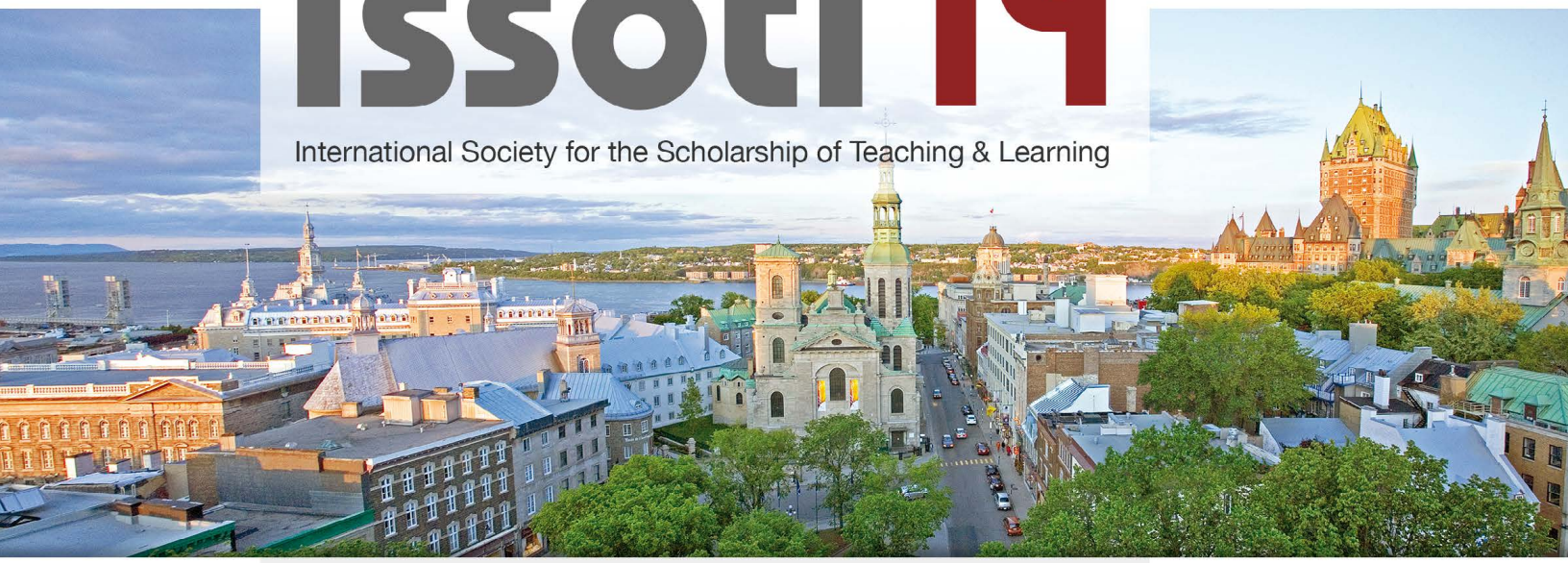
issotl 14

International Society for the Scholarship of Teaching & Learning



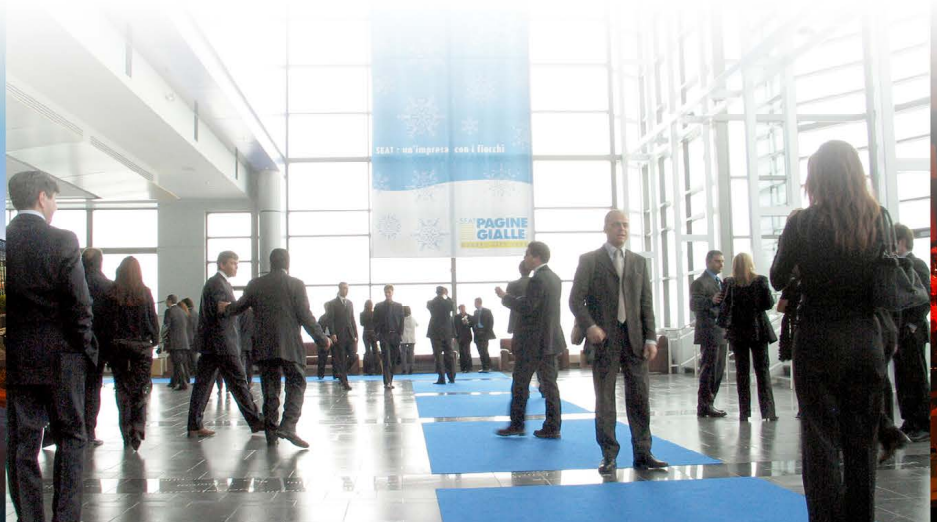
Nurturing Passion and Creativity in Teaching and Learning

UNIVERSITÉ LAVAL

issotl

October, 22-25, 2014

Quebec City Convention Center, Canada



SCHEDULE AT A GLANCE

	Wednesday October 22, 2014	**Thursday** October 23, 2014	**Friday** October 24, 2014	**Saturday** October 25, 2014
7:00 - 8:00		Conference breakfast	Conference breakfast	Conference breakfast
8:00 - 8:30		SIG Meetings	SIG Meetings	
8:30 - 9:00		Plenary	Concurrent Sessions - D	Concurrent Sessions - G
9:00 - 9:30	Pre-conference Workshops CUR Symposium			
9:30 - 10:00				
10:00 - 10:30		Break	Break	Break
10:30 - 11:00		Concurrent Sessions - A	Concurrent Sessions - E	Closing Plenary
11:00 - 11:30				
11:30 - 12:00				
12:00 - 12:30	Pre-conference lunch	Conference lunch	Conference lunch	Lunch on your own
12:30 - 1:00		Business Meeting	T&L I Meeting	
1:00 - 1:30	Pre-conference Workshops CUR Symposium			
1:30 - 2:00		Concurrent Sessions - B	Plenary	
2:00 - 2:30				
2:30 - 3:00				
3:00 - 3:30		Break	Break	
3:30 - 4:00		Concurrent Sessions - C	Concurrent Sessions - F	
4:00 - 4:30				
4:30 - 5:00	Welcome Event			
5:00 - 5:30		Chairs in Educational Leadership	SIG Meetings T&L I Meeting	
5:30 - 6:00	Opening Cocktail			
6:00 - 6:30		Poster Session/Reception		
6:30 - 7:00	Opening Plenary		Dinner on your own	
7:00 - 7:30				
7:30 - 8:00		Dinner on your own		
8:00 - 8:30	Dinner on your own			
8:30 - 9:00				

TABLE OF CONTENT

Welcome from the President and Board of ISSOTL

On behalf of the board, a very warm welcome to all of our delegates from across the globe, to the 11th annual conference of the International Society for the Scholarship of Teaching and Learning. We are grateful to the Laval team for their efforts in putting together a diversely rich programme as we gather in beautiful Quebec City to engage over the next three days in interdisciplinary, cross-cultural and international dialogues on the scholarship of teaching and learning.

In view of the growing needs of the Society to serve and support its membership, we have increased the representation of the regional Vice Presidents on the board. We are delighted to have each region represented by two VPs (previously each region had a single representative) and anticipate that our long-term goal of fostering stronger international collaboration and regional activities can be realized through the efforts of our committed board members. In addition, our newly assembled communications committee will be redesigning and expanding the functionality of the Society website to better engage with our members. I encourage our members to become active in the Society, as we are dependent upon the diverse expertise and perspectives you bring to our work. For those of you who have recently joined ISSOTL, do approach any of us on the board to learn how you can become actively involved in continuing to shape the Society.

The theme of this year's conference, *Nurturing Creativity and Passion in Teaching and Learning*, is particularly important at this critical juncture in higher education. The increasing pressures on institutions to produce globally competitive graduates can distract from a greater mission to foster creative experimentation, critical engagement and a passionate commitment toward the pursuit of intellectual sustenance. The scholarship of teaching and learning provides a forum for interrogating in what ways, to what extent, and in which dimensions the nurturing of creativity and passion interacts with the efficacy of our praxis. It is exciting to anticipate the diverse perspectives that all of you will bring to this conversation.

Do enjoy the conference, reconnect with your colleagues and meet new colleagues from across the world. And we look forward to seeing you next year in Melbourne, Australia for ISSOTL 2015!

With very best wishes,
Kathy Takayama
ISSOTL President

UNIVERSITÉ LAVAL

Faculté des sciences de l'éducation
Bureau du doyen

Dear ISSOTL 2014 conferees,

We are very pleased and honored to welcome you to Quebec city for the eleventh annual conference of the International Society for the Scholarship of Teaching and Learning.

Over the years, ISSOTL conferences have provided an interesting and productive forum for scholarly exchanges about teaching and learning in higher education. This year, some 500 participants from 14 countries will meet in Quebec city and will pursue that tradition , learning with and from colleagues. During these few days, they will be able listen to presentations on a broad range of subjects, all related to our conference theme.

This year's conference theme, « Nurturing Passion and Creativity in Teaching and Learning » focuses on two dimensions at the core of all successful initiatives in teaching and learning : passion and creativity. Our keynote speakers will address these aspects in various ways. Professor Sue Jackson will examine « The development of transformative spaces for learning and teaching in higher education », and, from a very different angle, Bernard Petiot, Vice-President Cirque du Soleil, will describe a particular environment that welcomes creativity. Professor Georges Bordage will then expose a series of lessons about learning from the field of Educational Psychology, and finally, an international panel will look at the impact of various transformations in undergraduate education, including the emergence of a new phenomenom : the MOOCS.

We hope you will enjoy our exciting program. This conference was only made possible through the hard work of the wonderful team at the « Bureau des services pédagogiques de l'Université Laval ». I am particularly thankful to Priscilla Lavoie and Sonia Lepage from this unit for their dedication and professional work. This conference would have never taken place without them.

Finally, it has been demonstrated over the years that the ISSOTL conference is a wonderful opportunity to network and initiate collaborations. We hope this conference will be a stimulating and rewarding experience. Enjoy the conference, the city and everything else !!

Fernand Gervais
Conference Chair
Université Laval

Pavillon des Sciences de l'éducation
2320, rue des Bibliothèques, bur. 250
Québec (Québec) G1V 0A6
CANADA

Téléphone : 418 656-2063
Télécopieur : 418 656-7347
Fernand.gervais@fse.ulaval.ca
www.fse.ulaval.ca

UNIVERSITÉ LAVAL

Cabinet du recteur

Dear ISSOTL delegates,

On behalf of Université Laval, it is my great pleasure to welcome you to Quebec city, for the 11th annual conference of the International Society for the Scholarship of Teaching and Learning.

We are delighted to have the opportunity to host the ISSOTL conference. ISSOTL and its members enhance teaching and learning in classrooms, disciplines and classrooms around the world. As a fully comprehensive university committed to engaged learning, global education and sustainable development, Université Laval has much to learn from and to contribute to research and best practices presented at this important conference.

This year's conference theme, « Nurturing Passion and Creativity in Teaching and Learning », emphasizes the notion that creativity and passion are at the core of all successful initiatives in teaching and learning. These dimensions are being explored from the point of view of various disciplines and in the context of emerging technologies, educational development and pedagogical initiatives. The 2014 conference challenges presenters and practicioners to expose their inquiries, perspectives and research outcomes on issues related to the nurturing of creativity and passion in higher education.

At this year's conference, Université Laval will take the opportunity to launch officially its Teaching Leadership Chairs Program, an initiative widely recognized across North America. The Chairs are full-time faculty members who will focus a portion of their considerable energies on leading and supporting teaching and curricular initiatives in their faculties and across campus. Université Laval is very proud of its program and strongly believe it will have a high impact on teaching and learning practices.

Best wishes for a successful conference,

Denis Brière
Rector

Pavillon des Sciences de l'éducation
2320, rue des Bibliothèques
Local 1656
Québec (Québec) G1V 0A6
CANADA

418 656-2272
Télécopieur : 418 656-7917
www.rec.ulaval.ca

Le maire
Ville de Québec

Message from the Mayor of Québec City

It is a great pleasure for me to welcome you to Québec City for the *11th Annual Conference of the International Society for the Scholarship of Teaching and Learning (ISSOTL).*

"Not only is there an art in knowing a thing, but also a certain art in teaching it", in the words of Cicero. In this spirit, a gathering of members of academic communities from around the world, who have chosen to use their passion and creativity in the service of their art, promises to enrich each of the persons participating.

More beautiful than ever in this autumn season, Québec City offers you an ideal setting in which to combine business with pleasure. I invite you to renew your energy by going out to discover the many attractions of a lively capital city where culture, nature and fine dining hold pride of place.

To one and all, I wish you fruitful dialogue and an excellent stay among us!

The Mayor of Québec City,

Régis Labeaume

Québec, September 11, 2014

C.P. 700, Québec (Québec) G1R 4S9 **Téléphone : 418 641-6434** Télécopieur : 418 641-6318

GENERAL INFORMATION

Accessibility
http://convention.qc.ca/en/attending-event

Assistance/Registration/Registration Desk Hours
The Registration Desk is located in the Level 2 "Hall 2000" of the Quebec City Convention Centre.
http://convention.qc.ca/sites/all/themes/main/swf/plan.html?2&en

The Registration Desk will be open:
Wednesday, 7:30 AM – 7:00 PM
Thursday, 7:30 AM – 7:00 PM
Friday, 7:30 AM – 4:00 PM
Saturday, 8:00 AM – 10:00 AM

Conference Meals and Refreshment Breaks
Breakfasts (Thursday, Friday, and Saturday) and lunches (Thursday and Friday) will be available for all conference registrants in the Room 2000CD on Level 2. Wednesday night reception will be held in the Hall 2000 and the Thursday night Reception with the Poster Session will be held in the Room 2000CD on Level 2. Morning and afternoon breaks will be available in the Hall 2000 on Level 2. Participants in the All-Day Workshops and CUR Symposium on Wednesday will have lunch in their respective room.

Dining Outside the Conference
http://www.quebecregion.com/en/where-to-eat-restaurants/

In Case of Emergency
Report an emergency to Convention Centre Security Control by picking up the house phone. You also can report an emergency directly to local emergency agencies by picking up the house phone and dialing 911. House phones are located on each floor of the Convention Center.

Free High-Speed Wireless Internet
No matter where you are at the Quebec City Convention Centre, you have access to free wireless high-speed Internet, according to current terms and conditions. Full coverage throughout, in every meeting and exhibit room and public space.

Lost and Found
Any found item may be turned into the Registration Desk at the Quebec City Convention Centre.

Mobile Program
In order to make the conference as green as possible, we are offering two electronic versions of this year's conference program :

- the downloadable PDF available at https://www.issotl14.ulaval.ca/cms/site/issotl14/lang/en/page108683.html

and

- the mobile version in Guidebook that is compatible with smart phones and tablets. To access the mobile program, download the Guidebook app at http://guidebook.com/getit/.
  Within the Guidebook app, click on "Download Guides" and then "Redeem Code" and enter the following code: issotl2014

Name Badges
Name badges are your ticket to plenaries, concurrent sessions, receptions, and meals.

For security and administrative purposes, you must wear your name badge in a visible manner to all conference functions.

Parking
http://convention.qc.ca/en/attending-event/parking

Photos/Videos
Still photos and videos will be taken throughout the conference. These photos/videos could be posted on the conference/ISSOTL websites or included as part of published descriptions or archives of the conference activities. If you do not wish to have your photo taken, please consult the Registration Desk.

Program Changes
Changes to the program will be listed at the conference registration area and sent as notifications to the mobile guide. Please check for changes daily.

Sustainability
Water stations are available throughout the conference centre. You are encouraged to bring your own reusable water battles and fill them at these stations.

In order to reduce paper usage, there will be no printed program available on site but several electronic options have been provided for this year's conference program. A downloadable PDF is available from the conference website at: http://issotl13.com/program.xhtml. A mobile version of the program that will work on smartphones and iPads is available through Guidebook. (See "Mobile Program" above for information on how to access this version.). Thank you for your assistance.

Transportation
Taxi : http://www.aeroportdequebec.com/en/to-and-from-the-airport/taxis/
Public transport : http://www.rtcquebec.ca/Default.aspx?tabid=56&language=en-CA

Things to Do in Quebec City
http://www.quebecregion.com/en/what-to-do/activities-attractions/

Twitter Account
Follow @issotl14 for updates regarding the conference. The conference hashtag is #issotl14.

ABOUT ISSOTL

The International Society for the Scholarship of Teaching & Learning (ISSOTL) serves faculty members, staff, and students who care about teaching and learning as serious intellectual work. The goal of the Society is to foster inquiry and disseminate findings about what improves and articulates post-secondary learning and teaching.

ISSOTL is organized to:

- Recognize and encourage scholarly work on teaching and learning in each discipline, within other scholarly societies, and across educational levels
- Promote cross-disciplinary conversation to create synergy and prompt new lines of inquiry
- Facilitate the collaboration of scholars in different countries and the flow of new findings and applications across national boundaries
- Encourage the integration of discovery, learning and public engagement
- Advocate for support, review, recognition, and appropriate uses of the scholarship of teaching and learning.

Membership Privileges

ISSOTL membership is open to all. Membership categories include administrator/faculty/staff, retired faculty/staff, part-time faculty/staff, and student. For current membership fees and benefits, see www.issotl.org. Membership benefits include:

- Participation and Community in ISSOTL
- Subscription to ISSOTL's journal, Teaching and Learning Inquiry
- Voting rights in organizational business, including the election of officers
- Discounted ISSOTL conference fees
- Opportunities to develop or join ISSOTL Interest Groups
- Opportunity for interaction and collaboration with an international scholarly community
- Opportunity to shape an exciting international organization
- Advance notices of ISSOTL activities and conferences

Get Involved

- Communicate with Members through the ISSOTL-Discuss Listserv and Facebook
- Join the Society's Online Discussions on its Website (www.issotl.com)
- Form or Join an ISSOTL Interest Group
- Nominate Yourself or Someone Else for an ISSOTL Officer's Position
- Contribute to a Comprehensive, International Wikipedia Entry for "the Scholarship of Teaching and Learning"

ISSOTL FOUNDING MEMBERS

Jane Aiken, Georgetown University
Thomas Angelo, Victoria University of Wellington
Peter D. Ashworth, Sheffield Hallam University
Marcia Babb, Carnegie Foundation
Bob Bain, University of Michigan
Randy Bass, Georgetown University
Spencer Benson, University of Maryland
Dan Bernstein, University of Kansas
Angela Brew, University of Sydney
Suzanne Burgoyne, University of Missouri
Mary Burman, University of Wyoming
Vernon Burton, University of Illinois
Nick Byrne, London School of Economics & Political Science
Barbara Cambridge, American Association for Higher Education
Nancy Chism, Indiana University-Purdue University
Brian Coppola, University of Michigan
Milt Cox, Miami University-Ohio
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Daisy Floyd, Texas Technical University
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Michael Prosser, University of Sydney
Paul Ramsden, University of Sydney
James Rhem, National Teaching & Learning Forum
Eugene Rice, American Association for Higher Education
Laurie Richlin, Claremont Graduate University
Jennifer Robinson, Indiana University
Anthony Rosie, Sheffield Hallam University
Chris Rust, Oxford Brookes University
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Anita Salem, Rockhurst University
Ian Scott, University of Cape Town
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Kathy Takayama, University of New South Wales
Lynn Taylor, Dalhousie University
Keith Trigwell, University of Sydney
Emily VanZee, University of Maryland
George Walker, Carnegie Foundation
Mark Walter, Oakton Community College
John Webster, University of Washington
Deborah Willis, Victoria University

ISSOTL CONFERENCES

October 21-24, 2004: “The Scholarship of Teaching and Learning: Perspectives, Intersections, and Directions” in Bloomington, IN, USA

October 14-16, 2005: “Commitment, Community, and Collaboration” in Vancouver, British Columbia, Canada

November 9-12, 2006: “Making a Greater Difference: Connecting to Transformational Agendas” in Washington, D.C., USA

July 2-5, 2007: “Locating Learning: Integrative Dimensions in the Scholarship of Teaching and Learning” in Sydney, Australia

October 16-19, 2008: “Celebrating Connections: Learning, Teaching, Scholarship” in Edmonton, Alberta, Canada

October 22-25, 2009: “Solid Foundations, Emerging Knowledge, Shared Futures” in Bloomington, IN, USA

October 19-22, 2010: “Global Theories and Local Practices: Institutional, Disciplinary and Cultural Variations” in Liverpool, UK

October 20-23, 2011: “Transforming the Academy through the Theory and Practice of SoTL” in Milwaukee, WI, USA

October 24-27, 2012: “Research on Teaching and Learning: Integrating Practices” in Hamilton, Ontario, Canada

October 2-5, 2013: “Critical Transitions in Teaching and Learning” in Raleigh, NC, US

October 22-25, 2014: “Nurturing Passion and Creativity in Teaching and Learning” in Quebec City, Canada

ISSOTL BOARD OF DIRECTORS

ISSOTL COMMITTEES

Committee work is vital to the success of ISSOTL. A list of current ISSOTL committees, all of which are seeking volunteers, can be found below. If you are interested in serving as a member on a committee, please contact the committee chair or contact person listed.

Conferences and Conevenings Committee

Kathy Takayama, Committee Chair
Brown University, USA
Kathy_Takayama@brown.edu

Anthony Ciccone
University of Wisconsin-Milwaukee, USA
ciccone@uwm.edu

Beth Marquis
McMaster Institute for Innovation & Excellence in Teaching & Learning, Canada
beth.marquis@mcmaster.ca

Membership Committee

Mary Ann Danielson, Committee Chair
Creighton University, USA
madam@creighton.edu

Beth Marquis
McMaster Institute for Innovation & Excellence in Teaching & Learning, Canada
beth.marquis@mcmaster.ca

Sang Nam
Quinnipiac University, USA
sang.nam@quinnipiac.edu

Communications Committee

Jessie Moore, Committee Chair
Elon University, USA
Jmoore28@elon.edu

Beth Marquis
McMaster Institute for Innovation & Excellence in Teaching & Learning, Canada
beth.marquis@mcmaster.ca

Mary Ann Danielson
Creighton University, USA
madam@creighton.edu

Aaron Long
University of Kansas, USA
A.long@ku.edu

Sang Nam
Quinnipiac University, USA
sang.nam@quinnipiac.edu

Publications Advisory Committee, Continued

Pat Hutchings, Committee Chair
Carnegie Foundation, USA
hutchings@carnegiefoundation.org

Mick Healy
Healy Higher Education Consultants, UK
mhealy@glos.ac.uk

Sean Brawley
Macquarie University, Australia
Sean.brawley@mg.edu.au

Margy MacMillan
Mount Royal University, Canada
mmacmillan@mtroyal.ca

Publications Advisory Committee, Continued

Rebecca Nowacek
Marquette University, USA
Rebecca.nowacek@mu.edu

Nancy Chick
Vanderbilt University, USA
Nancy.chick@vanderbilt.edu

Anthony Ciccone
University of Wisconsin-Milwaukee, USA
ciccone@uwm.edu

Gary Poole
University of British Columbia, Canada
gary.poole@ubc.ca

Budget and Finances Committee

Dan Bernstein, Committee Chair
University of Kansas, USA
djb@ku.edu

Beth Marquis
McMaster Institute for Innovation & Excellence in Teaching & Learning, Canada
beth.marquis@mcmaster.ca

Anthony Ciccone
University of Wisconsin-Milwaukee, USA
ciccone@uwm.edu

Leadership and Elections Committee

Joelle Fanghanel, Committee Chair
University of West London, UK
Joelle.fanghanel@uwl.ac.uk

Anthony Ciccone
University of Wisconsin-Milwaukee, USA
ciccone@uwm.edu

Anthony Ciccone
University of Wisconsin-Milwaukee, USA
ciccone@uwm.edu

Sherry Linkon
Georgetown University, USA
Sll5@georgetown.edu

Kathy Takayama
Brown University, USA
Kathy_takayama@brown.edu

Brad Wuetherick
Dalhousie University, Canada
brad.wuetherick@dal.ca

Teaching & Learning Inquiry (TLI) Editors

Nancy Chick
Vanderbilt University, USA
Nancy.chick@vanderbilt.edu

Gary Poole
University of British Columbia, Canada
gary.poole@ubc.ca

INTEREST GROUPS

Meeting dates, times and rooms for the interest group meetings are listed below.

Advancing Undergraduate Research

The ISSOTL Interest Group on Advancing Undergraduate Research (AUR-IG) is an international, interdisciplinary network for faculty and administrators who are interested in investigating undergraduate research through the lens of the scholarship of teaching and learning. We strive to help institutions define undergraduate research and develop assessments to evaluate student learning through research and scholarship across disciplines and individual institutions. We encourage collaborations among interest group members, particularly projects that promote scholarly research on student learning through undergraduate research. We also share resources, disseminate findings, and provide support for institutions to carry out best practices in undergraduate research. If you are interested in joining us, please contact Trent Maurer at tmaurer@georgiasouthern.edu. | Thursday, October 23rd, 7:00-8:15am, Meeting Room 308B

Arts and Humanities

If you are a teacher-scholar in the disciplines of the humanities (literature, philosophy, classics, religion, history, languages, et al) seeking a sense of community within ISSOTL, please join us. Send your name, institution, country, and email address to Nancy Chick at nancy.chick@vanderbilt.edu. We're brainstorming ways to have a greater presence at ISSOTL conferences and within SOTL in general, and together we can share ideas and models. | Friday, October 24th, 7:00-8:15am, Meeting Room 2105

General Education

Are you someone who is involved in planning, teaching, or assessing curricula for your institution's general education program or core curriculum? Are you responsible for the development of faculty/staff instructors? To better advance SoTL within institutions and across higher education, SoTL in general education programs must be explored further. We are seeking members interested in exploring the role of SoTL in general education and core curricula. If you are interested joining us, please send your contact information John Draeger, draegejd@buffalostate.edu. | Thursday, October 23rd, 7:00-8:15am, Meeting Room 2101

National Teaching Fellows & Institutional Teaching Award Winners

Are you a national teaching fellow or an institutional teaching award winner interested to exchange experiences and explore collaborative scholarship opportunities with international colleagues pertaining to issues of innovative educational leadership, curriculum, teaching and/or learning practices in high education? If so, please feel welcome to join members of this ISSOTL Interest Group. Although this interest group will take up matters of importance to national and institutional award winners, all ISSOTL members are welcome to join this group (per the ISSOTL interest group inclusiveness policy). If you would like to get involved, please contact Earle Abrahamson atwinedge@hotmail.com. | Thursday, October 23rd, 7:00-8:15am, Meeting Room 308A

Pedagogy and Research for Online and Blending Teaching and Learning

This interest group represents an international, interdisciplinary network of teachers and scholars committed to discussion, inquiry, and collaboration to explore fully the trends, potential, and challenges within online and hybrid teaching and learning. This group emphasizes: current tendencies and research in online education; effective tools for online education that combine strong teaching with appropriate technologies; collaboration on research projects; and sharing of ideas for new ways to design and deliver web-based instruction that meets the expectations of students and provide substantive academic experiences. For more information or to join, please contact John Huss,hussj@nku.edu. | Friday, October 24th, 5:15-6:30pm, Meeting Room 308B

INTEREST GROUPS

Problem-Based Learning

Problem-based learning (PBL) is an active learning pedagogy in which students collaborate in groups to solve complex problems. If you are interested in problem-based learning, please contact Ellen Lynch (University of Cincinnati) at ellen.lynch@uc.edu or Susan Polich at smpolich@carilionclinic.org. | No meeting

Scholarship of Leading

Committed to pursuing scholarly work on the relationships between leading, teaching and learning, this interest group's mission is to create opportunities for dialogue, to promote scholarly research on the topic, and to provide support to ISSoTL members interested in and engaged in leadership. For more information or to join, please contact La Vonne Cornell-Swanson, lcornell-swanson@uwsa.edu. | Friday, October 24th, 7:00-8:15am, Meeting Room 308A

Sociology

Are you a sociologist interested in SOTL? Would you like to join a group of other sociologists for SOTL networking? If so, please send your name, institution/organization, and email address to Melinda Messineo at mmessine@bsu.edu,and indicate you are responding to this announcement and whether you are a member of ISSOTL and/or ASA. | Friday, October 24th, 7:00-8:15am, Meeting Room 308B

Students as Co-Inquirers

Are you a faculty/ staff member who is interested in partnering with students on SOTL inquiry projects? OR are you a student who is interested in partnering with faculty/staff on SOTL inquiry projects? Then join us in creating a cross-disciplinary, international community of SOTL scholars dedicated to tapping into students' expertise on teaching and learning, sharing promising practices for co-inquiry with students, exploring the many positive outcomes of this work and amplifying student voices within the international society. If you are interested, please send your name and affiliation to Carmen Werder at Carmen.Werder@wwu.edu and Roselynn Verwoord rverwoor@uvic.ca. | Friday, October 24th, 5:15-6:30pm, Meeting Room 207

Student Engagement

This ISSOTL Interest Group on Student Engagement serves as an international, interdisciplinary network for ISSOTL members who are committed to pursuing SoTL projects on the topic of student engagement. This group offers opportunities for dialogue, encourage and promote scholarly research on the topic, and provide support to ISSOTL members interested in student engagement. If you are interested in joining us, please contact Andrea Jackson,A.V.Jackson@leeds.ac.uk or Israel Dunmade, IDunmade@mtroyal.ca. | Friday, October 24th, 5:15-6:30pm, Meeting Room 308A

ISSOTL 2014 ORGANIZING COMMITTEE

Conference Organizers

Fernand Gervais, Dean, Faculty of Education, Université Laval
Nicolas Gagnon, Director of the Teaching and Learning Unit, Université Laval
Sonia Lepage, Administrative Coordinator, Teaching and Learning Unit, Université Laval
Priscilla Lavoie, Communication Coordinator, Teaching and Learning Unit, Université Laval

Program Committee

Fernand Gervais, Dean, Faculty of Education, Université Laval
Serge Talbot, Director of Undergraduate Programs, Université Laval
Nicolas Gagnon, Director of the Teaching and Learning Unit, Université Laval
Kathleen Lechasseur, Professor, Faculty of Nursing, Université Laval
Gaétane Routhier, Associate Dean, Faculty of Medecine, Université Laval
Claude Savard, President of Studies Council, Université Laval
Pierre-Mathieu Charest, Associate Dean, Faculty of Food and Agriculture Sciences, Université Laval
Alain Faucher, Associate Dean, Faculty of Theology and Religious Studies, Université Laval
Beth Marquis, Assistant Professor, School of the Arts, and McMaster Institute for Innovation & Excellence in Teaching & Learning, McMaster University
Nicola Simmons, Assistant Professor, Graduate and Undergraduate Studies in Education, Brock University

Council on Undergraduate Research (CUR)

Elizabeth Ambos, Executive Officer Council on Undergraduate Research
Mary Pat Twomey, Manager for Student Programs Council on Undergraduate Research
Claude Savard, President of Commission des études, Université Laval

Program Design

Mélissa Touzin, Teaching and Learning Unit, Université Laval
Nancy Pomerleau, Teaching and Learning Unit, Université Laval

Volunteers from Université Laval

Laurent Maheux
Luc St-Laurent
Amélie Véronique Dubé
Jean-François Otis
Sarah-Caroline Poitras
Claude Potvin
Amélie Trépanier
Serge Gérin-Lajoie
Carlos Cano
Anna Chau
Laurence-Emmanuelle Dumas

ISSOTL 2014 PROPOSAL REVIEWERS

Earle Abrahamson	University of East London
Donna W. Bailey	University of North Carolina-Chapel Hill
Ana Vitoria Baptista	University of Aveiro
Theresa A. Beery	University of Cincinnati College of Nursing
Gülnur Birol	The University of British Columbia
Shampa Biswas	Washington State University
Catherine Black	Simon Fraser University
Stephen Bloch-Schulman	Elon University
Cheelan Bo-Linn	University of Illinois at Urbana-Champaign
Emma Bourassa	Thompson Rivers University
Patricia Calderwood	Fairfield University
Erica Cambly	University of Toronto
Barbara L. Cambridge	National Council of Teachers of English
Miriam Carey	Mount Royal University
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PLENARY PRESENTERS

Opening plenary

Wednesday, October 22 - 6:30 PM **Room 2000AB**

Sue Jackson
Pro-Vice-Master for Learning and Teaching and Professor of Lifelong Learning and Gender at Birkbeck University of London

Sue Jackson is Pro-Vice-Master for Learning and Teaching and Professor of Lifelong Learning and Gender at Birkbeck University of London, where she is also Director of Birkbeck's Centre for Transformative Practice in Learning and Teaching. She publishes widely in the field of gender and lifelong learning, with a particular focus on identities. Sue's recent publications include *Challenges and Inequalities in Lifelong Learning and Social Justice* (Routledge, 2013); *Innovations in lifelong learning: critical perspectives on diversity, participation and vocational learning* (Routledge, 2011); *Gendered choices: learning, work, identities in lifelong learning* (Springer, 2011, with Irene Malcolm and Kate Thomas) and *Lifelong learning and social justice communities, work and identities in a globalised world* (NIACE, 2011). Sue has recently been awarded a prestigious National Teaching Fellowship from the UK's Higher Education Academy.

Abstract

Developing transformative spaces for learning and teaching in higher education

Learning and teaching is about more than the mere transmission of knowledge: it is about developing the courage to transgress, taking leaps of imagination and transformation. Developing transformative spaces is about the process of effecting change in our current frames of reference; about imagining new possibilities. This keynote will explore the pedagogic challenges of developing transformative spaces for learning, teaching and assessment in higher education. It will consider ways in which:

- critical pedagogies and attempts to bring about social transformation develop through critiques of ideological and material constructions of 'truth'
- transformative pedagogies can be developed and sustained and learners and teachers can use higher education to challenge and transgress, rather than conform
- new pedagogical proposals be developed through spaces of transformation and transgression.

The keynote lecture will explore ways in which we can seek for real, imagined and potential transformative spaces through passion and with creativity.

Creativity and passion

Thursday, October 23 - 8:30 AM **Room 2000AB**

Bernard Petiot
Vice-President, Casting and Performance
Cirque du Soleil

Bernard holds a bachelor degree in Physical Education and has a Masters in Science and Physical Activity from the Université Laval. He also taught Physical Education at the Université de Montréal from 1980-1997. As one of the main organizers of the first international conferences for the development of talent in gymnastics (World Gymnastics Championships held in Montréal in 1985), he was often asked to analyze international competitions such as the Sabaë World Championships and the following Olympic Games: Barcelona in 1992, Atlanta in 1996, Sydney in 2000, Athens in 2004, Beijing in 2008, and London in 2012.

Renowned coach at Gymnix de Montréal from 1980-1998, Bernard has contributed to the development of some of Canada's best gymnasts, including Cathy Giancaspro (Seoul 1988), Mylène Fleury (Barcelona 1992), and Marilou Cousineau (five time World Championships winner). He has also coached the Canadian Olympic Team, through 13 World Championships and 2 Olympic Games.

Bernard Petiot has been part of the Cirque du Soleil management team for 15 years and currently holds the title of Vice President of Casting and Performance. His Vice Presidency consists of the following departments: Acrobatic Performance and Equipment Design and Development / Performance Medicine / Artist Training / Coaching / Casting / Content for New Creations, Casting, and Performance & Trends.

Abstract

Cirque du Soleil
An environment that welcomes creativity: the story

Over the last 30 years, Cirque du Soleil has established a strong reputation with regards to the reinvention of circus arts and live entertainment. Cirque du Soleil has presented over 30 live shows over this time span. The company is now undeniably one of the world leaders with regards to entertainment, celebration of creativity and expression of human talent. How does Cirque du Soleil ensure it maintains its creativity in a world which is in perpetual change, always more demanding and constantly searching for novelty? How can Cirque du Soleil's history and its creation methods be used to inspire and stimulate the establishment of a creative teaching and learning environment? This presentation will take you on a trip within the creative universe of Cirque du Soleil and take you behind the scenes to explore the creative process, the creative environment and the coexistence of production and creation logics and philosophies.

Leadership in teaching

Thursday, October 23 - 5:15 PM Room 2000AB

Denis Brière
25th Rector of Université Laval

Born in Sainte-Martine, Quebec, Denis Brière studied at Beauharnois High School before becoming a student at the Valleyfield Seminary and finished his classical studies with a Bachelor of Arts degree in 1968.

In 1972, he graduated from the Faculty of Forestry and Geomatics at Université Laval. In 1973, he registered in a Master's program in forest management and economics at the Faculty of Forestry of the University of British Colombia, in Vancouver. Considering the excellence of his academic achievements and the quality of his thesis outline, he was offered to go directly to a PhD program, from which he graduated in 1979. From 1977 to 1980, he taught at UBC at the undergraduate and graduate levels.

From 1979 to 1980, he was the president of the provincial and federal Committee for the evaluation of environmental policies for the province of British Colombia in the Queen Charlotte Islands. In 1981, Denis Brière returned to Quebec and joined the James Bay Energy Corporation.

From 1982 to 1987, he worked for the Forest Engineering Research Institute of Canada (FERIC) before becoming Vice President and General Director of the Woodland's Division at Kruger Inc from 1987 to 1996. In 1994, he was named Forest Engineer of the year by the Order of Forest Engineers of Quebec. From 1996 to 1998, he was President and Chief Executive Officer of Kruger Forest Products Inc., which employed more than 2 000 people with annual sales of 500 M $. From 1998 to 2000, Denis

Brière was President of the Comact Group, a North American leader in the conception and the manufacturing of equipment for wood processing.

From June 2000 to May 2007, Denis Brière held the position as Dean of the Faculty of forestry and Geomatics at Laval University which includes the Department of Geography who joined the Faculty in 2002 under his leadership.

In June 2007, Mr. Brière became the 25th Rector of Université Laval. Since then he increased his commitment in and outside the university community. In 2010 he became president of the Board of the Conférence des recteurs et principaux des universities du Québec (CREPUQ) and member of the CREPUQ Strategic Committee dedicated to science, technology and innovation. He is also member of the Board of the Association of Universities and Colleges in Canada (AUCC) and member of the Board of the U15 Group (15 most performant research universities).

He is member of the Board of Québec international, member of the Board of the Institut pour l'avancement de la culture philanthropique (IACP) and of the Comité régional ACCORD.

He received many honors in the name of Université Laval : the medal from the "Centre Jacques-Cartier" for the implication of Université Laval in the "Entretiens Jacques-Cartier" since 1987, and the medal from the City of Québec for the implication of Université Laval in the celebrations of the 400th anniversary of the City.

In 2010, he received the Soka University's Award of Highest honour in Japan. In 2012 he was granted the "Commandeur" title of the Order of Merit of France. And he also acts regularly as a speaker in front of many socio economic groups.

Abstract
Chairs in Educational Leadership of Université Laval

Learning

Friday, October 24 - 1:30 PM Room 2000AB

Georges Bordage, MD, PhD
Professor, Department of Medical Education
College of Medicine, University of Illinois at Chicago

Dr. Bordage is a Professor in the Department of Medical Education in the College of Medicine at the University of Illinois at Chicago. He completed his MD degree at Laval University, Québec City (Canada), a master's degree in Biometry at Case Western Reserve University in Cleveland, and a doctoral degree in Educational Psychology at Michigan State University. He is also the recipient of four honorary doctoral degrees (Sherbrooke (Canada), Moncton (Canada), Louvain (Belgium), Laval (Canada)) and is a visiting professor at the universities of Bern in Switzerland, Tokyo in Japan, and Jeddah in Saudi Arabia. Dr. Bordage holds dual citizenship Canada – USA. He teaches courses in Scholarship and Current Issues in Health Professions Education, Research Design and Grant Writing, and Scientific Writing. His research includes the study of clinical reasoning; written and oral assessment of clinical decisions (the "key features" approach); and scientific writing. He is the recipient of multiple awards, including the Abraham Flexner Award of the American Association of Medical Colleges, the John P. Hubbard Award from the National Board of Medical Examiners, the American Education Research Association Distinguished Career Award, and is a Fellow of the American Education Research Association. Grants: 37; Publications: 96 peer-reviewed, 82 others; Book chapters and monographs: 21; Educational materials: 14; National & international presentations: 499; Educational Workshops: 180. He consults worldwide on educational matters.

Abstract

Three Lessons from Educational Psychology: Spacing, Deliberate Mixed Practice, and Formative Testing

Courses are generally organized in discrete, condensed, juxtaposed sessions or units (e.g., a succession of discipline or systems courses); practice is in block form, repeating the same skills over and over, directly related to the materials just presented (e.g., problems at end of a chapter); and study time is spent mostly re-reading course notes or reviewing old exam questions. However, evidence from educational psychology have long shown that learning, specifically long-term retention and the ability to discriminate among possible solutions, is maximized by:

1. Distributing (spacing) the content over time;
2. Practicing in a deliberate and mixed fashion; and
3. Engaging in formative testing with constructed responses and immediate feedback.

Evidence will be presented regarding the superiority of each of the three strategies, along with ways of addressing the challenges of changing our current instructional methods. Scholarship opportunities regarding teaching and learning practices will be discussed.

Selected references

LINEBERRY, M, KREITER, CD, BORDAGE, G. Threats to Validity in the Use and Interpretation of Script Concordance Test Scores. Medical Education 2013; 47:1175-83

BORDAGE, G, MEGUERDITCHIAN, AN, TAMBLYN, R. Avoidable Adverse Events: A Content Analysis of a National Qualifying Examination. Academic Medicine 2013; 88:1493-98

GOLDSZMIDT M, MINDA, JP, BORDAGE, G. What Physicians Reason About During Clinical Encounters: Time to be More Explicit. Academic Medicine. 2013; 88(3):390-4.

COTE, L, BORDAGE, G. Content and conceptual frameworks of preceptor feedback in response to residents' educational needs. Academic Medicine. 2012; 87(9):1274-1281.

SCHWARTZ, A., PAPPAS, C., BASHOOK, P., BORDAGE, G., EDISON, M., PRASAD, B., SWIATKOWSKI, V. Conceptual frameworks in the study of duty hours changes in graduate medical education: A review. Academic Medicine. 2011; 86:18-29.

BORDAGE, G. & HARRIS, I. Making a Difference in Your Curriculum Reform and Decision-making Process. Medical Education. 2011; 45:87-94.

SUKOTJO, C., YUAN, JCC, BORDAGE, G. A Content Analysis of Dental Education Research as Reported in Two Journals. J. Dental Education. 2010;74:1106-1112.

EVA, KW, WOOD, TJ, RIDDLE, J, TOUCHI, C, BORDAGE, G. How clinical features are presented matters to weaker diagnosticians. Medical Education. 2010; 44:775-85.

YUDKOWSKY, R, OTAKI, J, LOWENSTEIN, T, RIDDLE, J, NISHIGORI, H, BORDAGE, G. A Hypothesis-Driven Physical Exam for Medical Students: Initial Gathering of Validity Evidence. Medical Education, 2009; 43:729-40.

WOLPAW, T., PAPP, K., BORDAGE, G. Using SNAPPS to facilitate the expression of clinical reasoning and uncertainties: a randomized comparison group trial. Academic Medicine, 2009; 84:517-524.

BORDAGE, G., CARLIN, B, MAZMANIAN, PE. Continuing Medical Education Effect on Physician Knowledge. Effectiveness of Continuing Medical Education: American College of Chest Physicians Evidence-Based Education Guidelines. Chest, 2009; 135:29S-36S.

BORDAGE, G. Conceptual Frameworks to Illuminate and Magnify. Medical Education, 2009; 43:312-319.

TRUDEL, J., BORDAGE, G. & DOWNING, S. Reliability and validity of Key Feature Cases for the Self-assessment of Colon and Rectal Surgeons. Ann Surg. 2008 Aug; 248(2):252-8.

COOK, DA, BORDAGE, G, SCHMIDT, H. Description, Justification, and Clarification: A Framework for Classifying the Purposes of Research in Medical Education. Medical Education. 2008; 42:128-33

COOK, DA, BECKMAN, TJ & BORDAGE, G. Quality of reporting experimental studies in medical education: A systematic review. Medical Education. 2007; 41:735-45

ZUBERI, R., BORDAGE, G. & NORMAN, G. Reliability and validity of ratings from the Student Evaluation of Teaching in Outpatient Clinics (SETOC) Instrument. Advances in Health Professions Education. 2007; 12:55-69

NORMAN, G., BORDAGE, G., PAGE, G. & KEANE, D. How Specific is Case Specificity? Medical Education 2006; 40:618-23

Closing plenary

Saturday, October 25 - 10:30 AM **Room 2000AB**

Thérèse Laferrière

Thérèse Laferrière is full professor of pedagogy at l'Université Laval. She is conducting a number of design research projects, including ones related to the Remote Networked School initiative in Quebec, network-enabled communities of practice, and knowledge building communities. She was the leader of the research theme "Educating the Educators" within the *TeleLearning Network of Centres of Excellence* (NCE Canada). Her research activities focus on networked learning environments and especially teacher-student(s) interactions and peer interactions as electronically linked classrooms become reality in elementary and secondary schools as well as in faculties of education and post-secondary education in general. She is an associate researcher at the Institute for Knowledge Innovation and Technology (IKIT) at the University of Toronto. She is currently the director of CRIRES, a multiuniversity research center on successfull schooling. She served as Dean of Education (1987-1995). She was president of the Canadian Association for Teacher Education (CATE/CSSE), and president of the Canadian Education Association (2001-2002).

She was also President of the Association francophone des doyennes et doyens, directeurs et directrices d'éducation du Canada.

Vivek Venkatesh

Vivek Venkatesh is Associate Dean, Academic Programs & Development at the School of Graduate Studies and Associate Professor in the Educational Technology graduate program at Concordia University in Montréal. His research draws on internationally-established collaborations and takes an interdisciplinary approach to systematically uncovering the cognitive, sociological and psychological factors that influence interactions in niche communities, of both the online and offline variety. Vivek and his team have published in the fields of information science, social psychology, marketing, educational psychology and technology integration. He is the lead editor for the recently released collection "Educational, Psychological and Behavioral Considerations in Niche Online Communities", published by IGI Worldwide, and he was also the guest editor for the January 2014 special issue on the "Impact of Web 2.0 Technologies in Higher Education" for the International Journal of Technologies in Higher Education.

Didier Paquelin

Didier Paquelin is an Information Science and Communication professor. The main purpose of his research addresses the uses of educational technologies. He studies the relationship between the digital use and the learning pratices. He directs the research program RAUDIN. His approach is interdisciplinary and systemic. He analyzes the process of innovation in higher education institutions in digital context. He contributes by his research in an anthropological approach to the analysis of digital practices by teachers and learners. He studied organizational commitment dimensions, cognitive, emotional and socio-economic transformation in the educational practices. He has written several scientific papers about the distance learning practices, the role of the teacher, the other students, and the family on the success in higher education. His recent researches concern the learning spaces and the use of BigData to anticipate the difficulties that students face in their learning. He is an expert at the french Ministry of Higher Education and Research about questions on pedagogy and digital technology. He has contributed on developing the MOOCs in France with the "France Université Numérique" project. He is the director of Aquitaine Digital University and has founded l'Université international d'été en pédagogie universitaire in collaboration with Université Laval and Concordia University.

Abstract

Transformations in Undergraduate Education: Beyond MOOCs

Technology allows undergraduate teaching to reach more students in more formats than ever before, yet many undergraduate classes continue to take place in lecture theatres in much the same way as they have for decades. This session will explore current and future transformations in undergraduate education, examining lessons learned from MOOCs (massive open online courses) and distance education, and exploring beyond to what the future could look like.

DAY AT A GLANCE
WEDNESDAY, OCTOBER 22, 2014

8:00 - 9:00				
9:00 - 10:30	Pre conference Workshop AM	Pre conference Workshop All-day	CUR Symposium	
10:30 - 11:00	Break - Hall 2000			
11:00 - 12:00	Pre conference Workshop AM	Pre conference Workshop All-day	CUR Symposium	
12:00 - 1:30	Lunch on your own	Lunch for Workshop All-day participants Room 2000CD	Lunch for CUR Symposium participants Room 206AB	
1:30 - 3:00	Pre conference Workshop PM	Pre conference Workshop All-day	CUR Symposium	SIG meeting WORK **National Teaching Fellows & Institutional Teaching Award Winners** Room 2104A
3:00 - 3:30	Break - Hall 2000			
3:30 - 4:30	Pre conference Workshop PM	Pre conference Workshop All-day	CUR Symposium	SIG meeting WORK **National Teaching Fellows & Institutional Teaching Award Winners** Room 2104A
4:30 - 5:30	**Newcomers to ISSOTL** Welcome Event - Room 2104B			
5:30 - 6:30	**Opening reception** - Hall 2000			
6:30 - 8:00	Opening plenary **Developing transformative spaces for learning and teaching in higher education** Sue Jackson - Room 2000AB			
8:00 - 9:00	Dinner on your own			

PRE CONFERENCE WORKSHOP

9:00 AM	Room 2101	Theories and practices of SoTL

W01 WRITING PASSIONATELY AND CREATIVELY ABOUT TEACHING AND LEARNING

Workshop half-day (3 HRS)

Helen Sword (1)
(1) University of Auckland (Auckland, New Zealand)

SoTL scholars are, with few exceptions, passionate and creative people who care deeply about teaching and learning. But how do we bring that passion and creativity into our scholarly writing? What principles and techniques can help us communicate effectively across disciplines and share our research with the world? And how do we find the courage to write differently – in a more assured and personal voice, a more lucid and engaging style?

This interactive 3-hour workshop will highlight, probe, and narrow the gap between what most of us intuitively know good writing is – fresh, precise, dynamic – and the impersonal, jargon-laden prose that dominates academic research publications in general and higher education journals in particular (Sword 2009). Participants will learn to identify the human stories at the heart of their own research and to convey them with passion and panache.

The session will be facilitated by Professor Helen Sword, author of Stylish Academic Writing (Harvard 2012) and an international expert on scholarly writing and research productivity. A passionate advocate of creativity and craftsmanship in teaching and research, she has been the recipient of two major university teaching awards and has run evidence-based academic writing workshops for faculty and PhD students at more than forty universities in Africa, Asia, Australasia, Europe, and North America.

On completion of the workshop, participants will be able to:

- identify the key features of creative, passionate, engaging academic prose;
- diagnose their own writing and plan targeted interventions;
- deploy strategies for communicating creatively and passionately across disciplines and for encouraging colleagues and students to do the same.

Delegates are encouraged to bring along a piece of their own academic writing (for example, a draft article or chapter) for analysis. There will be opportunities following the workshop for online networking and further discussion.

References:

Sword, H. Stylish Academic Writing. Cambridge: Harvard University Press, 2012.

Sword, H. 'Writing Higher Education Differently: A Manifesto on Style.' Studies in Higher Education 34.3 (May 2009): 319-336.

9:00 AM	Room 207	Inquiry into teaching practices

W02 APPLYING AN APPRECIATIVE INQUIRY PROCESS TO ACTIVATE LEADERSHIP IN TEACHING

Workshop half-day (3 HRS)

Rashmi Watson (1)
(1) The University of Western Australia (Perth, Australia)

An Appreciative Inquiry (AI) model is a strengths-based model which seeks the best in people, organisations and the context in which they exist through 'inquiry'. The act of carefully asking guided questions to delve into a person's thinking, experiences and aspirations are an enlightening and awakening process for individuals of any level and in any organisation. Appreciative Inquiry has been used extensively in education internationally (e.g. to develop vision goals, enhance teams or develop cooperative

relationships). The presenter is an accredited Appreciative Inquiry Facilitator who has used the process successfully with educators and education leaders for the past five years to enable them to seek the answers they want through a guided process that asks the right questions based on people's goals. The Appreciative Inquiry process as a pre-conference workshop would guide participants to focus on what it is about their teaching, leadership or scholarship in teaching that they would like to focus their energy on during the conference. The workshop is suitable to all of the listed conference themes.

All participants attending the session will be active throughout the workshop as the whole AI process involves everyone in paired discussion and questioning. They leave the session with a clear focus for the conference in terms of which themes to attend to get the most out of attendance (with links to career development).

AI is well researched and published and has contributed to organisational change as a highly effective model. The presenter will provide case examples of its use in education and the outcomes the process. There is opportunity from the participants to engage in international collaboration in the Scholarship of Teaching to apply AI in higher education into teaching practices, leadership in teaching, assessment practices, research capability or any area of interest if their practical experiences lead them to such collaboration.

Relevant and recent Appreciative Inquiry Literature

Cockell, J., & McArthur-Blair, J. (2012). Appreciative Inquiry in higher education: A transformative force. John Wiley & Sons.

Giles, D., & Kung, S. (2010). Using Appreciative Inquiry to explore the professional practice of a lecturer in higher education: Moving towards life-centric practice. Australian Journal of Adult Learning, 50(2).

Quaintance, J. L., Arnold, L., & Thompson, G. S. (2010). What students learn about professionalism from faculty stories: an "appreciative inquiry" approach. Academic Medicine, 85(1), 118-123.

Whitney, D. D., & Trosten-Bloom, A. (2010). The Power of Appreciative Inquiry: A Practical Guide to Positive Change (Revised, Expanded). Berrett-Koehler Publishers.

9:00 AM	Room 308B	Theories and practices of SoTL

W03 A COLLABORATIVE FLASH-RESEARCH PROJECT ON THE STATE OF THE FIELD OF SOTL

Workshop all-day (6 HRS)

Peter Felten (1), Nancy Chick (2), Margy MacMillan (3)
(1) Elon University (Elon, United States); (2) Vanderbilt University (Nashville, United States); (3) Mount Royal University (Calgary, Canada)

At the 2012 ISSOTL conference, a series of international collaborative writing groups brought together experienced and emerging SoTL scholars to draft articles on questions in the field (Healey, Marquis, Vajoczki, 2013; Marquis, Healey, & Vine, 2014). We will facilitate a variation on that process, hosting a flash-research project in a 6-hour pre-conference workshop.

In just six hours participants will not be able to write full articles; instead, participants will craft "state of the field" documents that are suitable for posting on the ISSOTL blog. These documents will make a real contribution to the field by providing a synthesis of SoTL research and practice related to two of Felten's "Principles of Good Practice in SoTL" (2013):

1. What topics have been the subjects of the inquiries into student learning in recent years in SoTL?

2. What research methodologies have been used in SoTL projects of the last five years?

When the workshop begins, we will establish two research teams. Each team will develop a strategy for conducting its survey of the field. Before lunch, the two research teams will present their preliminary findings to the full group, problem-solving with and soliciting feedback from their colleagues. After lunch, the teams will shift their focus to creating and writing up their synthesis for the ISSOTL blog. The entire group will gather again mid-afternoon for another round of feedback before the teams complete their writing. We will conclude with a celebration of what the teams have accomplished and a discussion about next steps — both extending the collaborative work done during the workshop and adapting flash-research to other contexts within (and beyond) SoTL.

This session's facilitators are experienced editors, researchers, and writing coaches (Felten facilitated one of the 2012 collaborative writing groups, Chick is co-editor of Teaching & Learning Inquiry, and MacMillan is a SoTL librarian). We will create the framework for the workshop, gather in advance as many resources as possible (e.g., electronic versions of major SoTL conference programs and a list of SoTL journals that can be accessed online during the session), help participants trouble-shoot during the session, and usher the process through to completion, but we will not act as lead authors of the writing that emerges from the session — again, following the model offered by Healey and Marquis during the 2012 writing groups.

If wireless access is not available during the pre-conference workshops, we will still be able to conduct this workshop but we will need to confer with the conference organizers to plan accordingly.

References

Felten, Peter. (2013). Principles of good practice in SoTL. Teaching & Learning Inquiry, 1(1). 121-125. http://muse.jhu.edu/journals/teaching_and_learning_inquiry__the_issotl_journal/v001/1.1.felten.pdf

Healey, M. & Marquis, B. & Vajoczki, S.(2013). Exploring SoTL through International Collaborative Writing Groups. Teaching and Learning Inquiry: The ISSOTL Journal 1(2), 3-8. http://www.jstor.org/stable/10.2979/teachlearninqu.1.2.3

Marquis, Elizabeth, Healey, Mick, & Vine, Michelle. (2014). Building capacity for SoTL using international collaborative writing groups. International Journal for the Scholarship of Teaching and Learning, 8(1). 1-34. http://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1006&context=ij-sotl

9:00 AM	Room 309A	Inquiry into teaching practices

W04 MAKING LEARNING HAPPEN: THE USE OF EDUCATIONAL CARDS FOR TEACHERS' EDUCATION AND MENTORING

Workshop all-day (6 HRS)

Claude Savard (1), Serge Talbot (1)
(1) Université Laval (Québec, Canada)

The preparation of university teachers in pedagogy is a challenge that every university must seek to address. Over the years, Université Laval has developed a set of training activities for the pedagogical development of its teachers (Talbot & Savard, 2014). These activities mainly take the form of courses, seminars, workshops and learning communities. Building a clear and effective representation of what constitutes a good educational strategy, and being able to communicate this representation and to discuss it for improvement, constitutes the foundation of all these training activities. A game of Educational Cards (Savard & Talbot, 2014) has been developed precisely to attain that goal while supporting trainers and counsellors in their pedagogical work with university teachers.

This workshop is designed to present these Educational Cards as an efficient tool for the development of competencies in teaching in higher education. The cards draw on mental models and constructivist and socioconstructivist theories as a way to represent instructional strategies for teachers. They can be used to communicate and share teaching approaches that can be adopted by teachers within the following categories: learning principles, learning outcomes, evaluation methods, learning styles, teaching methods, digital tools and learning spaces. These categories of concepts are identified and defined on 90 differently-coloured playing cards that teachers can manipulate to represent their own vision of teaching.

The first part of the workshop will enable participants to learn how to use the cards. A series of activities in pairs and triads will have them play with the cards in order to communicate their own conceptions of learning and teaching and develop different educational strategies. This first part of the workshop will illustrate a variety of card uses in different teacher training and counselling contexts. Once participants are familiar with the use of cards, the theoretical basis of their design will be presented and discussed. These discussions will focus on the concepts of mental models and constructivist and socioconstructivist theories.

In its second part, the workshop will focus on the different possible applications of educational cards in the higher education context. Different tests and experiments carried out with these cards at Université Laval in recent years will be presented and discussed. Concrete examples of different uses of the cards will enable participants to see possible uses in their own institutions. The workshop will conclude with a presentation of data on the impact of the use of educational cards in various training activities.

The facilitators of this workshop are Serge Talbot and Claude Savard. They have extensive experience in pedagogy in higher education. They have given courses, workshops and seminars over the past several years at Université Laval and other universities to teachers from a wide range of disciplines, using different approaches and tools.

REFERENCES

Talbot, S. & Savard, C. (2014) Le plaisir de faire apprendre (Making Learning Happen). A 36-hour course in pedagogy for university teachers. Université Laval, Canada.

Savard, C. & Talbot, S (2014) Educational Card Game. Université Laval, Canada.

1:30 PM | **Room 2101** | **Theories and practices of SoTL**

W05 SIX WAYS TO DECODE A DISCIPLINE

Workshop half-day (3 HRS)

Joan Middendorf (1), David Pace (2), Swantje Lam (3)
(1) Indiana University (Bloomington, United States); (2) Indiana University, Department of History (Bloomington, United States); (3) University of Bielefeld (Bielefeld, Germany)

In the decade since the publication of Decoding the Disciplines: Helping Students Learn Disciplinary Ways of Thinking scholars of teaching and learning around the world have been using the Decoding process to make explicit the mental operations that students must master to succeed in particular disciplines. Decoding supplies a missing piece in pedagogical theory, replacing generic teaching methods with a process for uncovering the mental processes and the epistemologies of specific disciplines.

Originally, Decoding began with the identification of a common bottleneck to learning in a field, and then two interviewers interrogated an expert in that area to make explicit the steps that a novice must master to successfully complete the task at hand. The resulting inventory of mental operations was then used as a basis for modeling, practice, and assessment initiatives. This process has opened paths to learning in a wide range of disciplines, but, as Decoding has spread, alternate strategies for making implicit disciplinary operations explicit have been developed, and a wide range of methods are now available to scholars.

After a brief introduction to the Decoding process, attendees will be able to experiment with many Decoding strategies, including:

- The classic decoding interview
- The decoding fishbowl, in which an interview is conducted in the middle of a room with other participants adding comments periodically from the periphery
- The communal interview in which a department or other academic unit collectively decodes the steps that its members would take to complete a task that often frustrates student learning
- The self-guided "bottleneck" writing tour in which a series of written prompts lead instructors through a journaling process that makes mental tasks explicit
- Rubric Decoding which begins with the mismatch between an instructor's ideal for an assignment and actual student work and then moves toward a fuller understanding of the steps that are missing in the novice's attempt
- Decoding through metaphors in which an instructor is asked to describe a process or image outside the discipline that captures the mental model (Jones et al. 2011) that students must master. The elements of that metaphor are systematically deconstructed

Workshop participants will have hands-on opportunities to work with each of these approaches and can then discuss the advantages and disadvantages of each method and the institutional contexts in which each is most appropriate. Finally, they will be able to brainstorm yet more strategies for making explicit the hidden mental actions that students must master.

Shopkow, L., Diaz, A., Middendorf, J., & Pace, D. (2013a). From bottlenecks to epistemology: Changing the conversation about the teaching of history in colleges and Universities. In R. Thompson (Ed.), Changing the Conversation of higher education. New York: Rowman & Littlefield.

Arlene Diaz, Joan Middendorf, David Pace, and Leah Shopkow, "The History Learning Project 'Decodes' a Discipline" in Kathleen McKinney, Ebbs, Flows, and Rips: SOTL In and Across the Disciplines (Indiana University Press, 2013)

Jones, N. A., Ross, H., Lynam, T., Perez, P. & Leitch, A. (2011). Mental models: An interdisciplinary synthesis of theory and methods. Ecology and Society, 16(1), 46–46.

1:30 PM | **Room 2105** | **Disciplinary approaches to teaching, learning and SoTL**

W06 ADVANCING EPISTEMOLOGY AS A METHOD TO NURTURE CREATIVITY AND PASSION

Workshop half-day (3 HRS)

Linda Klonsky (1), George Hay (1)
(1) The Chicago School for Professional Psychology (Washington, United States)

"Creativity…is the encounter of the intensively conscious human being with his or her world…" (May, 1975, p. 54)

"Joy…[passion]..the emotion that goes with heightened consciousness…that accompanies the experience of actualizing one's own potentialities" (May, 1975, p. 45)

Creativity, as defined by Rollo May, is the process of encountering the world with deep sensitivity and insight. The complexity of global life in the 21st century requires innovative higher education to heighten consciousness through self-knowledge, reflection-in-action, and knowledge-of-other. One approach to developing greater acumen and awareness of oneself and others is through the domain of epistemology. Not only do our students need to recognize cultural diversity, but deeply understand that people bring different perspectives and diverse ways of knowing into daily practice.

This emergent challenge calls for overturning traditional definitions of what counts as knowledge and requires creative pedagogies and practices to help students explore new epistemological perspectives. Epistemology, the study of knowledge, has traditionally been regarded as an intellectual endeavor in text-based curricula of the philosophy of research. Within the last decade, Dirkx (2008), Johnson & Duberly (2000), Raelin (2007, 2009), Yorks (2005) and others have advocated for an epistemology of practice, the study and acquisition of knowledge arising from reflection and action. The focus on epistemology of practice builds on the foundational work of Donald Schon's (1984) Reflective Practitioner and is closely linked to the practice of engaged scholarship as advocated by Van de Ven (2007).

This three-hour workshop demonstrates creative methods for the teaching of epistemology of practice in higher education and is designed to engage participants in a highly interactive process utilizing videos and an experiential learning module, entitled "Going to a Meeting". The purpose of the session is to imprint the importance of 1) self-reflection on assumptions and actions, 2) recognition of self/others as knowers, and 3) co-inquiry in order to generate collaborative knowledge.

Experiential learning that explores the epistemology of practice advances a "critical consciousness... through shared experience, dialogue, [and] feedback" (Heron & Reason, 1997), while focusing on tacit knowledge, critical reflection, and mastery (Raelin, 2007). Key points of the conversation will focus on inquiry into the various forms of knowing emerging from practice/action, allowing us to bring diverse contexts together. As important, discussions will also deliberate on translating the epistemology of practice to research and scholarship and include curricular follow-up for graduate school education.

Moving the study of epistemology into the realm of live action is a creative approach to the scholarship of teaching and learning. This workshop is well-matched to fulfill the goals of the conference theme since the focus is on creative strategies for improving teaching and learning, and is particularly suitable for a highly diverse group of participants from across the globe.

1:30 PM	Room 207	Inquiry into teaching practices

W07

Workshop half-day (3 HRS)

ENGAGING UNDERGRADUATES WITH RESEARCH AS PART OF COURSEWORK: A CROSS-DISCIPLINARY FRAMEWORK FOR INSTRUCTORS

Marcy Slapcoff (1), Sue Laver (2), Eva Dobler (2), Mariela Tovar (1), Rhonda Amsel (2), Richard Chromik (2), Isabelle Cossette (2), Dik Harris (1), Terry Hébert (1), Sarah Turner (1), Tamara Western (1)
(1) McGill University (Montreal, Canada); (2) McGilll University (Montreal, Canada)

In the years following the influential Boyer Commission report of 1998, many institutions of higher learning have faced the challenge of making research-based learning the standard for their undergraduates.

An important aspect of this challenge is that research is often conceived of as an individual activity aimed at making an original contribution to the field. Typically, this experience is only available to a select group of undergraduate students. The goal of this workshop is to demonstrate that a broader conception of research and scholarship opens up rich possibilities for using coursework to engage ALL students with the processes of knowledge production. The focus will be on how to design elements of undergraduate coursework to promote students' understanding of research and scholarship, regardless of discipline, academic level, or class size.

The workshop will be led by members of the Inquiry Network, a cross-disciplinary learning community made up of professors from across the university and academic staff from our library, writing centre and teaching and learning unit. Drawing on the results of our work over the past five years, we will introduce the conceptual framework we developed to support faculty members in integrating research into coursework, and invite participants to apply it to their own contexts. We will provide case study examples that illustrate how students' engagement with research can be a transformational aspect of undergraduate education.

This workshop will be of interest to instructors who would like to re-design aspects of one or more of their own undergraduate courses, but is also intended for educational developers who work with faculty members to promote the teaching-research nexus. Participants will be prompted to question the perceived boundaries between their own teaching and research and to uncover the points of contact between these core activities at the undergraduate level. Through a series of individual exercises, small group activities and discussions, participants will apply these ideas to one of their own courses. To support this process, resources developed at our institution will be presented in a variety of formats (written, online and video).

Using the framework developed by the Inquiry Network, participants will carry out the following activities:

- discuss a broad conception of what research can encompass at the undergraduate level,
- consider the factors that inhibit or promote the integration of research with undergraduate coursework,
- share strategies they are already using to promote students' understanding of research and scholarship, and
- develop new strategies to promote students' understanding of research and scholarship for one particular course.

Participants are requested to bring a course syllabus and/or particular assignment they would like to work on during this workshop.

1:30 PM	Room 308A	Student roles in and perspectives on SoTL

W08 STUDENTS AS PARTNERS IN LEARNING AND TEACHING IN HIGHER EDUCATION

Workshop half-day (3 HRS)

Mick Healey (1), Abbi Flint (2), Katherine Harrington (2)
(1) HE Consultant and Researcher, Emeritus Professor University of Gloucestershire (Goole, United Kingdom); (2) Higher Education Academy (York, United Kingdom)

Significance:

"At its roots partnership is about investing students with the power to co-create, not just knowledge or learning, but the higher education institution itself". (NUS 2012)

Engaging students in higher education effectively as partners in their learning and teaching is arguably one of the most important issues facing HE in the 21st Century. Partnership is essentially a process of engagement, not a product. It is a way of doing things, rather than an outcome in itself.

A wide variety of terms are used to describe the process of engaging students, including students as 'researchers and inquirers', 'producers', 'co-creators', and 'change agents'. The Higher Education Academy (HEA) and some others favour the term 'students as partners' (SaP) (HEA 2014; Cook-Sather et al. 2014). Though these, and other terms, overlap, they have been developed for different purposes and with different underlying conceptualisations by different authors, and it is timely to attempt to clarify the field.

To support this aim, we have developed a framework for exploring, reflecting on and fostering SaP in teaching and learning in HE based on four overlapping areas (Healey, Flint and Harrington, 2014):

- learning, teaching and assessment;
- subject-based research and inquiry;
- scholarship of teaching and learning; and
- curriculum design and pedagogic advice and consultancy.

PRE CONFERENCE WORKSHOP

Engaging students as partners involves nurturing creativity and passion in teaching and learning and hence is central to the conference theme. It will be particularly relevant to ISSoTL SIGs on Advancing Undergraduate Research, Students as Co-inquirers, and Student Engagement.

Learning goals and outcomes:

During the workshop participants will be invited to:

- Critically reflect on the conceptual framework for SaP presented
- Reflect on the meaning of and rationale for SaP in their contexts
- Examine and share examples of good practice in implementing SaP initiatives
- Explore how the development of partnership learning communities may guide and sustain practice in this area
- Plan how they might apply the ideas discussed in their own contexts.

Plans for interaction:

The workshop will be designed around a series of exercises which will enable participants to explore and critique concepts, understanding and international practices and to share and develop their own practices.

Facilitators' experience:

Healey has published widely on this topic and given numerous presentations, including a keynote on students as change agents at ISSoTL12. Flint and Harrington are responsible for the SaP theme at the HEA; their work includes research, events, publications and consultancy to provide guidance and support to colleagues in the UK sector. We organised and facilitated a 24hr national summit on SaP in the UK last September.

References:

Cook-Sather, A., Bovill, C., and Felten, P. (2014) Engaging students as partners in teaching & learning: A guide for faculty. San Francisco: Jossey-Bass (forthcoming).

Healey, M., Flint, A. and Harrington, K. (2014) Developing students as partners in learning and teaching in higher education. York: HE Academy (forthcoming)

Higher Education Academy (2014) Students as partners. Available from: www.heacademy.ac.uk/students-as-partners.

NUS [National Union of Students] (2012) A manifesto for partnership. London: NUS. Available from: www.nusconnect.org.uk/resourcehandler/0a02e2e5-197e-4bd3-b7ed-e8ceff3dc0e4/.

9:00 AM to 4:30 PM Room 206AB

Council on Undergraduate Research (CUR) Symposium

Nurturing Creativity and Passion in Undergraduate Research: A Scholarly Discussion

The fifth **Council on Undergraduate Research (CUR)** sponsored pre-ISSOTL International Symposium will take place on Wednesday, October 22nd, 2014 at Quebec City Convention Center. This symposium will focus exploring on how undergraduate research programs can provide individuals and institutions opportunities to nurture creativity and passion in students and faculty. Participants will work with colleagues from other institutions to craft practical strategies related to the following themes:

1. Leveraging innovation, design thinking, and creativity in undergraduate research;
2. Fostering interdisciplinarity and collaborative scholarship;
3. Ideating transformative learning spaces and structures;
4. Engaging external stakeholders and building partnerships.

The program for the day will include brief keynote addresses, poster sessions, and table discussions. We will conclude with a discussion on how to foster international conversations on undergraduate research.

The expected outcomes for participants in this day include:

- A raised awareness of how undergraduate research programs can be leveraged to nurture creativity and passion in students and faculty
- Consideration of how innovation, design and creativity studies can enrich undergraduate research programs
- Practical advice regarding how to build and support interdisciplinary learning and research communities
- Awareness of the possibilities afforded by transformative learning spaces and structures
- Shared strategies for engaging external stakeholders and partners
- The sharing and showcasing of good practice in undergraduate research
- The facilitation of networks of faculty and students interested in undergraduate research

Draft programme

9:00 - 9:15 am	Welcome & framing the day
9:15 - 10:15 am	Plenary 1: **On transformative curricular and physical spaces**
10:15 - 10:30 am	Morning break
10:30 - 11:15 am	Poster Session 1: **Innovation, design, and creativity in UR, Transformative spaces in support of UR**
11:15 - 11:45 am	Table discussions
11:45 - 12 noon	Report out/debrief
12 noon - 1:00 pm	Lunch
1:00 - 2:00 pm	Plenary 2: **On fostering collaborative partnerships**
2:00 - 2:45 pm	Poster Session 2: **Supporting interdisciplinary & collaborative structures, Engaging partners and stakeholders**
2:45 - 3:15 pm	Table discussions
3:15 - 3:30 pm	Afternoon break
3:30 - 3:45 pm	Report out/debrief
3:45 - 4:00 pm	Closing Discussion and Remarks

DAY AT A GLANCE
THURSDAY, OCTOBER 23, 2014

7:00 - 8:30	Breakfast for all attendees - Room 2000CD			
7:00 - 8:15	SIG meeting (breakfast) **Advancing Undergraduate Research** Room 308B	SIG meeting (breakfast) **General Education** Room 2101	SIG meeting (breakfast) **National Teaching Fellows & Institutional Teaching Award Winners** Room 308A	**Student Welcome Event** (breakfast) Room 207
8:30 - 10:00	Thursday plenary **Cirque du Soleil. An environment that welcomes creativity: the story** Bernard Petiot, Vice-president, Casting and Performance, Cirque du Soleil			
10:00 - 10:30	Break - Hall 2000			
10:30 - 12:00	**Concurrent sessions - A**			
12:00 - 1:30	Lunch for all attendees - Room 2000CD			
12:00 - 1:30	Business lunch meeting - Room 205C			
1:30 - 3:00	**Concurrent sessions - B**			
3:00 - 3:30	Break - Hall 2000			
3:30 - 5:00	**Concurrent sessions - C**			
5:00 - 5:15	Break			
5:15 - 6:00	**Chairs in Educational Leadership of Université Laval** Denis Brière, Rector of Université Laval - Room 2000AB			
6:00 - 7:30	**Reception and Poster session** Room 2000CD			
7:30 - 9:00	Dinner on your own			

10:30 AM | Room 2000A | Inquiry into teaching practices

A01 BEYOND CHICKEN-SCRATCH: THE EFFECTS OF DIGITALLY-ENABLED AUDIOVISUAL RESPONSE TO STUDENTS' WRITING

Panel
(90 minutes)

Chris Anson (1), Ian Anson (2), Jessie Moore (3)
(1) North Carolina State University (Cary, United States); (2) Indiana University-Bloomington (Bloomington, IN, United States); (3) Elon University (Elon, NC, United States)

Writing scholars have long argued that response to students' writing is central to their learning and development: "Nothing we do," claim Knoblauch and Brannon, "is more valuable" (2006, p. 69). Voluminous research has analyzed teachers' responses — the number, types, style, focus, and pragmatic force of marginal comments, the content of end commentary, the balance of praise and criticism, and the underlying developmental models conveyed through teachers' evaluations and advice. But beyond studies of face-to-face conferences, there exists little research comparing oral or audio-visual response with more traditional methods of feedback (Anson, 2012). Sociocultural views of literacy and orality suggest various entailments for each mode, including the effectiveness of instructional explanation and the expression of roles and identities. As new technologies develop that allow instructors to provide digitally captured voice and video responses to their students' writing, research is needed to more fully theorize and assess the effects of these response media on students' learning and writing development in higher education, across disciplines and course formats.

The presenters on this panel will describe their ongoing studies of screen-capture response (SCR) — a technology that allows teachers to record everything happening on their screen as they scroll through, highlight, and comment orally on students' writing, and then convey those recordings as 5-minute videos to students. These studies were conducted in first-year composition courses, political science courses, and distance-learning courses in psychology and women's studies. Evidence from the studies shows that SCR can improve students' experiences with feedback on written assignments across disciplines and course formats. Students self-report higher levels of learning from SCR than conventional written response, and construct teachers' intentions, identities, and relationships with them more positively. In qualitative assessment of instructors' reactions to screen-capture technology, we also observe evidence of improved grading efficiency and overall satisfaction with the feedback process. An assessment of the potential costs and benefits of scaling up the implementation of SCR, however, stresses the need for faculty training and development in the provision of oral and screen-capture response to student writing.

Presenting collaboratively in a 60-minute session, the speakers will: 1) provide a brief overview of what we know about response to writing from prior research; 2) describe and briefly demonstrate the screen-capture method; 3) explain the mixed methods used to compare SCR and conventional written response (which included surveys, videotaped interviews with students, text analysis, and interviews with teachers); 4) share the results of the investigations across the different courses; 5) discuss implications of the studies for further improvements in teaching and learning and for further research; and 6) provide ample time for questions and discussion.

Anson, C. M. (2012). What good is it? The effects of teacher response on students' development." In N. Elliott & L. Perelman (eds.), Writing assessment in the 21st century: Essays in honor of Edward M. White (pp. 187-202). New York: Hampton Press.

Knoblauch, C. H., & Brannon, L. (2006). Teacher commentary on student writing: The state of the art. In R. Straub (ed.), Key Works on Teacher Response (pp. 69-76). Portsmouth, NH: Heinemann.

10:30 AM | Room 2000B | Theories and practices of SoTL

A02 TRANSLATIONAL RESEARCH IN SOTL

Panel (90 minutes)

Peter Felten (1), Arshad Ahmad (2), Joelle Fanghanel (3)
(1) Elon University (Elon, United States); (2) McMaster University (Hamilton, Canada); (3) University of West London (London, United Kingdom)

Translational research holds particular promise as an approach to deepen and expand SoTL's influence in higher education.

In this panel, we will begin by presenting a review of ISSOTL conference programs and of leading SoTL journals (including Teaching and Learning Inquiry) to demonstrate that the majority of the work in this field focuses on rather narrow classroom-based inquiries into student learning. While these efforts typically have meaningful outcomes for individual teachers and for our own students, too often the significance of SoTL work is limited; Lee Shulman critiqued this approach as "Evidence Two" in his ISSOTL 2013 plenary address.

As Shulman and others (e.g., Gale, 2008) argue, rethinking SoTL practices and focusing on broader scale research is essential for our field to reach its full potential. We elaborate on Shulman's concept of "Evidence Three" by charting one path to expand SoTL landscape – translational research.

Daniel (2012) defines translational research as inquiry that goes through an iterative cycle involving:

1. The use of small studies and existing literature to articulate and develop practices that hold the promise of producing desired student learning;
2. Inquiry across multiple contexts to systematically explore the outcomes of these promising practices in authentic learning settings;
3. Synthesizing and sharing of the results of that collaborative inquiry to influence teaching, to contribute to policy-making, and to prompt further research.

We believe that the second and third steps of this translational cycle need to become a fundamental part of SoTL. Not only will this move us beyond Shulman's "Evidence Two," it also will produce research that has the potential to significantly influence teaching and learning within a discipline or across a campus. Isolated examples of translational research exist in SoTL (such as the History Learning Project at Indiana University), but this approach is so unusual that the examples are the exceptions that prove the rule. Translational research is on the margins of current SoTL practice (Felten, 2013; Poole, 2012); this panel will challenge all of us to think in new ways about our research.

After defining translational research in SoTL and making the case for its importance in our field, this international panel will facilitate a discussion about possible opportunities to develop both translational projects in and a translational orientation toward SoTL practice.

Daniel, D. (2012). Promising principles: Translating the science of learning to educational practice. Journal of applied research in memory and cognition (pp. 251-253).

Felten, P. (2013). Principles of good practice in SoTL. Teaching and learning inquiry (121-125).

Gale, R. (2008). Points without limits: Individual inquiry, collaborative investigation, and collective scholarship. In D.R. Robertson & L.B. Nelson (Eds.), To improve the academy: Resources for faculty, instructional, and organizational development, 26 (pp. 39-52). San Francisco: Jossey-Bass.

Poole, G. (2012). Square one: What is research? In K. McKinney (Ed.), The scholarship of teaching and learning in and across the disciplines. Bloomington: Indiana University Press.

Shulman, L. (2013). Plenary address. ISSOTL 2013 conference, Raleigh, North Carolina. https://www.youtube.com/watch?v=bhvwLW-5zMM

10:30 AM | Room 2101 | Inquiry into student learning

A03 HEY, I THINK THAT'S MY STUFF: THE USE OF STUDENTS' PERSONAL AFFECTIVE MATERIAL IN THE DRAMA THERAPY CLASSROOM

Workshop (90 minutes)

Jason Butler (1)

(1) Concordia University (Montreal, Canada)

As one of the creative arts therapies, drama therapy is an embodied, engaging approach that uses principles of theatre and drama to help achieve therapeutic goals including self exploration, healing, personal development and increased social skills. Within drama therapy sessions, participants engage in various dramatic activities and enactments using both personal and fictional stories. Drama therapy theory suggests that no matter what is being played, no matter what the dramatic action is, a portion of the player's personal material is projected into the action. This concept of dramatic projection allows drama therapists to circumvent usual defences and playfully engage with clients' personal material at a safe distance. When it comes to educating drama therapists, these concepts create a unique space within the classroom where students learning to utilize the drama therapy tools practice the interventions and are themselves engaging in the dramatic play. Through these instructive interventions, the concept of dramatic projection suggests that the students' own personal material is evoked and utilized. Therefore, within drama therapy pedagogy, students' personal histories and in-the-moment affective responses are used to learn drama therapy principles. While this makes for a lively, passionate, creative and engaging experience, it also has the potential to create a complex intersection of education and therapy that can bring with it a complicated set of ethical and pedagogical questions. This workshop will explore a recent phenomenological study examining the lived experience of drama therapy students within these moments where their personal affective material was evoked. The study, conducted earlier this year with students at three different masters level drama therapy programs in North America and the United Kingdom, consisted of focus groups with students and interviews with faculty members to elicit examples of their experiences. The workshop will share the study results and explore the subsequent questions, reviewing potential tools to navigate the complex intersection of personal and professional that can be created in these moments of experiential learning. The workshop will include a brief discussion of the research study and the findings but will primarily focus on theatre-based exercises with workshop participants in order to creatively examine the phenomenon and its potential manifestation in various disciplines. It will be applicable to any discipline that uses or engages with personal material, role-play, or physical enactment in the classroom.

10:30 AM | Room 2102A | Disciplinary approaches to teaching, learning and SoTL

A04.1 MOTIVATING STUDENTS TO ENGAGE IN SELF-REGULATED LEARNING THROUGH PROVISION OF FORMATIVE FEEDBACK: WHEN, WHERE AND WHY?

Individual Paper (30 minutes)

Gwendolyn Lawrie (1), Simon Bedford (2), Tim Dargaville (3), Hayden Dickson (4), Glennys O'Brien (5), Madeleine Schultz (3), Roy Tasker (6), Christopher Thompson (4), Mark Williams (6), Anthony Wright (1)

(1) The University of Queensland (St Lucia, Australia); (2) University of Wollongong (Wollongong, Australia); (3) Queensland University of Technology (Brisbane, Australia); (4) Monash University (Clayton, Australia); (5) The University of Wollongong

(Wollongong, Australia); (6) University of Western Sydney (Penrith, Australia)

There is limited opportunity for faculty to evaluate individual student's existing mental models of key concepts in very large first-year science cohorts, or to provide differentiated instruction, if required. Students arrive in first-year tertiary science possessing diverse prior learning experiences and this creates a challenge for instructors who wish to support their students' learning progressions. The provision of formative feedback that supports students in their development of independence to enhance self-regulated learning is an important strategy to support the transition between secondary and tertiary learning environments.

In this large-scale study, a diagnostic instrument has been developed to provide formative feedback for entering tertiary-level chemistry students across 5 separate Australian institutions. Outcomes have demonstrated the diversity in conceptions possessed by these students. As a result, a novel mechanism to deliver tailored online learning interventions to students with poorly-constructed conceptions has been trialled. Students obtain individual formative feedback from the concept review diagnostic and then can opt to challenge their conceptions through active learning modules based on visualisations of molecular level processes designed to cause cognitive dissonance. The online intervention activities were designed for completion in either a self-regulated or collaborative in-class environment, and their effectiveness was evaluated.

Students' perceptions of the feedback provided and their motivation to engage in self-regulated learning activities in response to that feedback were investigated in this study. The well validated Motivated Strategies for Learning Questionnaire (MSLQ) was adopted as the instrument to collect quantitative data which has been triangulated with students responses to open questions embedded in the questionnaire. Analytics, embedded in the web-based online modules, have provided insight into student activity including the length of time they invest in their learning in this environment across a semester. Outcomes of the study include insight into the strategies that students adopt and the relationship between intrinsic and extrinsic factors in their motivation to respond to feedback. A summary of these will be presented along with an additional dimension of the study evidenced through the emergence of different exemplars of practice adopted by the faculty across the 5 institutions. Constructivist learning environments arose because both teachers and learners were aware of their existing mental models of concepts. Faculty participating in this project became more reflective in their own practice and adopted pedagogies to support active learning by their students in face-to-face sessions taking place in parallel with the self-regulated online environments.

11:00 AM | **Room 2101A** | **Disciplinary approaches to teaching, learning and SoTL**

A04.2 CRITICAL THINKING IN EFL CONTEXT: HUMANITIES VS. ENGINEERING UNDERGRADUATE STUDENTS

Individual Paper (30 minutes)

Nikan Sadehvandi (1)
(1) Graduate School of Education, Kyoto University (Kyoto, Japan)

Critical thinking has been the center of attention in higher education over the last several decades. Critical thinking can be fostered at different rates and to varying extents in any academic disciplines, given the diverse cognitive processes that students need to go through. Hence, an understanding of the degree to which a specific field of study aids the development of critical thinking might help educators and the education system see what should be revised, substituted, and/or added in a curriculum. Accordingly, the major thrust of the present study was to compare the critical thinking ability of 296 humanities and engineering undergraduate students at four Iranian universities. The influence of gender and major of study, as independent variables, were also investigated. Another purpose of this study was to test the effectiveness of an explicit critical thinking intervention based on the Watson and Glaser (1994) classification of CT components, through a critical reading program using a pre-test/post-test quasi-experimental design. To this end, sixty-nine engineering and fifty-one humanities undergraduate students enrolled in

general English courses during the Fall (2012) semester participated in the activity. The two groups completed the critical thinking instruments: Honey's Critical Thinking Appraisal and a test of critical reading. Subsequently, both groups received an eight ninety-minute session intervention on critical thinking. The critical thinking instructional tasks and reading passages were adapted from Thomson (2002) and Weiner and Green (2006), respectively. Again, the two groups took the two aforementioned critical thinking tests after completion of the intervention activity. Descriptive statistics and a t-test were employed to interpret the data. The results indicated that a university major significantly affected the critical thinking ability of undergraduate students since engineering students significantly outperformed humanities students on the critical thinking test. No significant influence was discovered for gender on the test of critical thinking. However, male undergraduate students scored higher on the evaluation sub-skill (p=.01). In addition, although there was a significant difference between students' mean scores on the critical reading pre-test and post-test in both experimental groups, only humanities students improved in terms of their critical thinking ability after being exposed to the process (p=.02). Based on the findings, it was concluded that since there might exist differences among undergraduate students in different majors, curriculum designers and instructors need to take such differences into account when designing courses on critical thinking. Nevertheless, students can still benefit from instruction in critical thinking over time, even if the outcome is not evident immediately upon the completion of one course.

11:30 AM | Room 2101A | Disciplinary approaches to teaching, learning and SoTL

A04.3 STRATEGIES FOR CAPTURING AND CRITICALLY ANALYZING INFORMAL DISCOURSE: A GENDER AND THE MEDIA CASE STUDY

Individual Paper (30 minutes)

Jessica Birthisel (1)
(1) Bridgewater State University (Bridgewater, United States)

In the field of gender and media studies, instructors typically teach classic theories and terminology upon which the field was built: feminist and queer theory, hegemony, Marxism, etc. However, much of the contemporary popular discourse surrounding issues of gender and sexuality in the media is not likely to refer to these high theories; instead, these web-based conversations circulate a variety of informal, slang, and tongue-in-cheek concepts to discuss these topics. Related to the conference theme of "Disciplinary approaches to teaching, learning and SoTL," this project is rooted in the following question that arose out of a 300-level Gender and the Media course: how can I expose students to the informal gender-related terminology circulating online, that is unlikely to appear in a textbook, but that so often shapes public discourse surrounding issues of gender, sexuality and popular culture?

This presentation outlines my pedagogical and methodological strategies for identifying and evaluating informal and subsurface concepts and terms alongside more classic theories in a 300-level Gender and the Media course. This project utilizes the pedagogical strategy of critical discourse analysis (CDA), which Gee (2008) defines as observing not just the relationships between form and function in language, but also how this correlates with "specific social practices" where "issues of solidarity, status and power are at stake" (p. 19). This SoTL case study demonstrates how my students utilized online blogs and web comments, memes, slang dictionaries, wikis, and other informal sources in conjunction with contemporary media coverage case studies to create course resources that defined and considered the implications of important informal terms and gender-related concepts (such as ratchet culture, slut shaming, ball buster, muscularity, rape culture, revenge porn, bromance, sextremism, mansplaining, etc.), which are unlikely to appear in a textbook, but which are crucial to understanding contemporary discussions of gender and the media. In this presentation I will discuss evidence of learning via student examples and implications for the application of critical discourse analysis to informal sources that are too often overlooked in favor of more traditional academic resources. This presentation will incorporate literature related to the democratization of information and the potential of non-academic sources for teaching academic concepts.

10:30 AM | Room 2102B | SoTL and institutional cultures

A05.1 CAN COMMUNITIES OF PRACTICES BE SEEDED?

Individual Paper (30 minutes)

Peter Lake (1)
(1) Sheffield Hallam University (Sheffield, United Kingdom)

There have been numerous papers after Wenger's first real discussion of Communities of Practice (CoP) Wenger (1998). Wenger himself followed-up with "Cultivating Communities of Practice: a Guide to Managing Knowledge" (Wenger et al. (2002)), and others include Saint-Onge and Wallace (2002) and Samaras (2008).

After reading these we became certain that a CoP was needed in our department to help raise the Scholarship of Teaching and Learning (SoTL) profile and encourage reflective and sharing practice amongst colleagues. We began to look round for guides on making sure we had a successful implementation. However, there does not seem to be much in the literature about successful CoPs, especially those situated in the Higher Education sector.

I then asked the Staff and Educational Development Association (SEDA) community, through the JISCMail list, for any pointers and success stories. Whilst there was a flurry of emails which reinforced the idea that CoPs were good things, none actually said: "oh yes, we set a successful one up and this is what we did …."

Of course every community will be different and so the best we would be able to find would be general guidelines. Some of the SEDA responders did give tit-bits of advice, but just as many gave warnings. This was obviously not going to be a trivial task.

One particular problem for us was the insistence from Wenger, and others, that groups need to be self-forming, informal and in charge of their own agenda…. or, as one responder said: '' free from managerialist agendas". I am a manager grade lecturer (though in typical matrix fashion I am also a practitioner) and one of the reasons we thought a CoP might be useful would be to help encourage module teams to talk to one another before we had the next big revalidation exercise. A highly managerialist piece of rationale!

So the question became not just how do we create a CoP, but can we actually create, or help to create by seeding, a CoP that is relatively autonomous but which can deliver, if it so desires, some useful outputs for the department. If this project succeeds, does it mean that Wenger was wrong about the pre-requisites or would it mean we had created a quasi-CoP?

This presentation will start by briefly exploring the literature about CoPs, and feedback some of the ideas that came from the SEDA list. It will then describe the way this particular CoP project has moved forward thus far. It is a long term project but by the time of the conference a full-year review will have been completed and conclusions about the success or otherwise of the project will be available. Most importantly the presentation will end with an open discussion about CoP implementation, asking attendees for their experiences and thoughts.

11:00 AM | Room 2102B | SoTL and institutional cultures

A05.2 CREATIVITY AND PASSION AS GRADUATE ATTRIBUTES IN AUSTRALIAN UNIVERSITIES – THE RHETORIC AND THE PRACTICE

Individual Paper (30 minutes)

Theresa Winchester-Seeto (1), Anna Rowe (1), Agnes Bosanquet (1)
(1) Macquarie University (Macquarie University, Australia)

Over the past 20 years, Australian universities have provided statements about the attributes they wish to instil in their graduates. These statements are public accounts of what universities believe to be important, and articulate the 'intended curriculum' (Marsh & Willis, 20007) of higher education. Recent research has revealed changes in focus over time, from an emphasis on preparing the professional in the late 1990s to global perspectives and community responsibility in the late 2000s (Winchester-Seeto et al., 2011). Our presentation builds on previous research, specifically comparing the rhetoric on creative thinking and passion in graduate attribute statements with the reality of nurturing these in practice.

Thematic and word frequency analyses demonstrate that whilst many attributes change in popularity over time, 'creative' and 'critical' thinking are the only two attributes that occur in more than 75% of university statements from the 1990s to the late 2000s (Winchester-Seeto et al., 2011). Creative thinking is thus, at least in the rhetoric of the university sector, consistently viewed as important for graduates.

Passion features infrequently in attribute statements, but there are indications that it is valued. There is increasing emphasis in 'global citizenship' in the latest attribute statements (Bosanquet et al., forthcoming). Much of this is around being 'engaged' with the challenges of contemporary society, or similar sentiments. Engagement can be passive, active or critical (Bosanquet et al., forthcoming) and attribute statements include examples at all levels. It is difficult to see passion in passive engagement, but both active and critical engagement could, and probably should, be based on and foster passion.

Thus the rhetoric in graduate attribute statements firmly supports notions of creative thinking and passion. Teaching practices that have been shown to encourage creative thinking include small group learning, active learning strategies, and research opportunities for students. There are advocates and champions for all these approaches, but there are also economic drivers pushing in the opposite direction, as evidenced by the growth of MOOCs.

Nurturing passion is a more challenging ambition, and traditional lecture-based education has limited ways to support its development. Active engagement with communities and real world problems may provide effective conditions for such development, including approaches such as Service Learning and various forms of Work-Integrated Learning.

Graduate Attribute statements suggest the Higher Education sector values nurturing creative thinking and passion. There are certainly teaching practices that have the potential to fulfil this ambition, but their adoption requires re-prioritising, commitment, time and money -- something to be fought for in these fiscally restrained times.

Bosanquet, A., Winchester-Seeto, T. & Rowe, A. (forthcoming) Conceptualising global citizenship: analysis of intended curriculum in Australian universities. HERDSA 2014 Conference Proceedings.

Marsh, C. J., and Willis, G. (2007). Curriculum: Alternative approaches, ongoing issues (4th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Winchester-Seeto, T., Bosanquet., A, and Rowe, A. (2011) Smoke and Mirrors: graduate attributes and the implications for student engagement in higher education. In I. Solomonides, A. Reid and P. Petocz (eds), Engaging with Learning in Higher Education. Faringdon: Libri Publishing. (pp. 413-438)

A05.3 A VISION OF SOTL AT A RESEARCH UNIVERSITY

Individual Paper (30 minutes)

Denise Domizi (1)
(1) University of Georgia (Athens, United States)

Cultivating a SoTL community at a research university comes with a unique set of challenges (McKinney and Nelson 2003, Hutchings, Huber et al. 2011). The Center for Teaching and Learning (CTL) has developed "A Vision of SoTL" that provides campus-wide leadership by promoting, fostering, and supporting an engaged community around the Scholarship of Teaching and Learning (SoTL). In this session we will share our vision and the programs we implemented to make this vision a reality.

According to Chick and Poole (2014), the SoTL world is populated by guest scholars, tourists who are "traveling outside of their home disciplines, nations, methodologies, communities, and even languages." In order to support these scholars, we must 1) become aware of the faculty members who are currently engaged in SoTL, 2) entice new faculty to engage in SoTL, 3) help faculty overcome barriers to SoTL at a research university, and 4) raise awareness of SoTL.

Knowing current SoTL faculty and their projects

A first step to expanding SoTL is to gain a more complete understanding of who is currently doing SoTL research, to learn about their research projects, and to recognize the work they are doing. With this information we could begin to build a database of SoTL research on campus, match potential collaborators across campus, and raise awareness of the SoTL research on campus.

Recruiting faculty to SoTL

Learning communities, fellows programs, and interest groups can promote a vital exchange of ideas and energy around SoTL. In order to grow our SoTL community, we are offering a number of cohort-based opportunities, including a year-long soup-to-nuts community where participants will design and implement a SoTL project, as well as support for existing fellows programs where participants are required to do a teaching project but have no systematic structures in place to examine the efficacy of those projects.

Overcoming barriers to SoTL

Researchers at the university of Michigan (Wright, Finelli et al. 2011) identified barriers that keep faculty from engaging in SoTL work at a research university. While tenure-based reasons are not ones CTL can readily solve, there are other barriers we can address to increase SoTL engagement. Based on Wright et al's (2011) suggestions, as well as our own experiences, structures we have put in place include cohort-based communities; support with research design, IRB, and literature reviews through workshops and one-on-one consultations; and assistance finding appropriate dissemination outlets (e.g. journals, conferences).

Raise awareness

CTL will recognize faculty through SoTL Spotlight, an initiative that highlights SoTL researchers on the CTL homepage, a spotlight lecture, and an article in the CTL newsletter. Cohort communities will present their research in a poster session that kicks off the next year's community.

In this session we will share our SoTL vision, and the programming we have put in place in order to meet this vision. Attendees will share their own experiences with SoTL and the programs in place at their universities that support SoTL, as well as the support they wish they had to help them move forward.

10:30 AM | Room 2104A | Emerging technologies and SoTL

A06.1 PRINCIPLES TO REWARD PASSION: TOWARDS AN ORGANIC NOTION OF PEER REVIEW OF ONLINE TEACHING SOTL

Individual Paper (30 minutes)

John P. Egan (1)
(1) University of Auckland (Auckland, New Zealand)

The era of the sandstone, brick and mortar university has not ended—nor need it. However, in the 21st century the nature of higher education continues to evolve in ways that move beyond the presumption that university study is situated on a physical campus. In particular, the realm of online learning — from degree programs, through extension-like massive open online courses (MOOCs) — continues to grow rapidly. As peer review of teaching continues to gain currency, particularly in research-intensive universities, the normative institutional practices that presume teaching is a face-to-face (F2F) activity merit interrogation.

In this paper I examine both philosophical and operational aspects of cultivating a peer review of teaching culture than embraces online learning, as part of a wider scholarship of teaching and learning (SoTL) endeavours. Many online educators are somewhat evangelical in their commitment to the particular affordances of online learning: a passion is sometimes badly served in higher education culture. Therefore, my analysis disrupts presumptions about "observation", "interaction", "teaching" and "assessment", which are experienced substantively differently online.

In particular Anderson's (2004) work around particular nuances of online interactions (student-student, student-faculty and student-content) scaffolds my analysis of how various online learning spaces and platforms shape and inform pedagogy. As well, the ways in which learning management systems (LMSs), weblogs, wikis, virtual classrooms and a range of social media platforms inform, shape, constrict, and liberate online teaching will be considered. Importantly, the idea of instructor presence is given particular weight.

In reflecting on my own experiences with peer review — as a reviewer of others' online teaching and one whose online teaching has been reviewed — I recommend the following as best practices for the peer review of online teaching. Peer reviewers should neither be skeptics nor blind adherents with respect to online learning. They should be experienced online teachers and familiar with the platforms being used. Each review needs to take into account who is responsible for the instructional design of the course being taught, since, in some instances, reviewers should consider the extent to which the instructor might have been required to teach within another person's course design, which is not wholly reflective of their own ethos and naturalistic teaching praxis. When identifying aspects of online teaching praxis that merit refinement or redesign, consider the extent to which a F2F learning activity was ostensibly migrated to online, without comprehensive consideration of whether it would work well online. Reviewers need to ensure their review is based on teaching practice within platforms, rather than the platforms themselves. Finally, where systems provide such data, learning analytic/reporting function of platforms can be used to provide some context for the review — though such reporting more often captures the frequency of interactions rather than their calibre.

11:00 AM | Room 2104A | Emerging technologies and SoTL

A06.2 MASSIVE SOTL IN ACTION: MOOC, CREATIVITY, CRITICAL THINKING, AND PEER ASSESSMENT

Individual Paper (30 minutes)

Toru Liyoshi (1)
(1) Center for the Promotion of Excellence in Higher Education, Kyoto University (Sakyo-ku, Japan)

While a number of MOOCs (Massive Open Online Courses) are designed to effectively help learners gain specific domain knowledge, one of the primary goals of "KyotoUx 001: The Chemistry of Life" (https://www.edx.org/course/kyotoux/kyotoux-001x-chemistry-life-858), a Kyoto University edX course, is to help develop student skills for generating new ideas at the interface between chemistry and biology. As a result, a series of unique instructions, collaborative exercises and evaluation methods (e.g., peer assessment) was developed for this innovative course. Based on the analysis of the various data collected through the course, this paper examines the following and other questions:

- Which learner attributes (motivations for learning, education level, age, gender, region, etc.) significantly contribute to the completion of this course?

- Is there a correlation between students' learning performance and their active participation in peer assessment and discussion throughout the course?

- Was the course design (including organizational structure, learning materials, lecture videos, evaluation methods, interactions among students, instructors, and teaching assistants, etc.) relevant and satisfactory for most learners?

- How different or similar is this MOOC compared to the original face-to-face course, in terms of affective influence on student learning (e.g., interest in learning topics, motivations for learning, effort invested in continuing learning, etc.)?

- Is it possible to design a MOOC that help identify "creative geniuses" among learners?

Furthermore, some conflicts of interest emerged from the learners of this particular MOOC, given the competitive learning context and settings as well as their arguments about "absolute evaluation vs. relative evaluation". These were examined and discussed in relation to disciplinary styles and values and the culture of learning and teaching.

Finally, some Implications for further improvement in course design, use, and evaluation will also be presented.

(It should be noted that this MOOC just started on April 10, 2014 so the actual paper will be completed and submitted at a later stage.)

10:30 AM | Room 2104B | Student roles in and perspectives on SoTL

A07 ENGAGING STUDENTS AS CO-INQUIRERS IN SOTL: DIVERSE PERSPECTIVES FROM AROUND THE GLOBE

Panel (90 minutes)

Roselynn Verwoord (1), Mick Healey (2), Abbi Flint (3), Katherine Harrington (3), Carmen Werder (4), Shevell Thibou (4), Tawanna Franklin (5), Karen Hornsby (5), Camille Kandiko Howson (6), Saranne Weller (7)
(1) University of British Columbia (Vancouver, Canada); (2) University of Gloucestershire (Gloucestershire, United Kingdom); (3) Higher Education Academy (York, United Kingdom); (4) Western Washington University (Bellingham, United States); (5) North

Carolina A&T State University (Greensboro, United States); (6) King's College London (London, United Kingdom); (7) University of the Arts London (London, United Kingdom)

This panel, comprising some authors from an upcoming special issue of Teaching and Learning Inquiry (anticipated publication 2016), will highlight aspects of engaging students as co-inquirers in SoTL including: multiple student roles, multiple models of co-inquiry, and promising practices and caveats for partnering.

This work is of ongoing importance: There is a growing movement within higher education that recognizes the importance of involving students as contributors to all aspects of teaching and learning including SoTL. Many scholars (Healey et al., 2010; Bovill et al., 2011, Cook-Sather, Bovill, & Felten, 2011) have provided theoretical arguments for the role of students as co-inquirers while others (Werder & Otis, 2009) have modeled engaging students as co-inquirers through including students in all aspects of the research process. These scholars have helped pave the way for conversations about the vital role that students can play in advancing SoTL.

Roselynn Verwoord (University of British Columbia), as panel moderator & special issue co-editor, will provide a brief overview of the upcoming TLI special issue and will introduce the panelists who will provide ten minute presentations:

Mick Healey (HE Consultant and Researcher, Emeritus Professor University of Gloucestershire, UK); Abbi Flint (Academic Development Officer, Students as Partners, Higher Education Academy, UK); Katherine Harrington (Academic Lead for Students as Partners, Higher Education Academy, UK)

"Students as partners – towards a conceptual framework"

We will present a conceptual framework which maps the territory of recent and ongoing work on the theme of students as partners in learning and teaching in higher education. It arises from a UK HE Academy forthcoming publication on this topic, and is based on four overlapping areas:

- learning, teaching and assessment;
- subject-based research and inquiry;
- scholarship of teaching and learning; and
- curriculum design and pedagogic advice and consultancy.

Carmen Werder & Shevell Thibou (Western Washington University), Tawanna Franklin & Karen Hornsby (North Carolina A&T State University)

WWU and NC A&T both have SoTL structures that engage students as co-inquirers in institution-level assessment and enhancement. This piece provides a heuristic model for considering how co-location, collaboration, and co-inquiry are distinct, yet interrelated ways of partnering with students on teaching and learning. Co-authors interweave their own case stories from two institutions to demonstrate how this model might help understand these partnerships better and also suggests how move to co-inquiry as a partnering relationship with optimal benefits for learning.

Camille Kandiko Howson (King's College London) & Saranne Weller (University of the Arts London)

This presentation reports the outcomes of undergraduate student participation in learning and teaching enhancement. Students participated as partners in a collaborative inquiry into academic practice through teaching observation in a professional development programme for new lecturers. Drawing on concept map-mediated interviews, students' conceptions of their role in enhancement is explored, along with the expertise they could provide and their understanding of student voice in the institution. Concept maps will be presented and discussed.

10:30 AM | Room 2105 | Leadership, academic development and SoTL

A08 REFRAMING SOTL PROGRAMS TO EXPLAIN AND INCREASE THEIR EFFECTIVENESS

Workshop (90 minutes)

Craig E Nelson (1), George Rehrey (2), Carol Hostetter (3)
(1) Indiana University (Bloomington, Indiana, United States); (2) Indiana University Center for Innovative Teaching and Learning (Bloomington, Indiana, United States); (3) Indiana University School of Social Work (Bloomington, Indiana, United States)

Significance

How can academic development most effectively foster deep faculty engagement with SOTL research? We have imported a powerful framework from behavioral economics to address this question. Assumptions about rewards and compensation inherently influence the design of faculty development programs. But the assumptions we make about the best ways to engage and reward faculty for their contributions to SOTL often ignore relevant research in behavioral economics. We have recently reframed how we think about our SOTL programs using the contrast between social and economic reward systems (e.g., Dan Ariely, 2009, Predictably Irrational HarperCollins. Chapter 4: The cost of social norms: Why we are happy to do things, but not when we are paid to do them). We began by critically evaluating our earlier SOTL efforts and asking how they did and did not match the benefits expected from the types of rewards offered. Reflecting on our findings, we discovered that some of our most successful programs have primarily involved social rewards, a result that has flown in the face of our own prior assumptions regarding the importance of stipends and other incentives. These programs include the History Learning Project (tinyurl.com/m4nuysm), a new PhD degree in Teaching Anatomy (tinyurl.com/mkkm9w5), the Course Development Institute (tinyurl.com/k6jptt2), and SOTL Writing Retreats, to name a few key examples. What has made these particular initiatives successful can be explained, in part, by behavioral economics theory. We are now using these ideas as a framework for rethinking our priorities for programming and for allocating financial resources and staff efforts. Come and see how this reframing is working for us and see if you might find it equally helpful.

Learning Goals and Outcomes. During this workshop participants will:

- Identify some of the benefits and liabilities of both social and economic reward approaches to SOTL and faculty development programs,
- Consider how we have used behavioral economics to reframe our past efforts and redefine our further efforts,
- Reexamine the reward structures implicit in their own SOTL programs, identifying assumptions that may not accurately reflect the way faculty typically respond to social and economic rewards,
- Consider specific possible changes in the way they frame their SOTL initiatives and allocate their resources and
- Critique our analyses and applications so that we can further this work.

Plans for Engagement

Participants will be offered at least eight opportunities to reflect and write individually and then to discuss in small groups. Time for questions, whole group discussions and sharing of experience will be included both during the session and at its end.

Facilitators' Relevant Experience

The presenters collectively have been involved with an award-winning SOTL program (tinyurl.com/l2hmwu6; tinyurl.com/mhd9qgr) since its conception in 1998 and include its current director. We have been part of our university's multi-campus, faculty-driven teaching academy (tinyurl.com/7kl5g4t) since its inception and have served as directors of its SOTL center (tinyurl.com/lzbjdlr). Together and separately we have conducted dozens of SOTL-related workshops locally and across the country and have published over 60 SOTL papers.

10:30 AM | Room 206A | Inquiry into student learning

A09.1 **IS THIS COURSE ABOUT ME? LINKS BETWEEN METACOGNITION, CONTEXTUALIZED WAYS OF KNOWING, AND STUDENT LEARNING OUTCOMES**

Individual Paper (30 minutes)

Sarah Bunnell (1)
(1) Ohio Wesleyan University (Delaware, United States)

This paper describes an analysis of the link between metacognition and student learning outcomes. There is a rich body of work demonstrating a need to foster metacognition in our students (e.g., Dewey, 1933; Pintrich, 2002; Tanner, 2012). Some of my previous work has discussed links between reflective portfolios and course-specific learning (e.g. Bunnell, 2013; Bernstein & Bunnell, 2007; 2010; Bunnell & Bernstein, 2009). The current project examined the benefits and challenges of fostering metacognition in order to enhance student learning in a course where students inherently struggle with the concept of whether and/or how the material is self-relevant: Adolescent Psychology. In this course, we examine the literature on the factors that influence adolescent outcomes; additionally, students conduct an interview of an adolescent and then conduct an analysis of how the adolescent's experience either does or does not relate to the course material. At several points in the semester, I ask students to consider whether they themselves are adolescents, and how they know.

A trend that I noticed over several years of teaching this course was that students' thinking about whether they are adolescents shifted in dramatic ways across the semester for most students, as did their reasoning behind their answers. This project, therefore, focused on changes in views of the self across the semester, and how these changes were related to learning outcomes. Drawing on the work of Baxter-Magolda (2002; 1992) and others, I examined how students' views of their own knowledge differed along the continuum from "absolute" to contexualized." Analyses indicate that overall, students were more likely to provide absolute-level response stating that they viewed themselves as an adult at the beginning of the semester, while they were more likely to view themselves as an adolescent at the end of the semester. Those who changed their response across the semester, rather than held constant their view of the self, displayed higher levels of class content knowledge than did students who did not change their views. In particular, I was interested in students who changed their responses from an absolute view of the self to an uncertain, contextualized response, such that they stated that whether they were an adolescent or not depended upon the context as well as the level of the analysis. In terms of links to student learning, individuals who were more contextualized in their end of semester metacognitions demonstrated improved learning outcomes across exam performances and interview paper performance, relative to those who endorsed an absolute view of the self in relation to the course.

Discussion will focus on the use of metacognitive pedagogies to enhance student learning and how to provide support to students in their development of uncertain, contextualized views of the self. Audience members will be encouraged to consider to how they may increase students' metacognition, as well as where they may either encourage or limit students' ability to frame their learning in context-dependent ways.

11:00 AM | Room 206A | Inquiry into student learning

A09.2 **REDUCING PREJUDICE THROUGH A CLASSROOM ACTIVITY USING THE BOGARDUS SOCIAL DISTANCE SCALE: MEANINGFUL CHANGE OR CONFORMITY?**

Individual Paper (30 minutes)

Trent Maurer (1)
(1) Georgia Southern University (Statesboro, United States)

Questions & Rationale: This session will present an inquiry into student learning as measured by changes in student attitudes towards a target minority group as a result of classroom activities using the Bogardus Social Distance Scale [BSDS]. Prior SoTL work using the BSDS (Maurer, 2013) has established that compared to students in a control group, students who participated in this classroom activity significantly reduced their own self-reported social distance/prejudice across several class periods. However, both groups reported equal changes in perceptions about the difficulty of being a member of the minority group on that campus, suggesting that not all changes were attributable to the BSDS activity. Additionally, the nature of that study made it impossible to determine if changes in student attitudes on the BSDS were the product of simple conformity to the majority opinion (Asch, 1951) and/or group polarization (Sunstein, 2009). Building on that work, this investigation seeks to determine if changes in student attitudes on the BSDS: a) are genuine or merely a product of conformity/group polarization, b) are mirrored by changes in student attitudes on a second, independent measure, c) persist until the end of the term or regress over that time.

Methods: This project compared students' attitudes towards homosexuals as measured by the BSDS at three points in time across three groups enrolled in an introductory Family Science course. All students were assessed via survey before the class lecture material on the topic of diversity and discrimination (where these issues were discussed), at the end of the class material on the topic (the next class period), and again at the end of the semester. Students in the Control group section received only the lecture material. Students in the Peer Results group section were shown a graph depicting the distribution of student responses on the BSDS after the first BSDS. Students in the Activity group section participated in a classroom activity using the results from the first BSDS (Maurer, 2013). Students also completed a second measure of their own and other students' attitudes towards homosexuals independent of the BSDS (Wojcieszak, 2012, 2011) and two other questions about the difficulty of being homosexual on campus at the first two time points.

Outcomes & Reflective Critique: Data collection will be complete in June. Results from prior investigations suggest that students in the Activity group will report a greater shift in attitudes on the BSDS than students in the Control group and that shift will be in the direction of minimizing social distance/prejudice. Comparison to the Peer Results group, especially over the three time points, will enable answering the central project questions and the teasing apart of these issues in teaching about discrimination and reducing prejudice.

Audience Engagement: The audience will be invited to brainstorm further applications of the BSDS activity to reduce social distance and prejudice, particularly as it relates to target groups whose social status may differ between countries and regions.

11:30 AM | Room 206A | Inquiry into student learning

A09.3 THE EFFECT OF METACOGNITIVE EXAM PREPARATION ASSIGNMENTS ON STUDENT PERFORMANCE IN AN INTRODUCTORY BIOLOGY COURSE

Individual Paper (30 minutes)

Diane Angell (1), Sharon Lane-Getaz (1), Kelly Hennessey (1), Stephanie Smith (1), Sam Bailey-Seiler (1)
(1) St. Olaf College (Northfield, United States)

Metacognition, or the awareness and understanding of one's own thought processes, is typically considered essential for effective learning of complex material. Undergraduate biology courses increasingly push students to integrate concepts across levels of organization and to synthesize material rather than to simply memorize (AAAS, 2011). Integration and synthesis skills are likely to involve metacognition, since students must be aware of their knowledge before they can access and retrieve that knowledge to bring together new concepts (Tanner 2012). Many students arrive in our introductory biology courses underprepared for such challenges. Although metacognitive approaches are widely valued, time spent teaching students about metacognition or having students respond to metacognitive prompts may result in less time for other activities. This may be especially true for introductory biology courses that are traditionally material heavy and are expected to prepare students for entry into upper level courses.

Our study compared the effects of two different kinds of short exam preparation assignments required in advance of several exams during the semester. Classes were divided into groups, with one group receiving metacognitive exam preparation prompts and the other group receiving terms to define.

We compared the two groups in terms of exam grades, the ability of students to predict their grade before taking the exam and their self-reported study habits. Although metacognitive assignments increased student exam performance in some courses after accounting for incoming ACT/SAT scores, the effect was not consistent. Such sporadic metacognition exposure (3-4 times per semester) did not result in predictable test score increases. When students were asked to predict their exam scores, all students grew more accurate across the semester and students completing metacognitive assignments were somewhat better predictors of their own exam scores than students asked to simply define terms. Students receiving metacognitive assignments also self-reported at the end of the semester that they actually used strategies typically categorized as being metacognitive in nature.

Therefore, although periodic use of metacognitive assignments did not consistently increase test scores any more than giving students practice defining terms, the metacognitive group was better at predicting their grades on exams before taking the exam. Assigning metacognitive questions may have helped students gauge their understanding of material and given them knowledge of their cognition, even though their exam scores seem to indicate they were not yet regulating their cognition (Schraw, 1998). While it may be difficult for students to learn metacognition skills over the short time frame of a semester, our results indicate that even sporadic metacognitive assignments in material heavy courses can have some value.

I am especially eager to engage the audience in a series of exchanges throughout my presentation, centering broadly on whether we can force metacognition on students by having them complete assignments that require metacognition or whether we really need to infuse a course with metacognitive approaches to learning.

10:30 AM | Room 206B | Inquiry into teaching practices

A10.1 KNOWING YOUR STUDENTS: AN APPROACH TO ENCOURAGE PEDAGOGICAL CREATIVITY AND CHANGE

Individual Paper (30 minutes)

Meloni Muir (1), Garth Tarr (2), Helen Drury (3), Fiona White (2), Kellie Morrison (4)
(1) Sydney Medical School, University of Sydney (Sydney, Australia); (2) Faculty of Science, University of Sydney (Sydney, Australia); (3) Learning Centre, University of Sydney (Sydney, Australia); (4) Sydney Business School, University of Sydney (Sydney, Australia)

Together with a dramatic increase in tertiary enrollments over the last 50 years (UNESCO, 2010) there has been an accompanying increase in student diversity (Coaldrake, 2001; Ramsden, 2003). Many students are now studying in a second or third language due to internationalization of education. In addition, the range of students' age, educational backgrounds, preparedness and previous learning experiences has also increased, particularly with government policies aimed at non-traditional students. In Australia, diversity in tertiary education has long existed, in part due to the distinctive demographics of the Australian population but this diversity has often not been taken into consideration in curriculum design or teaching. It is not uncommon to find academic staff focusing on how to integrate discipline-specific knowledge into their teaching rather than applying advances in pedagogical theory and practice for teaching in this new tertiary environment. To teach diverse student cohorts effectively and inclusively, it is important to understand who our students are and engage with this diversity in the classroom (Brookfield, 2006). If we are to prepare our students to be global citizens and nurture creativity in tertiary teaching, we need to assess what staff understand in relation to their students' diversity and how prepared they are for teaching more inclusively. It is imperative to look towards supporting academics in developing more inclusive curriculum and learning environments by encouraging their passion for not only what they teach but how they teach (Williams et al, 2005; Danowitz & Tuitt, 2011).

In this presentation we will report on a study that examined how academics in the faculties of Business and Science at a large, research focused university use information about student demographics, language background and previous learning experience (i.e., courses successfully completed, percent of students retaking the course, other courses currently enrolled in, etc.) to inform their teaching and curriculum design. One hundred forty-six academics completed an online questionnaire regarding their knowledge of their student cohort's demographic and education backgrounds. They then received a Knowing Your Student (KYS) report that summarized the demographics and previous learning experiences of their student cohort in a concise two-page document. After receiving the report, staff completed a second questionnaire that included open-ended questions regarding how they used the KYS report data in their teaching and curriculum design. The KYS reports were new to Science staff while Business staff have received the reports since 2010. Overall, academics in both faculties had a very positive response to the KYS reports and engaged with the data provided. Provision of the KYS report to Science staff instantaneously brought their self-assessed knowledge of their student cohort up to a level comparable with that of Business School academics who have been receiving the reports since 2010. The presentation will share preliminary findings on curriculum renewal strategies and changes in pedagogy reported by academics in response to their new knowledge about the diversity of their cohorts.

11:00 AM | Room 206B | Inquiry into teaching practices

A10.2

Individual Paper (30 minutes)

INVENTING COURSE DESIGN TO DEVELOP REFLECTIVE INQUIRY-DRIVEN STUDENTS DESPITE INCREASING COMPLEXITY , DIVERSITY AND CHALLENGING COHORT CHARACTERISTICS

Barbara Hornum (1)

(1) Drexel University (Philadelphia, United States)

This model links student characteristics like cohort factors and diversity to their responses to high -impact practices and engaged learning by innovative course design. Uniquely developed group-work and team-building incorporate student learning characteristics into major assignments which assessment demonstrates produce desired learning goals and high satisfaction. After several iterations the course structure demonstrates reflective course design creates deep learning, builds a learning team of professor and students, while acknowledging cohort and cultural diversity. Using focused discussion attendees are encouraged to ask questions and share their experiences.

High impact courses to promote engagement, collaboration and inquiry-driven learning for life are creating innovative potential partnerships of faculty and students in active learning. (Kuh) There are also many studies about the specific needs of student cohorts such as millennials. (Espinoza) (Bonner et al.) Increasing numbers of international students from a variety of cultures, with different approaches on teaching and learning, raise issues of intercultural communication as another variable in creating effective, meaningful teaching/learning situations. (Yamashita and Schwartz) Focusing on deep learning — including critical thinking and evidence- based reflection — has also become part of many academic institutions. (Conrad and Dunek) These are separate yet equally important aspects of creating a learner-centered classroom for discussion herein.

A major goal of this presentation is to draw connections between the various aspects of deep learning. A second goal is to factor in the diversity of teaching and learning situations as related to globalization, multiculturalism, culturally based learning styles, and the commodification of some aspects of higher education. The third goal is to present one model of using course design and specific types of assignments as mechanisms to create an integrated system of deep learning, fostering critical thinking and enabling students to be involved and active participants in their own education. The fourth goal is to examine ways where both the professor and the students can move in tandem, overcoming the structural and cultural barriers as a learning team.

As we explore this model there are clearly benefits, but also constraints of time and energy for faculty and students. As the model has gone through several iterations more detailed course assessment designed to measure general and unique learning goals is enabling comparative analysis. It is clear that student satisfaction and engagement are increased by innovatively designing activities that are responsive to the needs of millennials and students from diverse backgrounds. This creates a targeted match between the goals of faculty and the goals of students to create a unity of purpose. Student responses to course and instructor evaluations clearly demonstrate this and will be a part of the presentation to support the engagement of the students.

Takeaways include: the session handout, a reference list useful to all four goals of the session, weekly or unit assessment measures, a sample of a learning goal course assessment requiring students to evaluate whether they understood the learning objectives of the course, how well these objectives were communicated, their connection to specific assignments, and other measures of deepened learning.

10:30 AM | Room 207 | Emerging technologies and SoTL

A11 ASSESSING AUTHENTIC LEARNING IN DIGITAL ASSIGNMENTS

Workshop (90 minutes)

Mills Kelly (1), Kelly Schrum (1)
(1) George Mason University (Fairfax, United States)

As more educators infuse digital assignments into their courses, an important question we face is how to assess authentic learning in those assignments. What are the challenges of combining intellectual rigor with creativity and digital skills and assessing all of the above? How can we credit the time involved in conceptualizing a digital project and often in developing the necessary skills to build a digital project? How do we account for varying levels of digital skill at the start of the semester so that our assessments take place on a level playing field? How do we measure intellectual growth against the background of growth in technical skill? All of these are central questions that will be addressed during this workshop.

This workshop will take a hands-on, learn-by-doing/learn-from-others approach. As a result, attendees will be asked to contact the facilitators in advance (optional) and to bring samples of assignments they use (or want to use), syllabi, and an example or two of an assessment problem they would like to discuss with colleagues. The facilitators will provide carefully selected examples to get the conversation started.

Those attendees who are already assigning digital projects will be asked to create a digital poster or bring sample digital student work, including one example that models success in assigning digital projects and one that models some of the challenges or productive failures. These attendees will also be asked to bring a sample rubric or a summary of the grading process for the projects.

The facilitators will open with brief framing remarks describing the workshop goals and process. Attendees with digital projects to share will be set up around the room. Participants will circulate for 30 minutes looking at examples and talking informally in small groups about the projects, including successes and challenges. During that time, participants will select one group or kind of project that most closely aligns with their content and/or teaching approach. These small groups will work together to identify problems and strategies for assessing that kind of digital project, establish relevant guidelines, and put them into practice by assessing sample student work. Groups will share ideas via Google Docs and then discuss as a large group to find commonalities and differences. We anticipate overlap as well as distinct problems and strategies for different kinds of project.

10:30 AM | Room 308A | Leadership, academic development and SoTL

A12.1 ENGAGING, SUPPORTING AND SUSTAINING TEACHING PRACTICES

Individual Paper (30 minutes)

Rashmi Watson (1)
(1) The University of Western Australia (Perth, Australia)

Universities in Australia and internationally, offer higher education teaching programs to academic staff with the aim of improving teaching practices. The current small-scale study examined factors associated with academic teaching staff experiences and perceptions with higher education programs at a research intensive university in the Group of Eight Australia. Specifically, the study focussed on their ability to access the program, apply new knowledge, share with colleagues, be supported by senior leadership, and maintain the new learning long-term beyond the program. Each academic was interviewed about their experiences of the related aspects related to their involvement in the teaching program to gain insights into their views about aspects that have enabled or have been obstacles. Data is represented through narratives to capture the personal experiences prior, during and

beyond the teaching program attendance. The study revealed a number of factors supported by the literature that aid in the positive experiences for academics such as: support by all faculty staff, a culture that is open to teaching, being an active member of a teaching community of practice and regular application and reflective practice of new knowledge.

11:00 AM | Room 308A | Leadership, academic development and SoTL

A12.2 SEEDING SOTL WITHIN A GRADUATE STUDENT COMMUNITY, THE EXPERIENCE OF UNIVERSITY COLLEGE CORK

Individual Paper (30 minutes)

Bettie Higgs (2), Marian McCarthy (1), James Cronin (2), Jacinta McKeon (2)
(1) University College Cork (Cork, Ireland); (2) University College Cork (Cork , Ireland)

In University College Cork over 1,000 graduate students are enrolled each year. The majority of these graduates play a role in teaching other students. Graduates are asked to do the important teaching and learning work in higher education. This presentation argues for the benefits of graduate students 'coming together to share experiences' of practice as a community of practitioners seeding SoTL as a university-wide framework for learning. The presentation will contextualize Cork's community of practice model within a range of online and face-to-face practices supporting graduate teacher assistant education currently operating within an Irish university context. The presentation will specifically focus on a need to manage student interaction so as to foster quality learning. Qualitative and quantitative data from end-of-course presentations will be arrayed to focus discussion findings. In Cork, graduate teaching assistants, across the university, are asked to run tutorials, organize seminars, carry out field-based studies, and act as mentors, while also taking on students in an apprenticeship model. In Irish higher education institutions graduate teaching assistants request support from the Teaching and Learning Centres. Annually, in University College Cork, 50 students participate in, and successfully complete, a face-to-face accredited course in teaching and learning in higher education. The course is enquiry-based and progressively leads graduate students into the scholarship of teaching and learning. Its goal is to empower graduate teaching assistants to become reflective practitioners when they take on the mantle of the expert in mentoring disciplinary and practice-based learning within university schools, departments and centers. Ongoing work with postgraduate teaching assistants has led to new initiatives that are grounded in a 'bottom-up' approach. Postgraduate students are taking the lead and are co-designing new courses. We suggest this approach as a model for scaling up support for graduate teacher assistants and for fostering a community of practice grounded in the scholarship of teaching and learning.

11:30 AM | Room 308A | Leadership, academic development and SoTL

A12.3 CHANGING THE TEACHING WAY: HOW THE RESULTS OF THE MID-TERM TEACHING FEEDBACK BY STUDENTS CAN BE CONSIDERED BY UNIVERSITY MANAGERS?

Individual Paper (30 minutes)

Alain Huot (1)
(1) Université du Québec à Trois-Rivières (Lévis, Canada)

A number of Quebec universities (CEFES 2005, Huot 2014) have established somewhat structured mechanisms to collect feedback data on teaching during the semester. Many studies (Bianchini, 2013; Jin & Chin, 2012; Prince, 2013, Levin & Chang, 2014) have explored the usefulness of the midterm teaching feedback for the improvement of education from the point of view of the academics involved. Many other studies (Marsh, 2007; Centra, 2003) have analysed students' points of view. But how are the results from these assessments used by managers in their decision-making process?

This ongoing case study, both qualitative and quantitative, analyses the diversity of respondents who complete a midterm teaching feedback assessment (written or orally), the learning environment (student-centered or teacher-centered), the number

of teachers who change their practices as a result of these evaluations, as well as the decision-making process used by administrators' regarding midterm teaching feedback results.

Preliminary results will be presented.

10:30 AM	Room 308B	Inquiry into student learning

A13.1 UNDERSTANDING AND ADDRESSING STUDENT GROUP WORK CHALLENGES THROUGH LEARNING ANALYTICS

Individual Paper (30 minutes)

Siara Isaac (1), Roland Tormey (1)
(1) Teaching Support Centre, Ecole Polytechnique Fédérale de Lausanne (Lausanne, Switzerland)

Working in groups and managing projects are important professional skills which form part of the hidden – if not the formal – curriculum in university-level professional courses. These skills are often learned in practice and many students (and perhaps professors) may assume that they are skilled in these areas even when they are not. There is a growing demand to teach, and perhaps even assess such skills, but it can be hard to know what needs to be taught and when. Literature is one source of information. For example, Tuckman's famous "stages of development of performing groups" can provide a framework for understanding the types of challenges which groups will face. Yet, as with any abstract model, if students do not see it as relating to their lived experiences, then it will not be transferred into their own practice.

In the context of a new, obligatory, first-year course, around 1,800 science and engineering students worked in 5-person groups on a project. To support them, online videos and exercises were provided to develop group work and research skills during the first 6 weeks of the semester. The resources for working in groups were based on Tuckman's stages of group development, and provided strategies for generating ideas and making decisions as a group, conflict resolution, and active listening.

Having 1800 students engaged in learning in an on-line environment alongside engaging in group practice provided a unique opportunity to use learning analytics to make sense of two questions: (1) How well does the "stages of group formation" literature match students' experiences of group formation and development during the term? (2) How do students' own perceptions of the challenges they will face (as distinct to the challenges they do face) affect what they are ready to learn and when?

Data analysis of the student on-line work reveals a shift in students' concerns about group work from the start of the process (at which time their concerns were lateness, lack of involvement, and irresponsibility of other members) to during the process (at which time differences in personality and communication styles were the primary causes of important friction). Cultural and linguistic differences were also common in the groups, but the impact of such differences was typically ranked as moderate. Further, despite efforts to convey disagreement as a normal and healthy part of group work in the videos, students reported very little conflict, even when identifying 'storming' as the phase currently occupied by the group.

Informed by this data and analysis, the supports provided to students are to be reviewed in order to provide materials which better match their concerns, their needs and their cultural context.

'Clickers' will be used to allow ISSOTL conference attendees to contrast their own hypotheses with the observations, and to generate discussion around how to better support the development of group work and other transversal skills in undergraduate students.

11:00 AM | Room 308B | Inquiry into student learning

A13.2 LEARNING TO INQUIRE AND THE IMPORTANCE OF ASKING QUESTIONS: A THRESHOLD FOR STUDENTS IN SCIENCE

Individual Paper (30 minutes)

Charlotte Taylor (1)
(1) University of Sydney (Sydney, Australia)

Inquiry learning is an integral part of undergraduate science programs, and its contribution to improving student understanding of the processes of research and investigation has been widely debated (Rissing and Cogan 2009, Brew 2010, Kloser et al 2011). There is general agreement that students demonstrate better engagement with learning activities, and develop a better awareness of the science research culture in an inquiry learning environment (Allen and Tanner 2005, Herron 2009), and this is likely to translate into increased independence and active learning approaches (McCune and Hounsell 2005, Biggs 2012). However, the extent to which students develop the capacity to think and practice like scientists, in the inquiry learning environment, is more difficult to determine (Taylor 2008). Previous studies of student misconceptions and troublesome knowledge in biology have suggested that the generation of hypotheses, an integral part of the inquiry process, causes many difficulties for students (Lawson 2003, Taylor 2006, Taylor and Meyer 2010). Our use of the threshold concept framework to investigate student understanding of hypothesis generation and testing, has produced a diagnostic instrument and information about the range of categories of understanding exhibited by students (Taylor et al 2014, Zimbardi et al 2014).

Further examination of student pre- and post- responses to scenarios about generating and testing hypotheses has led us to re-frame the categories in terms of the key areas of confusion and the characteristics of thinking about inquiry in novice (n=350) and expert (n=50) students, i.e., first year and senior year students. This presentation will describe the coding analysis of 350 first year student responses which has highlighted key problems in their conceptual understanding and ability to articulate experimental protocols for answering research questions. In contrast, analysis of responses from the control group of senior year students, who engaged in individual research projects as part of their course, demonstrates the significance of 'the research question' in shaping a more sophisticated understanding and practice in inquiry learning activities.

We have recently used these findings to redesign the first year biology curriculum for a cohort of 900 students in a broad range of degree programs. We included independent research experiments, and built learning support with a series of scaffolded interventions to address the 'threshold-crossing' points identified above. Analysis of student responses to the diagnostic instrument, experimental design activities, data collection labs and report writing sessions is providing a clearer picture of the variation in categories of understanding and the impact of our teacher/learner partnership.

10:30 AM | Room 309A | Emerging technologies and SoTL

A14.1 EXPLORING THE EFFECTIVENESS OF THREE DIFFERENT COURSE DELIVERY METHODS IN ONLINE AND DISTANCE EDUCATION

Individual Paper (30 minutes)

Sheri Fabian (1), Barry Cartwright (1)
(1) Simon Fraser University (Burnaby, Canada)

Simon Fraser University undergraduate students who completed at least one of three introductory Criminology courses offered through SFU's Centre for Online and Distance Education (CODE) between May 2013 and April 2014 were invited to participate in an online survey regarding student perceptions of, learning experiences with, and satisfaction with these three fully online courses. The three courses, Introduction to the Criminal Justice System, Sociological Explanations of Criminal and Deviant Behaviour,

and Psychological Explanations of Criminal and Deviant Behaviour, vary significantly in their online format and the pedagogical approaches that influence those formats. A primary research objective was to assess the effectiveness of asynchronous discussion groups, interactive exercises (educational video games), online presentations by students, and online audio-visual instructional materials prepared by the course instructor. The scholarship of teaching and learning provides myriad information regarding online learning activities (e.g., Dixson, 2010; Lee et al., 2011; Roehm & Bonnel, 2009). This study contributes to that literature with a systematic evaluation of student perceptions and learning outcomes. The online survey consisted of a series of questions regarding experiences with these online courses as well as 'demographic' questions regarding such characteristics as age, gender, citizenship, fluency in the English language, credit hours accumulated and grade point average. Students were also invited to offer 'qualitative' commentary on various aspects of the course(s). In particular, we explored the (highly varied) learning components of each of the courses to determine the effectiveness of learning formats, student perceptions of how user friendly and helpful the components were, and which ones students used the most and least (and why). Further, we asked students to suggest ways in which future iterations of these (and other) on-line courses could be improved. Students were also asked to compare their learning experiences in these fully online CODE courses with similar courses that are offered in traditional and/or blended classrooms, with an eye to bringing these different course delivery formats closer to each other in terms of learning outcomes and student satisfaction. Finally, we set out to assess whether any or all of these online learning components had a measurable effect on student learning, by comparing actual learning outcomes with aggregated student grades, and with outcomes stipulated in the assignment criteria. The survey results have the potential to influence the format of future CODE courses offered by the university, as well as the way in which current course offerings might be modified or re-designed. Although this is a research paper, audience feedback and questions will be encouraged.

References

Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging?. Journal of the Scholarship of Teaching & Learning, 10(2), 1-13.

Lee, S. J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. The Internet and Higher Education, 14(3), 158-163.

Roehm, S., & Bonnel, W. (2009). Engaging students for learning with online discussions. Teaching and Learning in Nursing, 4(1), 6-9.

11:00 AM | **Room 309A** | **Emerging technologies and SoTL**

A14.2 ENHANCED LEARNING OF MANIPULATION TECHNIQUES USING FORCE-SENSING TABLE TECHNOLOGY (FSTT)

Individual Paper (30 minutes)

Dominic Giuliano (1), Loretta Howard (1), Jay Triano (1), Marion McGregor (1)
(1) Canadian Memorial Chiropractic College (Toronto, Canada)

Purpose: This study evaluated Force-Sensing Table Technology (FSTT) as a learning and assessment tool for 2nd and 3rd year Canadian Memorial Chiropractic College students (n=374) learning manipulation skills. Two fundamental issues related to safe and effective treatment delivery were addressed:

1. What short-term gains in skill can be obtained and how well are they retained over time?

2. Can learners consciously modulate force applications to respond to changes in criteria?

Methods: This mixed-methods design study collected both qualitative and quantitative data. Baseline measures were taken from a representative number of students (n=140) students within each year within the first two weeks of the curriculum. The intervention was defined by the systematic scheduling of learners on two occasions for skills training using FSTT. The first session followed baseline evaluation by two weeks. A seven- (year 2) or five- (year 3) month interval separated the two sessions. Formative evaluations were carried out at the beginning and end of both the initial laboratory session and the second session.

Results: Data for peak force and rate of rise were paired and tested. Year 2 learners demonstrated a highly significant ($p = 0.000$) gain of 13.9% in their ability to generate peak force amplitude and an increase in rate of rise by 10.5% ($p = 0.0003$). For year 3, peak amplitude gains were 9% ($p = 0.0000$), though rate of rise in force was less clear, only approaching significance ($p = 0.0893$), with an increase in the mean of 3.9%. Retention of gains was assessed for the year 2 and year 3 groups as a whole. For year 2 learners as a whole, no significant change ($p = 0.2223$) was seen in paired peak force measures from the end of the session one to the onset of session two. However, an 8% gain in performance was noted for year 3 ($p = 0.0000$). For the parameter of speed as the rate of rise in force, year 2 again showed no significant difference ($p = 0.0107$) although, in the mean, an increase of 11.2% was noted. Also, for year 3, there was an increase effect with a change in speed of 12.6% ($p = 0.0000$). Overall gains achieved from session one were retained across the five- to seven-month interval up to session two.

Conclusions: The unique skill set required for the application of manual manipulation is critical for safe and effective service to the public. FSTT experience is an effective way to enhance skill development before the learner faces the need to administer care in a real clinical encounter. What remains as a significant challenge that previously could not have been adequately addressed without FSTT is the determination of the appropriate level of specific manual treatment parameters that should be the target for delivery under select clinical conditions. Future work to apply this technology as a fully summative assessment integrating clinically relevant factors associated with a patient's diagnosis and comorbid conditions may now be engaged.

11:30 AM | **Room 309A** | **Emerging technologies and SoTL**

A14.3 PROVIDING EXPERIENTIAL LEARNING TO STUDENTS IN A DISTANCE PROGRAM

Individual Paper (30 minutes)

Christine Colella (1), Theresa Beery (1), Martthew Rota (1)
(1) University of Cincinnati (Cincinnati, United States)

Providing online students with experiential learning can be challenging. Our quantitative dominant, explanatory mixed methods research study evaluated a novel intervention designed to bring experiential learning and role modeling to our distance learning students. In our Nurse Practitioner (NP) programs, on-site students have an opportunity to practice the art of differential diagnosis by working with standardized patients (SP) (paid and trained actors posing as patients with common complaints). Students must gather a history, perform a focused physical assessment, review laboratory data, and then develop a list of differential diagnoses, citing the rationale. Our challenge was to formulate a learning opportunity similar to interacting with SPs, for the distance learning student. We wanted to provide them with experiential learning and achieve the learning outcomes we expect from our on-site students.

To meet this new pedagogical dilemma, and provide the excellence in education our online students deserve, the Interactive Case Study (ICS) was developed. An Interactive Case Study (ICS) is a virtual patient encounter that role models professional behavior and provides the student or practicing healthcare professional with the opportunity for integrative thinking, problem solving, and the development of clinical reasoning. The experience of completing an ICS is comparable to being in a patient room collecting data and interviewing the patient.

Once we had developed two ICS, we sought to determine if learning outcomes for the distance learning students were equivalent to those of on-campus students who engaged in a live patient encounter. We collected data from 291 students (distance learning students n =150, on-site students n = 141). Equivalency testing assessed clinical rather than only statistical significance in the ICS responses from the distance learning and on-site students differed by only 4.9%, which was well within our a priori equivalence estimate of 10%. Narrative data supported our finding that learning outcomes were equivalent for both sets of students. Distance learning students referred to this learning activity as "hands on" even though their interactions were virtual.

We believe that the Interactive Case Study format is flexible could be useful to instructors from disciplines outside of healthcare. For example, a history professor could develop an ICS that would allow students to engage in a re-creation of an historical event or an English faculty member could help students engage with a text in an exciting and highly interactive way. We are eager to share our study results and methods with our colleagues and hope it will continue the dialogue about addressing experiential learning needs of distance learning students in all areas. Our presentation addresses several ISSOTL 14 Conference Threads including Inquiry into student learning and Emerging technologies and SoTL.

10:30 AM	Room 309B	Inquiry into teaching practices

A15.1 FACULTY MENTORING FOR TEACHING: FROM AD HOC TO INTENTIONAL APPROACHES AND PRACTICES

Individual Paper (30 minutes)

Cora McCloy (1), Carol Rolheiser (2), Megan Burnett (3)
(1) University of Toronto (Toronto, Canada); (2) Director Centre for Teaching Support & Innovation & Professor, Dept. of Curriculum, Teaching and Learning (OISE) University of Toronto (Toronto, Canada); (3) Acting Associate Director Centre for Teaching Support & Innovation University of Toronto (Toronto, Canada)

This research study explores the range of existing faculty mentoring for teaching practices at one large, urban Canadian university. There is limited academic literature on faculty mentoring specific to teaching as the focus tends towards broad mentoring for faculty as they embark on new appointments. Utilizing various institutional communication channels and a snowball sampling procedure, we recruited 37 faculty members in continuing appointments and 3 teaching and faculty development centre staff to participate in a 60 minute in-depth interview with one researcher (first author) to discuss their own experiences as teaching mentors and/or mentees. Our sample included representation from 4 major disciplines (humanities, social sciences, life sciences and physical sciences), across four faculty appointment positions: Teaching Stream (Pre-Promotion, Senior Lecturer) and Tenure Stream (Assistant and Associate Professor).

Interviews allowed for broad discussions on mentoring definitions, mentoring for teaching experiences, effective and promising practices, format and frequency of existing mentoring arrangements, current gaps, challenges, and recommendations for mentoring programs at this institution. Interviews were audio-recorded and transcribed with select direct quotations captured verbatim. We are utilizing Nvivo 10 for data analysis and management, using a thematic analytic approach (inductive analysis) and a constant comparative method (Glaser & Strauss, 1967).

Preliminary themes developed to date and to form the basis of an interactive (Q&A) with session attendees include: the broad continuum of mentoring for teaching activities (formal to informal, compulsory or voluntary); typical mentee requests for mentors (e.g., someone who is a 'connector' or 'champion' of teaching with links to 'experts'); peer mentoring within and outside departments; recognition and/or service for mentoring activities; the mid-career faculty 'slump' that highlights a desire to become a mentor and/or an seek guidance on their own teaching practice; and, the role of teaching centres to facilitate mentoring (e.g., via workshops), and enable/forge new relationships and networks within and amongst faculty attendees.

Finally, a central theme in this study is the variety of descriptions of a 'teaching culture', and its relation within a research-intensive focus at this university. Positive teaching climates shared in this study tended to include seamless and open spaces for highly effective mentoring to occur (structured/intentional combined with informal opportunities such as coffee/common spaces to congregate). The study uncovers the intricacies of how such teaching cultures emerge, ways in which they are supported and how such sites of strong support for teaching can assist our teaching centre as it shapes its recommendations for other departments faced with less supportive teaching environments.

This study afforded faculty a rare opportunity to reflect on their own experiences navigating through a new academic appointment and how they mentored others to alleviate the 'sink or swim' feeling described by several participants. Insightful input offers a re-envisioning of effective models or options in mentoring. In response to this research, our teaching centre may combine our findings with broader evidence-based models and effective practices that can support administrators and faculty in their mentoring activities. We welcome input from session attendees on their own institutional mentoring for teaching practices and resources.

11:00 AM | **Room 309B** | **Inquiry into teaching practices**

A15.2 SHIFTS IN ACADEMIC IDENTITY AS A RESULT OF MODIFYING TEACHING PRACTICE

Individual Paper (30 minutes)

Barbara Kensington-Miller (1)
(1) The University of Auckland (Auckland, New Zealand)

Research has shown that passive learning and transmission teaching are disempowering for students and can lead to low levels of attention and understanding. Nevertheless, the use of transmission style lectures in undergraduate courses is remarkably intransigent, with many lecturers believing in the effectiveness of such pedagogy. This is often attributed to the reluctance of certain academic staff to change their ways of lecturing due to tradition and ease.

In the discipline of mathematics, changing the beliefs about how mathematics should be taught is not a simple process and can often be extremely uncomfortable. However, research suggests that this process can become easier through collaborative reflection.

In this study, a pure mathematician and a mathematics educator both made changes to their teaching practice by implementing new questioning techniques in a very large undergraduate mathematics course. For both of them, the intervention was a source of discomfort and tension as neither lecturer had ventured out of their comfort zone before. By working within a team of educators, they engaged in a cyclical process of developing questions, implementing and testing them in lectures, and then reflecting on and revising them throughout the semester. The role of the collaboration was instrumental in keeping this process going, as well as being a source of encouragement for the lecturers and ensuring that changes to their practice would be sustainable.

We describe the journey of both the mathematician and the mathematics educator in accepting the challenge of asking their students to work interactively on questions during the lectures. In order to understand the shifts in academic identity that they experienced while attempting to modify their teaching practice, we use the metaphor of crossing uncharted territory as a framework to describe the changes. This metaphor allows us to liken different individual experiences to crossing new territory and liken changes made without collegial support to travelling without a map: Which way do you go? Is it safe to go it alone? What are the risks? The metaphor also illustrates why for some the journey can be so daunting that making it alone may prevent them from trying, while those that do travel without support may perish along the way.

Although the metaphor of a 'journey' is rather clichéd, it provides a mechanism to probe deeper into what might or might not be occurring when lecturers make changes to their practice. We do not investigate or evaluate the teaching activity here; instead our focus is on the lecturers as they navigate through uncharted territory. We investigate the changes in academic identity, which occurred as both mathematician and mathematics educator made modifications to their practice, teaching in a large undergraduate mathematics course. We emphasise the support the research group gave on the journey and explain why we believe a community of practice, or something similar, is crucial for any successful change in practice to be sustainable.

11:30 AM | Room 309B | Inquiry into teaching practices

A15.3 **A PORTRAIT OF PROFESSIONALIZING PRACTICES IN COMPETENCY-BASED HEALTH PROGRAMS**

Individual Paper (30 minutes)

Marilou Bélisle (1), Louise Boyer (2), Kathleen Lechasseur (3), Johanne Goudreau (2), Luc Bouchard (1)
(1) Université de Sherbrooke (Longueuil, Canada); (2) Université de Montréal (Montréal, Canada); (3) Université Laval (Québec, Canada)

Considering that a growing number of curricular innovations in university programs (Béchard & Pelletier, 2004; Bédard & Béchard, 2009) lead to competency-based programs, especially in the health sciences, we are justified in asking how such programs attempt to prepare students for effective professional practice. Consequently, the purpose of this communication is to present a review of the characteristics and educational practices used to professionalize students in competency-based health science programs.

As defined by Bélisle (2011), student professionalization is process of becoming a professional which entails three dimensions of learning: the development of professional competencies (Le Boterf, 2002; Fletcher, 2000; Tardif, 2006; Beckers, 2007), the appropriation of a professional culture (Abrandt Dahlgren, Richardson & Sjöström, 2004; Colbeck, 2008; Dryburgh, 1999; Greenwood, 1966), and the construction of a professional identity (Blin, 1997; Dubar, 2000; Gohier et al., 2001). Using Bélisle's conceptual framework, we analyzed health sciences programs in terms of student professionalization. Programs were selected on the basis that they were competency-based, pursued explicit competency outcomes, and were offered in Quebec universities. Documents (i.e. websites, educational guides) and semi-structured interviews with program directors were used to collect data.

We will present a portrait of the current educational practices (i.e. problem-based learning, simulations, portfolio) used to professionalize students in health science programs and discuss how those practices are explicitly or implicitly linked to competency development, appropriation of culture, and construction of identity. We propose looking most closely at educational practices that integrate all three learning dimensions. Questions will be raised regarding different conceptions of student professionalization and the pedagogical rationale for choosing educational practices that foster and support professionalization in health science programs. We will conclude with future research questions for investigating students' learning trajectories in programs designed to professionalize students.

1:30 PM | Room 2000A | Leadership, academic development and SoTL

B01 **THE SIX STANDARDS OF SCHOLARLY WORK, RECONSIDERED: FRAMING A SCHOLARLY APPROACH TO TEACHING AND LEARNING AND INSTITUTIONAL SUPPORT FOR SOTL**

Panel
(90 minutes)

James Sage (1), La Vonne Cornell-Swanson (2), Anthony Ciccone (3), David Hastings (1)
(1) University of Wisconsin-Stevens Point (Stevens Point, United States); (2) University of Wisconsin System Administration (Madison, United States); (3) University of Wisconsin-Milwaukee (Milwaukee, United States)

In Scholarship Reconsidered (1990), Boyer argued for four types of scholarship: discovery, integration, application, and teaching. The scholarship of teaching, and later the Scholarship of Teaching and Learning (SoTL), was immediately challenged as a legitimate form of scholarship, in no small part because it was initially vaguely defined.

To help make the case that the scholarship of teaching (and later, SoTL) should be considered on the same footing as other forms of scholarship, Glassick, Huber, and Maeroff proposed six "standards" with which to assess all forms of scholarly work (Scholarship Assessed, 1997): (i) clear goals, (ii) adequate preparation, (iii) appropriate methods, (iv) significant results, (v) effective dissemination, (vi) reflective critique. The standards opened up robust conversations about the nature and value of scholarly work in teaching and learning and made it possible for many individuals and institutions to value that work as a legitimate form of research.

To the best of our knowledge, however, these six standards of scholarly work have rarely been used in other contexts.

We argue that they can as well (1) provide guidance for characterizing a scholarly approach to teaching and learning and (2) provide guidance in defining, developing and measuring institutional support for the process and products of scholarly inquiry into teaching and learning.

We have developed a framework by which university leadership and faculty can use these six standards to develop meaningful and relevant strategies to improve teaching and assess learning (i.e., focus on teaching as a scholarly act). Likewise, we have developed a framework by which these six standards can be applied to institutional planning that seeks to support and value SoTL inquiry (as perspective, process and product) and a scholarly approach to teaching and learning.

Sage and Hastings will present the strategic planning process their University engaged in to institutionalize support for scholarly teaching and achieve acceptance of both disciplinary and SoTL research for promotion, renewal and tenure. Ciccone and Cornell-Swanson will present our interpretation of the history of the idea of the scholarship of teaching, linking the canonical discussions in Scholarship Reconsidered (Boyer, 1990) and Scholarship Assessed (Glassick, Huber & Maeroff, 1997) to the eight recommendations for institutionalizing scholarly inquiry in the Scholarship of Teaching and Learning Reconsidered (Hutchings, Huber& Ciccone, 2011).

Participants will generate new questions adapted from the Six Standards of Scholarly Work (1997) and discuss the feasibility of implementing the eight leadership recommendations using this framework. The panel will conclude with a reflective critique about its process thus far and outline what the campus will do to implement its full strategic plan for teaching and learning.

1:30 PM | Room 2000B | Disciplinary approaches to teaching, learning and SoTL

B02 ARTS AND HUMANITIES SOTL: FRAMING A RESEARCH AGENDA

Panel (90 minutes)

Sherry Linkon (1), Stephen Bloch-Schulman (2), Nancy Chick (3), Susan Conkling (4), Karen Manarin (5), Kathleen Perkins (6)
(1) Georgetown University (Washington, United States); (2) Elon University (Elon, United States); (3) Vanderbilt University (Nashville, United States); (4) Boston University (Boston, United States); (5) Mt. Royal University (Calgary, Canada); (6) Columbia College (Chicago, United States)

SoTL work in the Arts and Humanities has addressed a wide range of questions, from how best to help general education students develop critical reading skills to how to assess performance in music and theater. Conversations with ISSOTL sessions and the Arts and Humanities Interest Group make clear that scholars from these fields share common methodological and conceptual challenges, and we would benefit from more coordination and collaboration in our research. In August, 2014, a group of SoTL scholars in the Arts and Humanities will come together for a three-day intensive roundtable workshop to discuss and formulate a statement about future directions for research. The workshop will share a framing document, which will identify common methodological and conceptual ground, suggest a set of core questions for future exploration, and identify strategies for facilitating more coordinated and collaborative SoTL work in the Arts and Humanities. This document will emerge from a three-day gathering this summer, hosted by Elon University's Center for Engaged Learning, with participants from several fields and perspectives. During the roundtable, we will provide some context for the document, review its key elements, and engage the audience in discussion about three questions: Does the document adequately represent the state and possible future of SoTL work in the Arts and Humanities? To what extent should such work be coordinated and/or collaborative? How can we work within ISSOTL to develop a shared research agenda for our fields?

1:30 PM | Room 2101 | Inquiry into student learning

B03 NURTURING PASSION AND CREATIVITY: AN ARTS-BASED APPROACH TO EDUCATION DEVELOPMENT

Workshop (90 minutes)

Eleanor Pierre (1), Loretta Howard (2)
(1) Mohawk College/EJPCommunications (Grimsby, Canada); (2) Canadian Memorial Chiropractic College (CMCC) (Toronto, Canada)

This hands-on experiential workshop explores the use of arts-based teaching strategies from the situated perspective of post-secondary teacher education. Paolo Freire once said "to teach is not to transfer knowledge but to create the possibilities for the production or construction of knowledge." We maintain that arts-based approaches to teaching and learning provide significant learning opportunities "that foster the capacity to construct interpretations" (Efland 2002) and as such are critical to the promotion of higher order thinking and double loop learning. However, creative arts-based strategies are often overlooked as effective learning strategies in teacher education, despite the evidence that supports their use (Petty, 2009). Many learners find that the creative process in which they engage not only helps them to synthesize and integrate concepts but also contributes to transformative learning (Howard & Pierre, 2014). When encouraged, these innovative activities can release imaginations that open up new perspectives, construct alternative interpretations and assimilate learning. This workshop begins by exploring a theoretical framework to support the use of creativity and passion as a teaching and learning tool in the classroom. Next, from a teaching and curriculum design perspective, we will discuss how to effectively design, implement and evaluate arts-based activities. The presenters' real experiences, including challenges and opportunities in the implementation of creative approaches to learning, will be shared. Examples of student work will be showcased and contextualized to their intended learning outcomes

as situated learning. Throughout the workshop, participants will engage in an experiential arts-based process that explores several dimensions of teaching and learning and models the pedagogy and practice discussed. Join us to together explore the use of creativity and passion in arts-based classroom activities.

Session Outcomes: Participants in this workshop will be able to:

1. Discuss critical questions related to the theory and practice of integrating arts-based strategies into teaching practice.

2. Explore a number of arts-based, evidence-based instructional strategies

3. Consider significant ways of carrying out arts-based exchanges.

1:30 PM | Room 2102A | Disciplinary approaches to teaching, learning and SoTL

B04.1 AN INTRODUCTION TO THRESHOLD CONCEPTS AND TROUBLESOME KNOWLEDGE: A TRANSFORMATIONAL APPROACH TO LEARNING

Individual Paper (30 minutes)

Ray Land (1)
(1) Durham University (Durham , United Kingdom)

This presentation will discuss Threshold Concepts, a discipline-based and transformative model of learning in higher education. It is being used as a conceptual tool and an analytical framework to inform course and programme design. The Threshold Concepts Framework can be considered akin to a portal, opening up a new and previously inaccessible way of thinking about something. The model has over the last decade been adopted across a broad range of disciplines in many countries. (see http://www.ee.ucl.ac.uk/~mflanaga/thresholds.html)

It represents a transformed way of understanding, without which the learner cannot progress, and invariably involves a shift in the learner's sense of self. As a consequence of comprehending a threshold concept, there is a transformed internal view of subject matter, subject landscape, or even world view. This transformation may be sudden or protracted, with the transition to understanding often involving 'troublesome knowledge'. Depending on discipline and context, knowledge might be troublesome because it is ritualised, inert, conceptually difficult, alien or tacit, because it requires adopting an unfamiliar discourse, or perhaps because the learner remains 'defended', resisting the inevitable shift in personal subjectivity that threshold concepts entail. Difficulty in understanding threshold concepts may leave the learner in a state of 'liminality', a suspended state or 'stuck place' in which understanding approximates to a kind of 'mimicry' or lack of authenticity.

This session will provide an introduction to the Thresholds approach followed by a discussion of its implications for curriculum design.

2:00 PM | Room 2102A | Disciplinary approaches to teaching, learning and SoTL

B04.2 TEACHING FOR CREATIVITY IN AND ACROSS DISCIPLINES

Individual Paper (30 minutes)

Beth Marquis (1), Jeremy Henderson (1)
(1) McMaster University (Hamilton, Canada)

Creativity has assumed an important position within educational discourse in recent years, as both policymakers and researchers have argued that institutions of higher education have an obligation to develop students' creative capacities (EUA, 2007; McWilliam & Dawson, 2008). In spite of this increasingly common contention, however, some scholarship suggests that creativity

is nonetheless afforded a comparatively minor place in day-to-day considerations of university teaching and learning (Kleiman, 2008; Jackson & Shaw, 2006). While creativity is often reified as an unquestionable good (Bleakley, 2004), it is less frequently incorporated into courses and curricula as an explicit, central and intentionally facilitated learning outcome (Jackson, 2008; Authors, 2012). To the extent that this is true, universities' capacity to develop student creativity is seriously circumscribed.

Questions of discipline figure interestingly in this discussion. As scholars have pointed out, creativity is a complex concept that is defined and understood in relation to the field in which it operates (Jackson & Shaw, 2006; Reid & Petocz, 2004). Individuals from different disciplines may have distinctive conceptions of creativity and its relevance to their fields (Walsh et al., 2013), and thus might be differentially likely to attempt to foster creativity in their students. Faculty across disciplines might also favour differing strategies for developing students' creativity, insofar as existing research has suggested correlations between discipline and approach to teaching (Lindblom-Ylänne et al., 2006) and pointed out that disciplinary cultures create specific "Teaching and Learning Regimes" that shape the ways in which educational activities are understood and enacted (Fanghanel, 2013; Roxå & Mårtensson, 2008). At the same time, other research suggests that academics in fact hold similar conceptions of creativity regardless of their disciplinary backgrounds (Creativity Centre Ltd., 2006), or propose means of fostering creativity that are ostensibly discipline-generic (Beghetto, 2010; Zacher & Johnson, 2014).

Against this backdrop, this session will present the results of a study that sought to examine the ways in which faculty from a range of disciplines define, value and teach creativity. In June 2012, an online survey addressing these issues was sent to approximately 6600 full-time instructors at eight Ontario universities. This survey contained a mixture of open-ended, forced choice and Likert-style questions that were developed from questions reported by Jackson & Shaw (2006) and refined following a pilot study by the authors (Authors, 2012). In line with the literature, data gathered from the 614 completed responses suggested that participants across disciplines value creativity highly, but are less likely to focus explicitly on developing it in students. Responses also revealed areas of both commonality and difference amongst disciplines in terms of how participants understand and attempt to teach creativity, as well as challenges they encounter in this process. Implications and limitations of these data will be discussed, and participants will be engaged through structured conversations in considering the ways in which these findings might serve to enhance the development of students' creativity in a range of disciplinary contexts.

2:30 PM | Room 2102A | Disciplinary approaches to teaching, learning and SoTL

B04.3 GENDER ISSUES IN TEACHING AND LEARNING IN POLITICAL SCIENCE CLASSROOM

Individual Paper (30 minutes)

Ekaterina Levintova (1)
(1) University of Wisconsin-Green Bay (Green Bay, United States)

For a variety of reasons, political science as a discipline remains deeply gendered and still relatively unaffected by larger trends in higher education which is witnessing increasing numbers of female students and faculty. A recent article in the Chronicle of Higher Education, for example, described the grievances felt by female faculty members and graduate students in the political science department at Rutgers University, concluding that "political science has been one of the most male-dominated disciplines among social sciences."

Even looking at UWGB, with its 65:35 female to male ratio in the student population, our political science classes usually have a reverse gender breakdown, irrespective of the course. The majority of students are male and it is male students who do the bulk of talking and participation in the class. Breaking the gender barriers in the political science classroom remains challenging and requires awareness of various gender-sensitive pedagogical approaches, classroom management, and tailored feedback even on the part of female faculty members. To date, however, the research on this topic with important implications for social justice, gender equality and closing the gender gap beyond voting behavior, has been limited and, to a degree, disjointed. My study adopts

a different theoretical angle, by looking at the effect of the instructor's gender on teaching and learning in the political science classroom. But it is still situated within the scholarship on the role of gender in political socialization.

I attempt to investigate the effect of instructor's gender on the student-instructor relationship in the classroom. Does gender matter in how students perceive the knowledge and expertise of an instructor? Do they see differences in pedagogies? In types of course work that male and female faculty assign? Do students find female instructors more relatable? Do they themselves behave differently in the classrooms of male and female instructors? I suspect that students, consciously or sub-consciously, react to the gender of their instructor and such reactions might have effects on success for traditionally underrepresented groups (e.g., female students in political science classes) in the classroom.

The research design employed in this study is experimental vs. control group. In this research design, two equal groups of students in each upper level political science class offered in the Spring 2014 semester will be given teaching scenarios identical in wording, except for gendered names and pronouns referring to political science professors. In survey #1, the faculty member involved will be female, in survey # 2, male. After reading the short description of a teaching situation (scenario), students in each sub-group will be given a short survey questionnaire, asking identical questions (please see scripts and questions below). The survey will be administered using Qualtrix software.

1:30 PM | **Room 2102B** | **Assessment, accountability, and SoTL**

B05.1 THE RELATIONSHIP BETWEEN STUDENT AND INSTRUCTOR ENGAGEMENT IN ONLINE COURSE EVALUATIONS

Individual Paper (30 minutes)

Cherie Werhun (1), Carol Rolheiser (2)
(1) University of Toronto (Toronto, Canada); (2) Centre for Teaching Support & Innovation, University of Toronto (Toronto, Canada)

With the increased integration of technology into the learning environment, academic institutions are turning to online administration of course evaluations. Though this mode of administration is often regarded positively by students as it provides them with the opportunity to provide feedback about their learning experiences in their own time and in a more reflective environment outside of the classroom, it has been met with concern; instructors worry about student participation rates (Crews & Curtis, 2011), the quality of students responses (Hardy, 2003), and the perceived reduction in control over how and when the information is collected (Morrisson, 2013). When participation in online course evaluations is voluntary, concern about response rates is justified; given the high stakes quality of course evaluation data for important institutional decision-making, reliability and representativeness of an instructor's course evaluation feedback are a priority. Though the written feedback from those students who complete evaluations tends to be richer online than on paper, the response rate remains a concern for most institutions. Whereas extensive research has investigated instructors' perceptions of effective communication mechanisms to encourage student participation in online course evaluations (Ballantyne, 2013), the focus of our research was to isolate the factors that motivate students to participate in online voluntary course evaluations. Thus, in the present study, applying both survey, quantitative ($N \approx 10{,}000$), and focus group, qualitative approaches ($N = 15$), undergraduate students were asked about a) the extent to which they felt a number of ongoing, literature-based communication strategies (e.g. reminders from the system, posters, etc) motivated students generally to complete course evaluations, b) the extent to which these strategies motivated them personally to complete course evaluations for their course(s), and c) strategies that they felt the institution should implement to encourage participation. Results demonstrated that students felt that reminders from the online system were effective; however, they also indicated messages from their instructors were highly motivating. When these factors were statistically regressed onto actual online course evaluation response rates (controlling for various course demographic variables), results demonstrated messages from the course instructor were more strongly associated with student participation than were other messages. Qualitative themes from students' written

responses further confirmed that the extent to which instructors expressed an investment in student feedback played a key role in student voluntary participation. Qualitative themes also highlighted student reasons for not participating: students felt that the inability to "see" the outcomes of their end of term feedback was a factor that diminished their interest in providing feedback. Taken together, results suggest that strategies designed to motivate students to complete online course evaluations require a) instructor-level openness regarding the importance of course evaluation feedback, b) divisional or faculty-level openness as to how course evaluation feedback is being used to improve teaching and curriculum, and c) system-level openness or ability to send regular, targeted reminders to students. When all these are implemented in concert, our data suggests that both students and instructors can benefit from the reflective and flexible feedback environment provided by online administration of course evaluations.

2:00 PM | Room 2102B | Assessment, accountability, and SoTL

B05.2 **PEER EVALUATION OF TERM PROJECT PRESENTATIONS: WHAT PEDAGOGICAL LESSONS CAN BE LEARNED?**

Individual Paper (30 minutes)

Israel Dunmade (1)
(1) Mount Royal University, Calgary (Calgary, Canada)

The researcher was a member of a faculty group that recently completed a study of the popular book entitled "What the best college teachers do" authored by Ken Bain. The subject of "peer evaluation by students" was raised in one of the group's discussions. Peer evaluations of term projects presentations by students were conducted for two of my courses. The purpose of this study is to determine the authenticity of peer evaluation in assessing student learning. The study involved comparison of the degree of variation between peer evaluation and the instructor's own assessment of the same set of presentations. Moreover, the instructor wanted to see similarities or differences in the pattern of peer assessment results observed in the two courses involving entirely different sets of students. Furthermore, there was an interest to know time lag effects on the observed patterns of assessment results. This was determined by examining similarities and differences in the results of peer evaluations of similar presentations on different dates by the same set of students. In addition, I tried to identify possible biases in line with observed groupings/friendships in the class. All these analyses were aimed at determining what lessons instructors could learn from results and what could be done to ensure authentic evaluation of student learning, on the basis of a term project. All students in each of the two classes were given the same evaluation template designed specifically for the assessment of the term project presentations in their own class. Preliminary results revealed about 18% of the students in each of the two classes gave everyone the same grade. About 46% in each class tended to be very generous in the marks awarded to their peers. Evaluations by the rest of the students seemed fair and I saw a similar trend in the pattern of grades awarded by about 52% of the students, in comparison with my own assessment of the same set of students. The analysis is still ongoing and is expected to be completed before the conference.

1:30 PM | Room 2104A | Emerging technologies and SoTL

B06.1 **CREATIVITY, PASSION, AND COHESIVE SPACE: THE ONLINE LEARNING EXPERIENCES OF A TEAM OF JUNIOR RESEARCHERS**

Individual Paper (30 minutes)

Nancy Labonte (1)
(1) UQAM (COPEH-CANADA) (Montreal, Canada)

A swath of literature exists that focuses on social cohesion, which can be broadly defined as a process that involves factors and mechanisms regarding social integration and exclusion (Miciukiewicz, Moulaert, Novy, Musterd, & Hillier, 2012). By reducing

the target of a three month observation to an online work team of which I was a part, group cohesion marks the primary foci of this study. Cohesion is an essential component in a team's performance towards achieving its goals (Beal, Cohen, Burke, & McLendon, 2003). It fosters satisfaction, thus encouraging members in the execution of tasks (Cota, Evans, Dion, Kilik, & Longman, 1995). The study of Yoo and Alavi (2001) has shown that, in established groups, cohesion not only increases the degree of social presence perceived by the members, but also the degree of participation in tasks. If cohesion facilitates presence in and commitment to the group project, it will be particularly useful to understand how it is generated in the context of an online work team today.

My reflection rests on the premise of the materiality of group cohesion. Our team was composed of three junior researchers who had never met in person. Our presence manifested on the Skype interface, which became our "meeting room". But this "room", in each of our cases, was located on a personal computer that had been set up in a home office. The audio conferencing, therefore, incidentally revealed some aspects of our personal lives. Our actual encounter is located within these interstices that also exhibit the presence of our private bodies. However, the options for audio conferencing meant that we had only our voices through which to materialize interactivity between team members. In principle, the materiality of cohesion collectivizes learning (Montes, Moreno, & Morales, 2005, p. 1160). But how would the presences of three junior researchers living in England, Quebec, and Ontario manifest? More precisely, in the context of a team of junior researchers, what generates cohesion of the participants who are in privation of corporeal presence? Under what conditions would the encounter succeed in converting relevant learning for the benefit of the collective project to which the team is attached?

Andreas Wittel (2000) states that we must consider the actual space where the persons stand when the electronic encounter is produced. Thus, in order to counterbalance over 60 years of positive studies in the social psychology of small groups, I propose a short organizational ethnography that will explore the forming of cohesion between the members of a small work group after a few months of online collaboration. Through a impressionnist tale (Van Maanen, 1988), I will invite the audience to enter into our learning experience through a passion for research and the creation of a cohesive space.

2:00 PM | Room 2104A | Emerging technologies and SoTL

B06.2 STUDENT FREE SPEECH AT ILLINOIS STATE UNIVERSITY: A DIGITAL DOCUMENTARY EXPLORING STUDENT SPEECH ACTS AND STUDENT LEARNING

Individual Paper (30 minutes)

Maria A Moore (1)
(1) Illinois State University (Normal, United States)

Civic Engagement (CE) has been infused into the curriculum at Illinois State University (ISU), resulting in various project-based student experiences each semester. During the Spring Semester 2014, sixty upper-class students conducted acts of free speech in the Bloomington/Normal, IL community as part of a Media Law course activity. The Free Speech acts were documented by a student/faculty SoTL research team, using the method of digital documentary production. The faculty/student producer/scholars reviewed pertinent case law on campus free speech rights and documented the ISU student Free Speech acts.

This SoTL (Scholarship of Teaching & Learning) project's goal was to investigate the student CE experience. The impact of CE participation in Free Speech acts was explored through discussion with student participants about their self awareness, their understanding of diversity, their understanding of democracy, their ability to think critically about social issues, and their ideas about the integration of Free Speech, societal issues and coursework. We also explored the students' perspective about the value of Free Speech project participation and what learning occurred for the student in the process.

Using a qualitative research method of case study analysis coupled with focus group discussion and the technique of collaborative documentary production, this SoTL project used digital video as a medium for communication rather than a traditional academic paper. This publication approach more fully honors the rich and descriptive source material contributed by the participants during this research project and captured the Free Speech and Civic Engagement project experience more fully through sight, sound and motion.

This "paper" presentation at ISSoTL will include the exhibition of pertinent segments from the documentary accompanied by discussion about the SoTL findings.

1:30 PM | **Room 2104B** | **Student roles in and perspectives on SoTL**

B07 ENGAGING STUDENTS AS CO-DESIGNERS AND CURRICULUM DEVELOPERS FOR AN INTRODUCTORY UNIVERSITY COURSE

Panel
(90 minutes)

Kris Knorr (1), Lori Goff (1)
(1) McMaster University (Hamilton, Canada)

Successful initiatives in teaching and learning in higher education require careful attention to both creativity and passion. One way to nurture this creativity and passion in higher education is to involve students as active participants in their learning. This idea of actively and democratically engaging students in learning is not new. However, practical examples of engaging students as designers of course curriculum to enhance teaching and learning in higher education are less prevalent. Many advocate for a collaborative process of curriculum development, but often these processes involve faculty of staff inviting student voices to curriculum committee meetings, and then later acting on some of the ideas that they generate (Bovill, 2013). How can we more deeply engage students as partners in curriculum development?

We have experimented with one possibility at McMaster University. Quickly into the development of a new introductory science course, it became increasingly obvious that student input was required to elicit the passion and excitement that we felt would foster student success in science. We began by inviting student voices to the curriculum committee meetings, but strived to find more ways to deeply engage students as partners in teaching and learning (Cook-Sather, Bovill & Felten, 2014). We believed that creative designs would undoubtedly result by engaging senior students in the development of creative learning modules. This idea provides a practical example and trial of engaging students as co-creators of curricula, a component of the conceptual framework being developed and advocated by Healey, Flint & Harrington (2014).

Our initial trial (piloted from January to April 2014) involved developing collaborative and interdisciplinary groups of students who took a lead role in designing and developing learning modules for the new introductory science course. We developed an Applied Curriculum Design credit course for third and fourth year students from across the Faculty of Science. The course was rather unique: not only did students learn about curriculum and course design, but all students enrolled in the course actually developed a series of learning modules for the first year science course. They used their creativity and passion for science to design modules that would excite first year students in learning about science. But they did not do it without guidance. The student designers were connected with and received regular feedback from educational developers who contributed pedagogical expertise and faculty members who contributed content expertise to the collaborative groups.

This panel session will include reflective evaluations from the educational developers, faculty, and students who were involved in the initial trial, including a brief showcase of a selection of modules that were developed by students. We will present our SoTL research plans for studying this pedagogical initiative. Finally, we will invite audience members to engage in discussion on ways in which we may further broaden implementation and study the impact of engaging students as partners in teaching and learning.

1:30 PM | Room 2105 | Leadership, academic development and SoTL

B08 BEST PRACTICES FOR UNDERGRADUATE RESEARCH EXPERIENCES IN SCIENCE: LESSONS FROM AN AUSTRALIAN NATIONAL LEADERSHIP PROGRAM

Workshop (90 minutes)

Susan Rowland (1), Gwendolyn Lawrie (1), Kirsten Zimbardi (1), Paula Myatt (1), Jack Wang (1)
(1) University of Queensland (St Lucia, Australia)

Significance: Undergraduate research, where students complete a laboratory or field research project over an extended period of time with an academic supervisor, is associated with high levels of student engagement, academic success and a wide range of student benefits. The problem with this model is the number of students who can participate; most URE programs in Australia are still aimed at elite students, and in many cases only a small number of students can be accommodated each year. The presenters (Rowland and Lawrie) have developed a successful model for up-scaling undergraduate research experiences to cohorts of several hundred students.

Our experience: We are currently leading a National Leadership Project, funded by the Australian Office for Learning and Teaching. Our work supports the uptake of Authentic Large-Scale Undergraduate Research Experiences (ALUREs) in science programs; we aim to provide the benefits of research experiences to thousands of undergraduate students. 2014 is the last year of the project, and this year we are supporting the implementation of over 15 ALURE experiences, serving more than 1000 students at four Australian Universities. As part of our evaluation we are completing an intensive study of the implementer experience of ALURE, and in this workshop we will present our model and framework for best practice in the leadership and delivery of ALUREs.

Participant activities, learning goals, and outcomes for the workshop: We suggest that anyone who is interested in implementing large-scale undergraduate research with their students will find this workshop helpful. We aim to take participants through the process of planning the design and delivery of an ALURE.

As part of our study we have developed an implementer checklist. This tool will be used as a stimulus to help participants consider the educational and academic benefits of implementing an ALURE, while also providing them with a realistic idea of the challenges involved in ALURE implementation. In particular, we will focus on the building of relationships between implementers and their larger implementation teams, and the ways in which implementers can gain support for the initiative at the institutional and local levels.

Upon completion of the workshop participants should have a well-formed plan for the successful, sustainable design and delivery of an ALURE in their own educational context.

1:30 | Room 206A | Inquiry into student learning

B09.1 CAMPUS-WIDE COLLABORATION TO UNDERSTAND STUDENT DIVERSITY IN A UNIVERSITY TRANSITIONS COURSE: BUSINESS STUDENTS' FIRST YEAR EXPERIENCE

Individual Paper (30 minutes)

Wallace Lockhart (1), Kate McGovern (1), Bruce Anderson (1), Brian Schumacher (1), Don Balas (2)
(1) University of Regina (Regina, Canada); (2) Sheldon WIlliams High School (Regina, Canada)

In universities, we face an increasingly diverse mix of students – in terms of academic preparedness, language & culture, and personal characteristics which may not be easily identifiable. Nonetheless, we take on a responsibility for the success of all students who we welcome into our institutions. In order to fulfill our mandates, we need to better understand students and the ways in which they transition into university.

In this research project, we examine student experience in our introductory business course. The course covers a survey of business environment and management topics through a blend of online and in-class work, and an intense program of high-impact student experiences (Geary-Schneider, 2012). The study is supported by our institutional research group, student success centre and our centre for teaching and learning.

Research Questions:
1) Who are our students, how do backgrounds vary, and how does each experience first year?
2) Are we doing the right things – for each of our varied mix of students?

Research Design:
We compare student experience in 20 class sections over two years (n=791).

Student profiles:
- Age, gender, nationality

Student survey:
- Autonomous learning skills – independence and study habits (Macaskill and Taylor, 2010).
- Grit – consistency of interest and perseverance of effort (Duckworth, 2007)
- End of term: student perceptions of effort, course difficulty, value of experiences, importance of factors in their learning experience, and of their own learning outcomes.

Course pedagogy (classroom experience):
- Personality profile (Human Metrics, Jung Typology Test, 2013)
- Writing skills – organization and clarity (Saskatchewan Education, 2011)

Outcomes are examined from two perspectives:
- Measured outcomes: course grades and overall GPA.
- Student perceptions: What is important to their learning, value of course activities, and learning outcomes.

Results:
1) A high degree of variability in results – within and between groups. Our student are a diverse mix!
2) Measured outcomes: Significant differences between groups based on characteristics which can be measured on intake: nationality (language & culture transition), writing skills, autonomous learning skills, personality (J vs P).
3) Measured outcomes are generally not significant based on Duckworth's Grit, gender, age, and personality (E vs I).
4) Student perceptions:
- Despite some wide gaps in measured outcomes, there are relatively few and small differences in student perceptions.
- Most important factors in student learning: instructor knowledge and enthusiasm, studying for exams.
5) Though there was no control group in the research design, variability in study results between class sections indicates a high degree of importance to high-impact experiential learning.

Discussion:
Results are valuable and widely used both within the course (pedagogy, practices, assessment) and by the broader university providing student support services. Next priorities include longitudinal tracking of student performance, parallel study with another university, and transition from research to routine data collection, reporting and inclusion in course pedagogy.

We will be happy to share with you – our design, methodology, results and our stories!

2:00 PM | Room 206A | Inquiry into student learning

B09.2 EVALUATING ASYNCHRONOUS DISCUSSIONS IN ON-LINE AND BLENDED LEARNING COURSES

Individual Paper (30 minutes)

Sheri Fabian (1), Aynsley Pescitelli (1), Rahul Sharma (1)
(1) Simon Fraser University (Burnaby, Canada)

In Fall 2011, the School of Criminology at Simon Fraser University replaced traditional in-person tutorials in a first-year undergraduate class, Introduction to Criminal Justice System, with on-line tutorials. The 50 minute tutorials are delivered entirely on-line and can be taken at any time during the one-week period they are open. In an effort to maintain the traditional tutorial format which involved facilitated discussions by a tutorial leader, the on-line tutorials were designed to place students in small groups. Once during the term, each student is required to produce an on-line presentation (PowerPoint format - no voice over or camera required) which includes two discussion questions and is also responsible for facilitating student discussion. Each student is an assigned discussant for four different presentations. In 2013, a two-phase research project was conducted inviting students enrolled in these on-line tutorials to complete an on-line survey regarding their perceptions of and experiences with the newly formatted tutorials. The 2013 project evaluated student perceptions of the effectiveness of emerging learning technologies when compared to traditional tutorial formats and investigated the degree to which those perceptions match actual learning outcomes. The current study examines the pedagogical value of the facilitated on-line discussions. Instructor and teaching assistant perceptions were that for the most part, the on-line discussions were of considerably higher quality than what they had experienced in traditional first-year tutorials. This study examines these perceptions through a systematic evaluation of the discussions and a detailed examination of the qualitative responses regarding the on-line discussions provided by students who participated in the 2013 on-line survey. In this paper we examine both the quantity and quality of the discussion posts as well as the student opinions of the value of the on-line discussions. Preliminary results indicate that the majority of students report that they enjoy the on-line discussions and that many feel that it helps them in understanding course materials. Discussion posts were often well-edited, thoughtful, engaging, and evidenced critical thinking. Further, it appears there is a correlation between student participation in on-line discussions and learning outcomes as measured by performance on examinations. Ultimately, the results provide promising support for the use of alternative technologies and environments in post-secondary learning, particularly in terms of discussion and participation. Since discussions could be completed at any time during a specified week, this research also lends support to the use of well-designed and moderated asynchronous (as opposed to real-time) discussions in an on-line educational setting (Andresen, 2009). Finally, we address study-specific implications and advantages for EAL (English Additional Language) students and the use of on-line tutorial technology (Zeng & Takatsuka, 2009). Opportunities for audience feedback and questions will be encouraged throughout.

References:

Andresen, M. A. (2009). Asynchronous discussion forums: Success factors, outcomes, assessments, and limitations. Journal of Educational Technology & Society, 12(1), 249-257.

Zeng, G., & Takatsuka, S. (2009). Text-based peer–peer collaborative dialogue in a computer-mediated learning environment in the EFL context. System, 37(3), 434-446.

2:30 PM | Room 206A | Inquiry into student learning

B09.3 H.O.T. HABITS: REFRAMING THE CONVERSATION OVER HIGHER-ORDER THINKING

Individual Paper (30 minutes)

John Draeger (1)
(1) SUNY Buffalo State (Buffalo, United States)

Higher education claims to be dedicated to helping students develop higher-order thinking (H.O.T.) skills, such as deep learning (Trigwell and Prosser, 1991), integrative learning (Huber and Hutchings, 2005) and critical thinking (Elder and Paul, 2010). Yet many institutions in the United States allow one course (often an introduction to critical thinking) to satisfy the formal higher-order thinking requirement with the presumption that higher-order thinking will be followed up in subsequent courses. However, "generic" notions of critical thinking fail to fully capture the richness of higher-order thinking within the disciplines (Moore, 2004). Worse, while instructors report that these skills are important, they have difficulty explicitly articulating them (Paul, Elder, and Bartell, 1997). Students tend to be less convinced of their value and even less able to identify the relevant H.O.T. skills (Lauer, 2004). This is, at least in part, because both instructors and students often confuse higher-order thinking with other indicators of excellent thinking, such as student interest, active engagement, and student success (Choy and Cheah, 2009). For example, it is possible for students to solve complex problems, craft meaningful prose, and create beautiful works of art without an explicit awareness of their thought processes and without the ability to transfer those H.O.T. skills to another learning context.

This presentation will reframe the debate over student learning by focusing attention on the acquisition of H.O.T. habits, especially within the disciplines. It argues that students need to make a habit of becoming explicitly aware of the thinking processes across various fields of study. Survey and interview data from two prior studies on academic rigor and integrative learning were re-examined to consider themes in higher-order thinking not previously analyzed. These include an investigation of the nature of various H.O.T. skills, their frequency in the classroom, and their perceived importance. The study of academic rigor suggested that instructor perceptions of rigorous learning environments emphasize the importance of high-order thinking (author, 2013) while students emphasize workload and perceived difficulty (author, 2014). Making a habit of explicitly articulating the relevant H.O.T. skills can facilitate communication between instructors and students and refocus student learning by clarifying differences between the instructor and student points of view. The study of integrated learning revealed that H.O.T. skills are not being reinforced across a student's program of study. This suggests that students need to be given more opportunities to explicitly practice these skills in a variety of domains if they are to develop H.O.T. habits. Exposing students to skills within a particular discipline is not enough. Students need to develop H.O.T habits through consistent practice and with conscious awareness of their benefits. While this presentation will not provide a comprehensive look at higher-order thinking, it will share several conceptual models that were constructed using interview data. This will provide the audience with opportunities to discuss how these models might help students develop habits of higher-order thinking within their disciplinary contexts and develop lifelong H.O.T. habits across fields of inquiry.

1:30 PM | Room 206B | Inquiry into teaching practices

B10.1 FLIPPING THE GRADUATE QUALITATIVE METHODS CLASSROOM: DID IT LEAD TO FLIPPED LEARNING?

Individual Paper (30 minutes)

Mark Earley (1)
(1) Bowling Green State University (Bowling Green, United States)

In this paper I will reflect on the process of creating and teaching a flipped class in Qualitative Research Methods at the graduate level. The first (brief) part of the paper will be a review of the limited literature on flipped and inverted classrooms, a relatively new

pedagogical technique originating in the K – 12 environment. After that, my reflection narrative will come in three parts. First, I will look back on the four months it took to re-create the course from a traditional face-to-face classroom to a flipped classroom. The primary data source for this first part will come from a 37-page reflective journal I kept during the process. Second, I will present what happened during the actual teaching of the course in the spring 2014 term. Primary data sources will be my own teacher observations and student reflections and evaluations of the course. Preliminary data here suggests the flipped classroom was a success, with some improvements recommended for the next time I teach the course in spring 2015.

Last, I will apply the FLIP learning theoretical framework recently developed by the Flipped Learning Network (2014) to my classroom to evaluate whether flipped learning truly occurred. As they state, "flipping a class can, but does not necessarily, lead to Flipped Learning". I will share the Four Pillars of FLIP that together are the markers of flipped learning: a Flexible environment, a Learning culture, Intentional content, and a Professional educator. These pillars are new as of spring 2014, so when I created my flipped classroom they were not yet developed. Thus, while I believe I created a truly flipped classroom, I am not certain this led to flipped learning as defined by the Four Pillars. This third reflection will be the core of the paper and presentation. Preliminary data here suggests some, but not all, of the pillars were achieved but true flipped learning did not occur in this classroom. Again, suggestions for achieving flipped learning the next time I teach the course will be presented. Overall, my intent is to provide other educators with an example and guide for flipping their own classrooms and creating a flipped learning environment.

2:00 PM | Room 206B | Inquiry into teaching practices

B10.2 HOW DO YOU FLIP A DEPARTMENT?

Individual Paper (30 minutes)

Sean Brawley (1)
(1) Macquarie University (Sydney, Australia)

This paper uses the Department of Modern History, Politics and International Relations at Macquarie University (Sydney, Australia) as a case study for examining the questions of why and how you might transform teaching and learning in an academic department.

Guided by the broad scholarly literature (such as Keengwe, Onchwari and Oigara, 2014; Nordmeye and Stelzer, 2014; Garrison and Vaughan; and Bramble and Panda 2008), the presentation will explain why the Department decided to seek answers to these questions and provide a snapshot of its continuing efforts in this space.

Much of the scholarly literature has seen the re-purposing of time and content as the key to the flipped classroom (Educause, 2012). For the Department there was another dimension to the importance of repurposing. The Department currently teaches its units of study across learning environments that range along the blended learning continuum (Jones, 2006) from completely F2F to completely online, and in a recent development to the massively open online. Designing content that could be re-purposed across these environments to provide comparable learning experiences were important pedagogical and resourcing issues for the Department. Such desires were also complicated by institutional Quality Assurance and Quality Improvement agendas seeking uniform learning outcomes for the same unit irrespective of delivery mode. Such mandates provoked a number of design issues. For example, the flipped approach transforms the classroom experience with greater opportunities for collaborative problem-solving and team-work around assessment. How are the valuable learning outcomes from this classroom innovation translated into an online course? Are claims to the "promise" of collaborative online learning (see Roberts, 2004) not comparable with the powerful learning moments created in a flipped campus-based environment?

As well as showcasing some of the learning materials produced, the paper will further discuss the support and scaffolding provided by the University's Learning and Teaching Centre and Education Studio, display the structural framework that was

employed for the project and the various modelling techniques utilised. As well as institutional policy constraints, the way institutional infrastructure complicated and sometimes confounded the Department's ambition will also be examined.

2:30 PM | Room 206B | Inquiry into student learning

B10.3 THE ROLE OF HOMEWORK IN A FLIPPED CLASSROOM

Individual Paper (30 minutes)

Kimberly de La Harpe (1), Nathan Terry (1), Steven Novotny (1), Gregor Novak (1)
(1) United States Air Force Academy (USAF Academy, United States)

At the United States Air Force Academy, we have developed a three-fold learning process for our general physics classes: pre-class preparation combining traditional reading assignments with worked-examples, an in-class lesson with engagement activities, and post-class practice involving standard homework assignments. The motivation for this flipped classroom structure was to develop an approach to challenge, but not discourage, both students with strong and weak math and science skills taking General Physics I and II as part of a core requirement. In this talk, we will discuss the analysis of homework strategies used by students in general physics and suggest strategies to improve the effectiveness of homework for specific student populations. We find that homework strategies have different, sometimes negative, outcomes depending on the math and science skills of the student.

As part of our three-fold learning process, worked-examples are designed to guide a student through an expert's solution to a basic physics problem before class. The worked-example pedagogy will be discussed in more detail in a separate presentation. The in-class lesson combines instruction with active-learning techniques. The post-class component of the course consists primarily of homework assignments, a signature pedagogy for practicing physics concepts in general physics courses. Despite its ubiquitous nature, little guidance is given on effective ways to do homework. Additionally, recent studies at the United States Air Force Academy have shown that the standard method of homework is useful for some students, but actually corresponds to lower test scores for other students with weak math and science skills. As a component of the student population in our courses fall into this category, we are interested in understanding the factors that contribute to this surprising result. Do students with different math and science skills use different homework strategies when completing written homework problems? Should students list the given variables for a problem in their homework? Or is there more benefit to drawing a diagram of the problem? Does the benefit vary depending on the strength of math and science skills? To better understand how homework could lead to lower test scores and gain insight into the strategies students of different skill levels use to complete written physics homework problems, we analyzed the homework strategies present in student's written homework in both a general mechanics and a general electricity and magnetism course. The homework strategies and corresponding performance on semester exams and the final exam were compared for students with strong and weak math and science skills. Differences in correlations were observed between homework strategies and exam performances for students with strong and weak math and science skills, as well as, between different individual strategies. Not all homework strategies show positive correlation with exam scores.

1:30 PM | Room 207 | Inquiry into teaching practices

B11 DEVELOPING AND EMBEDDING INCLUSIVE ASSESSMENT ACROSS A UNIVERSITY

Workshop (90 minutes)

Pauline Kneale (1), Jane Collings (1)
(1) Plymouth University (Plymouth, United Kingdom)

In the UK the equality legislation, and support for students with disabilities and learning difficulties, has given rise to a culture of modified assessments tailored for individuals in a module. In some disciplines this can mean a member of staff having to set as

many as six alternative assessments for a module. This is both time-consuming and can leave some students feeling they are causing additional problems and less supported. Increasing numbers of students with diverse learning needs particularly impact on modules which have relied on traditional timed examinations.

Awareness of these issues has led to a University-wide project to explore, promote and embed alternative, inclusive options. The emphasis is on moving towards authentic learning tasks that promote student engagement, and as a result students learning from assessment.

We will present participants with a broad range of inclusive assessment materials which have been trialled with academics from all disciplines in the University. This project is driving a culture change in assessment, and developing deeper understandings of particular students' needs.

Participants will gain an understanding of: the role and need for inclusive assessment; a range of inclusive assessment opportunities; the challenges of matching assessments to students with disabilities to enable them to better demonstrate their knowledge and understanding of the discipline.

Participants will work with examples of inclusive assessment methods, and discuss ways in which these can be employed in their own disciplines. The challenges of disciplines which typically rely on timed examinations, such as mathematics, history, English, and business will be explored. The session will follow the format used in staff development workshops and away days.

Meeting the challenge of inclusivity has led to university-wide curriculum review and revision, with a broader range of assessment styles adopted, so that wherever possible students are working towards the same assessments.

1:30 PM | **Room 308A** | **Leadership, academic development and SoTL**

B12.1 ACADEMIC BAGGAGE? THE INFLUENCE OF PRIOR DISCIPLINES ON ACADEMIC DEVELOPERS' ENGAGEMENT WITH RESEARCH

Individual Paper (30 minutes)

David Green (1), Deandra Little (2)
(1) Seattle University (Seattle, United States); (2) Elon University (Elon, NC, United States)

- To what extent do academic developers' prior disciplines influence their present research and practice?
- What are the implications for developers working on SoTL projects with academics from fields with different epistemologies?
- How do SoTL conversations about trans- and interdisciplinarity act as models for the academic development community?

Academic development (AD) has been described as an interdisciplinary "family of strangers" (Harland & Staniforth, 2008), where developers have typically transitioned from other academic fields (Rowland, 2003). Yet identification with a prior discipline runs deep for developers. Our conference presentations and conversations contain frequent asides about our original fields to explain our particular scholarly inclinations. So how do our academic backgrounds influence our present work, and how we see ourselves as academics? How do our prior academic associations converge or conflict with our new interdisciplinary home and what might this mean for our SoTL collaborations?

In this session, we explore how developers' current academic roles and their disciplinary backgrounds intertwine, drawing on our own previous interviews with 15 developers in five countries and our new survey of around a thousand developers in 38 countries on six continents, and comparing the data with participants' reflections during the session. We consider, for instance, what differences we find in attitudes and approaches between developers from clusters of disciplines (e.g. natural sciences or humanities), and whether developers are drawn to particular kinds of AD research (ethnographic, quantitative, narrative) at the expense of others.

Given that developers typically occupy an interdisciplinary space, these questions matter. We often work with academics from disciplines with different epistemologies from our own, whether on SoTL projects or in consultations and courses; how we frame our work and envision our identities can therefore greatly affect our capacity as colleagues, collaborators, and agents of change.

Moreover, how we talk about our disciplinary differences and collaborations within the field of academic development matters. Developers can look to ongoing conversations in the SoTL community (Hutchings, Huber, & Ciccone, 2011; McKinney, 2013) for productive ways to frame and negotiate this shared space. Although academic development emerged as a recognized field decades before SoTL, the SoTL community has pushed this conversation further to consider both the challenges and possibilities for "talking across the disciplines" (Robinson et al., 2013). Gary Poole, for example, makes a case for the importance of "bringing disciplines together" in SoTL research, particularly if we "do not simply tolerate differences but we give them enough respect for serious consideration" (2013, p.149). Further, Poole points out that ultimately "this issue is about the legitimacy of voices" (p. 149). In academic development, as in SoTL, investigating how disciplinary perspectives inform our research and practice can also help us engage in conversation across these differences so that multiple voices speak and are heard.

As well as reporting on the findings of our studies, we will end by inviting attendees to discuss and critique this approach, including reflecting on how their prior disciplines emerge in their present work and other lessons the SoTL community might offer.

2:00 PM | **Room 308A** | **Leadership, academic development and SoTL**

B12.2 MAKING TEACHING VISIBLE ON YOUR CAMPUS: PROVOST'S CONVERSATIONS ON TEACHING AND LEARNING (PCTL)

Individual Paper (30 minutes)

M'hammed Abdous (1)
(1) Old Dominion University (Norfolk, United States)

Ongoing conversation among colleagues about teaching and learning remains one of the most effective tools for encouraging faculty to consider, reflect upon, and renew their teaching practices. According to Palmer (1993), creating a community of discourse about teaching and learning requires three conditions: leadership support, a series of relevant topics for conversations, and a set of non-judgmental ground rules for the conversation.

As part of a comprehensive faculty development program, the PCTL series provides a bi-monthly opportunity for faculty, adjuncts, and teaching assistants to listen to, and then to interact with, award-winning faculty members who share their teaching best practices. Invited and introduced by the Provost, presenters engage their colleagues in dialogue that encourages them to refresh and to rethink their teaching practices. Senior leadership's support for this ongoing campus discussion makes teaching and learning visible on our campus, while offering faculty a forum to collectively celebrate ideas that work and to brainstorm solutions for the vexing issues than can impede their teaching. Organized around themes, PCTL topics include a wide range of ideas converging toward the improvement of our students' learning – across various disciplinary traditions. PCTL sessions are recorded and are made available for online viewing. Exceptional moments from past Conversations are edited and compiled under a Worth Sharing section: http://clt.odu.edu/pctl.

This session will present results from a two-year study of faculty satisfaction with the Conversation series, with a focus on the reported impact on the teaching of faculty who participated in the program. The study blends a quantitative component (5 Likert-type questions) about satisfaction with questions about what faculty members might do differently in their teaching as a result of attending a PCTL session. Later, to further understand the impact of the Conversations on faculty teaching practices, a follow-up survey asks them specifically how they have used the ideas, tips, and suggestions offered by the Conversationalists during the various PCTL presentations.

As a theoretical framework, we chose Argyris and Schön's (1974) espoused theory versus theory-in-use. In so doing, we discover whether theories-in-use – those which represent what faculty actually do – are aligned with espoused theories, which represent what faculty say that they would do. To this end, our first survey collects self-reported data about faculty intentions, while the follow-up survey asks faculty for information about how they have implemented their initial Conversation-gleaned ideas.

The descriptive statistics are generated using SPSS; the open-ended questions are analyzed using WordStat. This approach favors a triangulation design model, gathering both quantitative and qualitative data to better understand faculty responses.

Although a causality relationship between the PCTL series and faculty teaching improvement is tenuous and distal, we believe that the Conversations help engage faculty to reflect about the effectiveness of their own practices and their underlying beliefs about teaching and learning. This process is likely to encourage a renewed focus on teaching practices, which, in turn, will contribute to significant student learning.

1:30 PM | Room 308B | Inquiry into student learning

B13.1 GETTING PAST THE GRADE: MOTIVATION STRATEGIES TO PROMOTE GOOD GRADUATES

Individual Paper (30 minutes)

Bryan Ruppert (1), Colette Hoption (1)
(1) Seattle University (Seattle, United States)

Colleagues often complain that students will "do the work" only if there is a grade attached, and it is commonplace that only graded assignments are included in coursework. Against this backdrop, we ask two questions:
(1) How can we foster appreciation for non-grade incentives in the classroom?
(2) Are certain types of students more motivated by non-grade incentives than others?

According to regulatory focus theory, individuals are motivated to maximize pleasure (achieve rewards) or minimize pain (avoid punishments; Higgins, 1997). Therefore, students who strive for an A differ from students who vie to maintain an A, even if their study habits are identical. Indeed, these students are apt to perform differently when faced with creative tasks (Roskes, Elliot & De Dreu, 2014). To explore this further, we devised a two-part assignment that offered different incentives. Completing Part 1 guaranteed an A grade; we expected that this incentive would appeal to students interested in rewards and those who feared losing a guaranteed A grade. Part 2 had no bearing on grades but, if completed, bought social capital: students would receive a commendatory email cc'd to their department chairs. One might expect that only those interested in maximizing pleasure would complete Part 2. However, because Part 2 could only be completed after finishing Part 1, we anticipated that students concerned with minimizing pain would recognize their behavioral commitment to the coursework and be "nudged" to complete Part 2 (Kline & Peters, 1991; Thaler & Sunstein, 2009). Ultimately then, this assignment and incentive design would engage and benefit both student populations.

Surprisingly, about one third of students completed Part 2. We are conducting a survey (to assess primary motivations) and semi-structured interviews (to understand reasons for completing or failing to complete Part 2). We suggest two main takeaways: (1) give students the option of 'losing' grades to invoke action and (2) 'hook' students to coursework through sequential, effortful activities so that students strive for the feeling of completion/achievement rather than a grade.

Still unclear is what would happen if grades were removed entirely from the incentive structure to complete minor tasks. Can social capital alone be incentive enough to complete tasks? And what is the relationship with non-financial rewards in employment (Pouliakas & Theodossiou, 2012).

Participants will be invited to discuss how they may translate social-capital reward structures into their own assignment design.

References

Higgins, E. T. (1997). Beyond pleasure and pain. American Psychologist, 52.

Kline, C. J., & Peters, L. H. (1991). Behavioral commitment and tenure of new employees: A replication and extension. Academy of Management Journal, 34.

Pouliakas, K., & Theodossiou, I. (2012). Rewarding carrots and crippling sticks: Eliciting employee preferences for the optimal incentive design. Journal of Economic Psychology, 33.

Roskes, M., Elliot, A. J., & De Dreu, C. K. W. (2014). Why is avoidance motivation problematic, and what can be done about it? Current Directions in Psychological Science, 23.

Thaler, R. H., & Sunstein, C. R. (2009). Nudge: Improving decisions about health, wealth, and happiness. London, UK: Penguin.

2:00 PM | Room 308B | Inquiry into student learning

B13.2 FROM PASSIVE CONSUMERS TO PASSIONATE CREATORS: HOW STUDENTS DEVELOP THEIR RESEARCH PROCESSES OVER THE COURSE OF AN UNDERGRADUATE DEGREE

Individual Paper (30 minutes)

Margy MacMillan (1)
(1) Mount Royal University (Calgary, Canada)

From first year through graduation, students' approaches to research assignments undergo a gradual transformation. Starting as passive consumers of sources they barely understand, they become passionate creators of new knowledge. This development extends well beyond the learning for assessment they do in class to becoming subject experts in their own communities. When students see research as developing their own understanding so they can inform others, rather than as trying to find and cite enough sources to satisfy assignment requirements, there is joy in learning.

These observations come from a project that is gaining fascinating insights into the student experience. Now in its fifth year, the Mount Royal Assessment Seminar interviews around 100 students every year, documenting their challenges and frustrations, their turning points and triumphs. Woven through discussions of learning experiences across and beyond the curriculum are rich descriptions of how they conceptualize and carry out research tasks, both those imposed by assignments and those that follow more personal quests.

Each year the Assessment Seminar interviews a different group of students (e.g. first-years, or senior honours students) with proportionate representation from the different programs of study. This provides an invaluable opportunity to see how students at different points in their education view the research process, and patterns in how those conceptions change over time. Like a number of projects elsewhere, this study takes SoTL beyond the single classroom, to observe learning across the curriculum and over time. The work also draws on research in SoTL, information behaviour, reading, and information literacy to gain insights into how students develop an understanding of using information to create new knowledge. A constructivist/connectivist understanding of learning informs the study and is also useful in interpreting some of the affective data present in the transcripts. In the students' words, research emerges as a process of extending prior knowledge with new information and of making exciting connections between various elements of scholarly conversations.

In the interviews, students explicitly describe using a range of sources, from books to raw data and primary literary sources. Some comment explicitly on how their research practices have developed, from just using Google to consulting a range of more scholarly sources. First and second year students describe frustrations with finding the 'right' source (and citing it correctly). As they develop more familiarity with the processes, there is an evolution from research as finding what others have already

said to research as constructing original work. Students further along in their programs say their ability to find information for assignments transfers to doing research outside of academic work. For some, this has led to becoming experts in their social circles, a position they are proud of.

Understanding which aspects of research students find frustrating and which spark interest, enthusiasm, and pride has helped me develop better research workshops and suggests improvements to research assignments. As a group, we will develop characteristics of the 'perfect' assignment that will encourage students to develop a passion for research.

1:30 PM	Room 309A	Emerging technologies and SoTL

B14.1 EMPLOYING MOBILE DEVICES ON STUDENT FIELDWORK TO FOSTER THE DEVELOPMENT OF GRADUATE ATTRIBUTES

Individual Paper (30 minutes)

Derek France (1), Victoria Powell (1), Alice Mauchline (2), Katharine Welsh (1), Brian Whalley (3), Julian Park (2)
(1) University of Chester (Chester, United Kingdom); (2) University of Reading (Reading, United Kingdom); (3) University of Sheffield (Sheffield, United Kingdom)

Mobile devices have the potential to enhance students' research capabilities (France et al., 2013) and student learning via access to online content and can provide flexible, networked, stimulating and challenging learning opportunities (e.g. Cochrane & Bateman, 2010). Smartphones are becoming more affordable and ubiquitous (Melhuish and Falloon 2010) and there is a need to explore their application to support student learning and contribution to the development of graduate attributes. In Morris et al.'s (2012) study, participants owned an average of 4.3 electronic devices that could be used for learning. However, a recent study of undergraduate students (Woodcock et al. 2012, 1) found that many students who own smartphones are "largely unaware of their potential to support learning".

We have explored some of the possibilities of using "tablets" and "smartphones" to aid the research and inquiry process in geography and bioscience fieldwork. Over the course of 2012 -13, questionnaires and focus groups were conducted with groups of Bioscience and Geography allied students, from first year undergraduate to postgraduate, on three bespoke field courses (2 European and 1 USA based). Students and faculty were asked to reflect on the learning experiences of using iPads during fieldwork. The different fieldwork environments and assessment regimes provided a diverse range of information about how students perceive the benefits and drawbacks of using these mobile learning devices.

Students reported on the initial pitfalls and practical aspects (e.g. saves time) as well as intellectual benefits (e.g. aided real-time fieldwork reflections). The devices facilitated engagement and group interactions and helped develop graduate level skills such as rapid information gathering, networking, creativity, digital literacies, reflection and independent learning. This research seeks to establish how the inclusion of mobile technologies in fieldwork may contribute to the development of graduate attributes.

One of the key messages that this paper will demonstrate to the delegates is the range and potential of mobile devices for flexible learning and the ability to align/map graduate attributes to mobile "apps" from a student and faculty perspective. It is imperative for faculty to provide their students with learning opportunities with mobile devices to promote a way of thinking and behaving digitally to increase the connections between related research activities

References

Cochrane, T. & Bateman, R. (2010) Smartphones give you wings: Pedagogical affordances of mobile Web 2.0. Australasian Journal of Educational Technology, 26(1), 1-14

France, D., Whalley, W. B., & Mauchline, A. (2013) Using Mobile Devices to Enhance Undergraduate Field Research. CUR Quarterly. 34 (2) p. 38-42. Washington, DC: Council on Undergraduate Research.

Melhuish, K. & Falloon, G. (2010). Looking to the future: M-learning with the iPad. Computers in New Zealand Schools: Learning, Leading, Technology, 22(3).
Morris, N.P, Ramsay, L. & Chauhan, V. (2012) Can a tablet device alter undergraduate science students' study behavior and use of technology? Advances in Physiology Education, 36, 97-107.
Woodcock, B., Middleton, A. & Nortcliffe, A. (2012) Considering the Smartphone Learner: an investigation into student interest in the use of personal technology to enhance their learning. Student Engagement and Experience Journal, 1, 1-15.

2:00 PM | Room 309A | Emerging technologies and SoTL

B14.2 FACULTY PROFESSIONAL DEVELOPMENT THROUGH A SOTL COHORT ON TABLET AND MOBILE TECHNOLOGIES

Individual Paper (30 minutes)

Dedra Demaree (1), Brian Boston (1), Beth Campolieto Marhanka (1), Members Faculty Cohort (1)
(1) Georgetown University (Washington, United States)

From December 2013 to May 2014, the Center for New Designs in Learning and Scholarship at Georgetown University ran a series of faculty cohorts topical to our Initiative on Technology Enhanced Learning. One cohort centered on the use of tablet and mobile computing in the classroom; this cohort contained eleven faculty members and seven unique projects representing a range from introductory core courses to medical school courses.

The cohort had three levels of goals: goals surrounding enhancing the student experience, goals of facilitating faculty innovation, and goals of producing scholarship of teaching and learning. This third goal is multifaceted: to assist faculty in implementing a SoTL-based approach to their tablet/mobile classroom application, to collect data to understand the functioning of this cohort as a faculty development tool, and to collect SoTL data across the projects for generating cohort-level recommendations to the university on how to implement such technology on a larger scale.

Although tablet technology is not emergent, the recent reduction in cost and increase in available range of devices means that many students at Georgetown University already own some sort of tablet, and it is increasingly affordable to provide loaner tablets to students. This cohort used a mix of these two models.

The primary model for our research methodology is a paper by Rossing et al. (JOSOTL, Vol 12, No 2, pp 1-26). In this paper, a cross-disciplinary faculty iPad cohort is described, including a study of student impressions of mobile technology in the classroom. We utilized a large subset of the student survey questions in this study in order to directly compare our results. We also used the literature on developing faculty learning communities to guide the structure of our faculty cohort activities, and literature on questions of inquiry to guide or faculty reporting process.

We have three sets of data for this project. We have the surveys students completed at the end of the course which ask questions ranging from effective use of technology in general to specific use in this course (this survey aligns with Rossing et al.). We have cohort faculty member blog posts and final project reports where they answer prompts including:

- in what ways being part of the cohort has impacted your project
- in what ways has being part of the cohort expanded your project or future plans
- inquiry into student learning (including questions of inquiry, evidence of impact on learning, and implications and actions), and
- faculty reflection (including impact on teaching, project implementation, and the cohort model)

We also have observations and notes from the faculty cohort interactions during the monthly meetings.

In this presentation, the methodologies used and the data from each of the three sources will be shared. Participants will have a chance to look at raw data and discuss trends observed. Participants will then be presented with the researcher's findings, and participants will discuss implications and suggest ways in which this work can inform broader practice for technology-based faculty cohorts.

2:30 PM | Room 309A | Emerging technologies and SoTL

B14.3 SERIOUS GAMES IN POST-SECONDARY EDUCATION, AN OPPORTUNITY FOR THE CURRICULUM AND THE 21ST CENTURY SKILLS DEVELOPMENT

Individual Paper (30 minutes)

Margarida Romero (1), Michela Ott (2)
(1) Université Laval (Québec, Canada); (2) Istituto Tecnologie Didattiche (ITD) Consiglio Nazionale delle Ricerche (CNR) (Genova, Italy)

Games are often associated with childhood and unconditional playfulness; the use of games as learning artifacts in post-secondary education is still limited. Games can be powerful tools for learning, offering complex learning systems to the learners (Prensky, 2006), a participative interaction with the learning content to the students (Aldrich, 2009) and providingrisk-free environments to explore (Kirriemuir, & McFarlane, 2004) that could be integrated into the curricula of primary, secondary and post-secondary education. According to Ott, Popescu, Stanescu and de Freitas (2013), Game Based Learning (GBL) could be integrated into the curriculum, to contribute not only to achievinig specific pedagogical objectives linked to educational subjects but also to the development of the 21st Century skills. Post-secondary education should combine both the traditional learning objectives curriculum and 21st Century skills in order to prepare learners for future job market needs. Collaboration, communication, ICT literacy and social and cultural skills are the main skills recognized by the different 21st century skills frameworks (Voogt, & Pareja Roblin, 2012). Digital computer based games can effectively contribute to develop the ICT skills of learners/players, especially in situations where the learners are engaged in the co-creation process of the games through computer game-making authoring tools such as Scratch (Hayes, & Games, 2008) or MAGOS (Kiili et al., 2012). Moreover, the use of serious games in collaborative learning activities could contribute to developing collaboration, communication and social skills when the game is pedagogically integrated into the curriculum to promote these social skills. Serious games can also be profitably used in the field of entrepreneurship education to help students acquire an entrepreneurial mindset, sense of initiative and specific entrepreneurial skills (Bellotti et al., 2012), which also are considered key competencies needed by those wanting to be leading actors in the Knowledge Society (Gordon et al., 2009).

Not only individual serious games played in collaborative learning settings in the postsecondary classroom but also Massive Multiplayer Online (Serious) Games (MMOGs) could be integrated into the post-secondary curriculum for achieving the most important 21st century skills. The presentation will introduce some case studies of serious games that could be used in the context of post-secondary education and it will also put forward some ideas and opportunities for developing new serious games that could contribute to developing skills for the 21st century.

1:30 PM | Room 309B | Inquiry into teaching practices

B15.1 MULTIMEDIA CASE STUDIES IN TEACHING MUSICAL CREATIVITY

Individual Paper (30 minutes)

Valerie Peters (1), Zara Pierre-Vaillancourt (1)
(1) Université Laval (Québec, Canada)

This paper will present an inquiry into teaching practices using the case study method. Four multimedia case studies that encourage reflective thinking about how to teach musical creativity in schools will be presented. The Web site and complementary material has recently won a prize for excellence in university pedagogy. The site presents different contexts of musical creativity in schools and by doing so, the material engages the students in the principal themes of the undergraduate music education class: lesson planning, classroom management, evaluation and musical creativity. Professional tasks and roles that are examined through the case studies include: (a) the phases of teaching – planning, action in class, reflection on practice; (b) classroom management; (c) the role of the teacher; and (d) teaching musical creativity. Each case study includes video clips that portray the creative activity as well as all the complementary materials used by the teacher (handouts including a description of the activity, evaluative rubrics, etc.). The video clips include interviews with students and teachers about their experiences with musical creativity.

Case studies bring interesting, real-world situations into the classroom and help pre-service music students to propose solutions that they find through deductive reasoning. The pedagogical team filmed in 4 schools (2 elementary, 2 secondary) and created 53 video clips as well a series of reflective questions that allow the students to observe, analyze, and reflect on professional practice related to teaching musical creativity. The case studies go from practice to theory and students are asked to extract pedagogical concepts and principles by viewing these valuable, significant experiences of practicing teachers.

Audience members will be invited to interact with the presenters and to share their experiences of case study methods in university teaching. We will share student evaluations of the case study method and also provide our own critical evaluation of this approach.

2:00 PM | Room 309B | Inquiry into teaching practices

B15.2 PROMOTING PERSONALIZED LEARNING IN HIGHER EDUCATION? – AN EXPLORATION OF 30 TEACHERS' VIEWS

Individual Paper (30 minutes)

Dominique Verpoorten (1), Françoise Jérôme (1)
(1) University of Liège (Liège, Belgium)

The personalization of learning has become a prominent topic in the educational field at various levels: social (Bonal & Rambla, 1999), government policy (DfES, 2004), school management (Lambert & Lowry, 2004) and course design (Tomlinson, 1999). This concern for the accommodation of education to individual differences has received political expression in programs such as "No child left behind" in the US or "Every child matters" (West-Burnham & Coates, 2005) in the UK. In French-speaking Belgium, 3 government decrees about teacher training or coordination of higher education have recently, introduced expressions consonant with personalization into official texts.

Despite the growing interest in this important issue, efforts to explore students' (Higgins, Sebba, Robinson, & Mackrill, 2008) or teachers' (Underwood et al., 2007; Verpoorten, Renson, Westera & Specht, 2009) opinions on personalized learning remain scant. For this reason, the article analyses the views of 30 faculty invited to verbally elaborate on 3 questions: is enhanced

personalization of learning a desirable end for higher education? Is it possible in concrete practice? What do you do in your courses in this respect? Results indicate that a majority of teachers endorse the need for more personalized learning while having trouble giving concrete expression to it. Their current attempts tend more to constitute remedial mechanisms than personalization in the full sense of the word.

The paper concludes by relating these observations to theoretical and practical issues (Grandguillot, 1993; Perrenoud, 1996) -- especially in terms of SOTL -- emerging from the assumption that education should take into account students' individual characteristics.

Bonal, X. & Rambla, X. (1999) The Recontextualisation Process of Educational Diversity: new forms to legitimise pedagogic practice, International Studies in Sociology of Education, 9(2), 195-214.

DfES, (2004). A National Conversation about Personalised Learning. Nottingham: Department for Education & Skills publications.

Grandguillot, M.-C. (1993). Enseigner en classes hétérogènes. Paris : Hachette Education.

Higgins, S., Sebba, J., Robinson, C., & Mackrill, D. (2008). Personalising learning: the learner perspective and their influence on demand. London: Becta.

Lambert, M.B. & Lowry, L.K. (2004) Knowing and Being Known: personalization as a foundation for student learning. Seattle: Small Schools Project.

Perrenoud, Ph. (1996). Ou vont les pédagogies différenciées ? Vers l'individualisation du curriculum et des parcours de formation, faculté des sciences de psychologie et des sciences de l'éducation, Genève.

Tomlinson, C.A. (1999) Mapping a Route toward Differentiated Instruction. Educational Leadership, 57(1), 12-16.

Underwood, J., Baguley, T., Banyard, P., Coyne, E., Farrington Flint, L., & Selwood, I. (2007). Personalising learning with technology. London: Becta.

Verpoorten, D. (2013, oct. 22). La personnalisation : entre individualisation et capacitation. Paper presented at the 9ème journée des chercheurs en sciences de l'éducation (ABC-Day 9), Nivelles, Belgium. Orbi : http://hdl.handle.net/2268/157880

Verpoorten, D., Renson, J.-M., Westera, W., & Specht, M. (2009). Personalised learning: a familiar concept to teachers? And which teachers? - A questionnaire-based survey of 43 secondary school teachers. In S. Walker, M. Ryan & R. Teed (Eds.), Making it Personal – Proceedings of the e-learning@greenwich/conference (pp. 61-67). Greenwich: Education Development Unit. Orbi: http://hdl.handle.net/2268/153979

West-Burnham, J., & Coates, M. (2005). Personalizing learning: transforming education for every child. Stafford, UK: Network Educational Press.

3:30 PM | Room 2101 | Inquiry into student learning

C01 TEAM PROJECTS IN FOCUS: A COLLABORATIVE, CASE STUDIES WORKSHOP EXPLORING STRATEGIES FOR OBTAINING DATA ON STUDENT LEARNING IN TEAM PROJECTS

Workshop (90 minutes)

Siara Isaac (1)
(1) Teaching Support Centre, Ecole Polytechnique Fédérale de Lausanne (Lausanne, Switzerland)

Group projects are valuable learning opportunities for appropriating academic content and for developing professional/transversal skills. These latter skills may include team work, project management, intercultural research, and oral and written communication skills.

These myriad learning goals can be complementary or conflicting, and must be reconciled in many decisions related to setting up the group work (type of project, group size and assignment method, individual, peer or group grades…). Poor choices can lead to frustration and inefficiency for both instructors and students, and the desired learning does not occur.

This workshop provides an opportunity for participants to explore different methods for collecting and analyzing information about student learning in groups. Participants will generate ideas for observing group process and group learning, and apply the concepts and methods to specific case studies. The goal is to develop simple, efficient strategies for use in one's own teaching.

Introduction: 20 minutes

- Complementary and contradictory goals of team projects
- Characteristics of a 'good' team project

Case studies – Jigsaw strategy: 50 minutes

As part of a department-wide curriculum review, teachers are being asked to clarify their objectives for projects and to provide additional data on the learning experience of students completing the projects. You have been assigned to teach this year's edition of a course using team projects, briefly described below. Please review the information and prepare to explain how you will be evaluating the effectiveness of the team project at this afternoon's departmental meeting:

A. A first-year undergraduate course provides important fundamental knowledge for subsequent years. Students complete challenging weekly assignments in stable teams (5 people). Students give peer feedback to their colleagues three times over the semester and a final peer grade which counts for half of the grade for the assignments. Teaching assistants mark the weekly assignments which account for the rest of the assignment grade. The course has 100 students and 20 contact hours over the term. The assignments are worth 10% of the grade, half of which comes from the peer evaluations.
OR
B. A Master's level course taken by many international students, a key objective of which is the development of intercultural communication. The project is designed to develop professional skills and to enable students to make contacts in industry. In past years, there has been significant conflict within the teams. The course has 30 students and 20 contact hours over the term. The project counts for 50% of the grade.
OR
C. Final-year undergraduate course, where the project is an opportunity to develop project management and communication skills. The large class size means that teams are large (8 people) and feedback from previous years is that not all students develop equal proficiency in the desired skills. The course has 80 students and 20 contact hours over the term. The project counts for 15% of the grade.

Conclusion: 15 minutes
Discussion on the exercise, wrap-up

The facilitator, a faculty developer, has had success with the structure of this workshop for exploring effective group work at several previous francophone conferences.

3:30 PM | **Room 2102A** | **Disciplinary approaches to teaching, learning and SoTL**

C02.1 CREATIVITY AND LEARNING OUTCOMES IN DESIGN EDUCATION

Individual Paper (30 minutes)

Bahar Mousavi Hejazi (1)
(1) OCAD University (Toronto, Canada)

Outcomes-Based Education (OBE) with its learning-centred framework is gradually replacing the traditional teacher-centred model. How does OBE impact the quality of teaching and learning in design education? This paper is a part of the research that I am conducting for my PhD dissertation entitled "Implementation of OBE in Design Programs: an Action Research". I explore the potential impact of a learning-centred model on design education with an emphasis on 'creativity', 'imagination' and 'innovation' as the key aspects of design programs.

Each profession requires specific sets of knowledge, skills and competences. The raison de vivre of OBE is in its adaptable pedagogical framework which has the capacity to bridge education to the professional career that one chooses to pursue. "What are the learning outcomes that should be specifically considered in the planning of a design-based curriculum?"

'Design' as defined by The International Council of Societies of Industrial Design (ICSID) is "a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles. Therefore, design is the central factor of innovative humanization of technologies and the crucial factor of cultural and economic exchange. Design seeks to discover and assess structural, organizational, functional, expressive and economic relationships, with the task of enhancing global sustainability and environmental protection (global ethics), giving benefits and freedom to the entire human community, individual and collective, (serving) final users, producers and market protagonists (social ethics), supporting cultural diversity despite the globalization of the world (cultural ethics), giving products, services and systems those forms that are expressive of (semiology) and coherent with (aesthetics) their proper complexity."

The design studio with its roots in the medieval artisans' workshops and royal renaissance academies where the transfer of knowledge and skills occurred through the 'master-apprentice' relationship, constitutes the didactic model for design education. The idea of 'learning by doing' that has been the core practice in design education throughout the 20th century, has developed an innovative mode for learning that encompasses a repository of knowledge as well as a wide range of skills and competences within both cognitive and affective domains. The current teaching approach in design education involves realistic or simulated design experiences that enhance the students' learning experience within the studio culture where "knowledge and intellectual skills are acquired in a similar way, and are inseparable. It is not possible to make a clear-cut division between them; as the level of knowledge applicability increases, it is becoming closer to skills."

The definition of the design profession and the nature of studio-based education in design suggest that some very important cognitive terms such as 'creativity' should be considered within an OBE model. How do we construct measurable learning outcomes that capture the nature of these terms? How do we enable students to understand the concept of creativity and how do we measure them? The articulation of learning outcomes in a way that fosters these specifically cognitive design-oriented attributes as well as their measurement thus becomes a significant challenge of design education within an OBE model.

4:00 PM | Room 2102A | Disciplinary approaches to teaching, learning and SoTL

C02.2 HOW CAN WE BETTER UNDERSTAND THE DESIGN PROCESS, FACULTY TEACHING EXPERIENCE, AND STUDENT SATISFACTION OF TECHNOLOGY-ENHANCED LEARNING?

Individual Paper (30 minutes)

Matt Trevett-Smith (1), Stacy Williams-Duncan (2)
(1) University of Virginia, Teaching Resource Center (Charlottesville, United States); (2) University of Virginia (Charlottesville, VA, United States)

For the past two years, the University of Virginia (UVa) Hybrid Challenge for Engaged Learning program has supported faculty members from across the disciplinary spectrum to build high-engagement learning opportunities into their courses. Each course and activity supported the residential-learning experience by promoting active in-class learning made possible through students' use of appropriate interactive technologies. Faculty members who received Hybrid Challenge Grants came from across the university, had varying degrees of experience in using technology as a teaching tool, and planned to redesign a variety of courses. During the 2013-14 academic year, Hybrid Challenge grants were awarded to redesign two architecture courses, two engineering courses, a biology course, a chemistry course, a history course, and two language courses.

The Teaching Resource Center (TRC) sought to understand 1) the process through which faculty design hybrid courses, 2) faculty experiences in teaching hybrid courses, and 3) student satisfaction with the hybrid courses. A mixed method design was used to collect two years of data and evaluate the TRC's impact on teacher planning, attitude, and commitment to creating student-centered, hybrid classrooms. Both quantitative and qualitative data was collected in the form of faculty attitude surveys, course design evaluations, faculty interviews, faculty learning communities, classroom observations, student focus groups, pre- and post-course student attitude surveys. Similarly, mid-semester teaching analysis polls provided quantitative and qualitative data on student perceptions of learning.

We found that hybrid courses supported the UVa residential-learning experience by promoting active in-class learning made possible through students' using appropriate interactive technologies to prepare for class. This model encouraged students to engage with course concepts, peers, and instructors, which resulted in deeper leaning, stronger collaboration skills, and more effective feedback. Face-to-face interactions in hybrid courses took many different forms; they included working problem sets, investigating case studies, small group work, discussions, and mini-lectures. Interactive web-based or digital technologies supported the course learning goals; they included student response systems, software that automatically graded problems, assignments that resulted in digital products, wikis, blogs, and video or screen-cast lectures.

Within this session, presenters will introduce the program's evaluation objectives and design, our research questions, and the results of our assessment. Participants will also experience the learning as students did, share their ideas, and discuss ways to increase engaging activities in their own courses. We will use video interviews to allow participants to hear firsthand accounts from faculty members, including their responses to positive and negative student feedback and how they plan to change their courses the following year. Qualitative data from the interviews and grant participants' final reports will be compared to the quantitative data gathered in student surveys and course evaluations. The student data will be analyzed for each course, by class size, and by broader discipline groupings of STEM, humanities, and languages. The cross-disciplinary nature of this research makes a strong case for transferability of the findings to other settings.

3:30 PM | Room 2102B | New and diverse contexts for SoTL

C03.1 USING SOTL STRATEGIES TO GUIDE HEALTH LEADERSHIP DEVELOPMENT

Individual Paper (30 minutes)

Maura MacPhee (1), Lilu Chang (2)
(1) University of British Columbia (Vancouver, Canada); (2) Koo Foundation Sun Yat-Sen Cancer Centre (Taipei, Taiwan)

Leadership development is a new context for SoTL: Finding the best teaching and learning strategies to develop emerging leaders. This presentation will focus on SOTL strategies applied to interprofessional health leadership development in Taipei, Taiwan. An international practice-academic collaborative (Canada, Taiwan) was responsible for the development, implementation and evaluation of a leadership development program for interprofessional teams of health providers at one, major cancer centre in Taipei. Executive leadership at the cancer centre funded and supported this project and its evaluation. SoTL approaches were used to: conduct a learner needs assessment, identify learner-appropriate delivery methods and develop a systematic, workshop evaluation framework. A learner needs assessment identified health professionals' interest in collaborative leadership and teamwork. Five teams attended the pilot workshop: a total of 50 healthcare professionals from five different disciplines. The workshop consisted of one day of pre-work where the five teams met separately, followed by an all-teams full-day workshop. Teams were also asked to debrief with their own team members at regular intervals after the workshop. The workshop was prefaced with self-and team-assessment activities to stimulate critical reflection before the workshop. During the workshop, short presentations were accompanied with a variety of individual and team learning activities. Leadership development begins with self-development through heightened self-awareness and regulation of behaviors. Individual activities were designed to identify each team member's personal strengths, areas of expertise, and actual or potential contributions to teamwork. Teams are considered the major, functional unit of healthcare delivery. Within teams, collaborative leadership is necessary to establish common goals and values, manage team members' roles and accountabilities, maintain critical information flow, lead innovation and flexibly adapt to constant change. Evidence-based, active learning team activities included low fidelity simulations and case-based problem-solving. The workshop evaluation strategy was based on Kirkpatrick's four-level model. A trainer-developed satisfaction survey was used to assess participants' reactions to the workshop (Level 1). Learning (Level 2) was assessed post-workshop by asking participants to rate attainment of specific learning objectives. Level 3 (behaviour) was assessed 6 months post-workshop by interviewing participants and holding focus groups. Participants were asked to provide examples of how workshop participation influenced collaborative leadership/teamwork. A pre- and post- workshop survey was conducted at the time of the workshop and 6 months after workshop attendance. The survey, the Collaborative Practice Assessment Tool (CPAT), is a valid and reliable tool that was culturally adapted and content validated for use in Taiwan. The CPAT was used to measure participant perceptions of changes in teamwork. Level 4 (Results) was evaluated through interviews with executive leadership to determine their perceptions of change from the workshop, such as increased teamwork efficiency and effectiveness, greater team morale, and higher patient satisfaction. This presentation will share evaluative data, particularly evidence that links mixed methods findings to SoTL strategies applied throughout the development, implementation and evaluation of this Taiwanese-Canadian interprofessional health leader workshop.

C03.2 COLLABORATIVE LEADERSHIP FOR HEALTH SYSTEMS TRANSFORMATION

Individual Paper (30 minutes)

Rosemary Brander (1), Maura McPhee (2), Emmauelle Careau (3), Margo Paterson (4), Janice Van Dijk (1)
(1) Queen's University (Kingston , Canada); (2) University of British Columbia (Vancouver, Canada); (3) Universite Laval (Quebec City, Canada); (4) Queen's Universtiy (Kingston, Canada)

Introduction

Models of integrated services in healthcare organizations and delivery systems are becoming more evident globally. This trend requires concerted efforts to cultivate collaborative leaders within and across organizations in order to best align resources with effective and efficient care. 'Collaborative leadership' in the literature conveys many diverse definitions. The Canadian Interprofessional Health Leadership Collaborative (CIHLC) is a multi-institutional and interprofessional partnership among five Canadian universities: University of Toronto, University of British Columbia, Northern Ontario School of Medicine, Queen's University and Université Laval. Chosen as one of four international innovation collaboratives of academic institutions by the U.S. Institute of Medicine's (IOM) new Global Forum on Innovation in Health Professional Education in 2010, the CIHLC's vision is that of "collaborative leadership for health system change to globally transform education and health". The goal of the CIHLC is to develop, implement, evaluate and disseminate an evidence-based collaborative leadership educational program targeted at emerging health leaders. Emerging leaders are senior-level leaders who have the capacity to champion and role model community engagement. The program is grounded in social accountability and community service learning. One aspect of this program, a service learning project, involves emerging health leaders building formal partnerships with members of the community. Specific populations of underserved members of the community are a particular focus of this project, such as individuals with mental health and addiction issues, aboriginal peoples, the frail elderly, and street youth.

Learning Objectives

Presentation participants will:

1. Learn about a theoretical collaborative leadership model for education of emerging health leaders for health systems transformation
2. Discover evidence-based teaching and learning strategies used within the leadership curriculum
3. Examine the developmental evaluation process being used to assess learning attainment from the perspectives of program participants and their health organization sponsors.

Methods and Results

Program development consisted of three phases. Phase I of the program began with a broad needs assessment that included a systematic literature review and key informant interviews. Key informants included interprofessional health educators, healthcare administrators and community health leaders. Phase II involved the creation of an evidence-based model to guide curriculum development for emerging collaborative health leaders. Phase III, in progress, is a pilot and developmental evaluation of the program's transformative learning curriculum and associated learning principles and activities, such as the service learning project that focuses on how to effect sustainable, effective and efficient health systems change.

Conclusion

The presentation will demonstrate how participants can apply teaching and learning principles of the CIHLC collaborative leadership model in their own work. It will emphasize the need for a new breed of collaborative health leader who understands transformative learning and can implement effective change through community-engagement processes that include under-served members of the community.

4:30 PM | Room 2102B | New and diverse contexts for SoTL

C03.3 ASSESSING THE POST-DEGREE IMPACT OF A 4TH YEAR GROUP PROJECT COURSE IN RENEWABLE RESOURCE MANAGEMENT

Individual Paper (30 minutes)

Thomas Yates (1)
(1) University of Saskatchewan (Saskatoon, Canada)

Renewable Resource Management is an applied science degree program that prepares students for land resource, and environmental careers with a focus on field skills, data management, environmental modeling, and project management. RRM 421 Group Project in Renewable Resources Management is an opportunity for senior students to apply knowledge and skills learned in the RRM program to real-world situations by defining, planning and executing a project for a non-university organization. In turn, students are exposed to a real-world experience including the challenge of working with and depending on others, vague and sometimes unrealistic expectations from clients, and subject areas not always within their comfort zone. Partnering with a non-academic organization exposes the student and their work to a form of evaluation not usually encountered until after they have finished their degree. This learning experience requires significant time, energy, risk, and the stress that comes with all of that.

Field and laboratory skills are often immediately transferable to careers in resource management and environmental consulting. Soft skills, such as communication, working collaboratively and managing a project, are valued by employers, but are not usually the focus of applied degree programs. Thus, courses like RRM 421 are believed to be valuable learning experiences; however, how does one know if a course like RRM 421 has a positive impact on student success after they finish their program of study? These learning opportunities are especially important to applied degree programs, such as the BSc. RRM, that have the intention to produce graduates for specific career paths where there is an expectation on the part of the employer in regard to competency, both in the field and in the office. Experiential learning of this nature is transformational, but does it transform the student in a way that supports their post-degree careers?

The purpose of this presentation is to report the results of two surveys; one of post-degree students and the second of project mentors, who had participated in RRM 421. Both surveys were intended to provide data on the RRM 421 experience and on the impact the course has had on the students' post-degree success. The presentation marks the beginning of a longer-term pursuit to understand the best means by which we can evaluate the impact of experiential learning courses on students' ability to transform their learning to the "real world."

3:30 PM | Room 2104A | Inquiry into teaching practices

C04 DECODING THE DISCIPLINES ACROSS THE GLOBE: ADAPTING A SOTL PARADIGM TO DIFFERENT INSTITUTIONAL CULTURES

Panel (90 minutes)

David Pace (1), Miako Rankin (2), Thomas Horejes (2), Swantje Lahm (3), Elizabeth Smuts (4), Jennifer Boman (5), Genevieve Currie (5), Ron MacDonald (5), Janice Miller-Young (5), Michelle Yeo (5), Stephanie Zettel (5)
(1)) Indiana University Bloomington (Bloomington, United States); (2) Gallaudet University (Washington, United States); (3) University of Bielefeld (Bielefeld, Germany); (4) University of the Free State, Qwaqwa Extension (Bloemfontein, South Africa); (5) Mount Royal University (Calgary, Canada)

Decoding the Disciplines provides a paradigm for SoTL in at least nine countries on four continents. Decoding seeks to identify bottlenecks to learning in particular disciplines, to uncover implicit mental operations needed to overcome these obstacles, and

to systematically teach these to students. As this paradigm has been applied in a wider range of institutions, there has been a creative reshaping of the model to respond to local needs.

This session explores these transformations in Canada, the US, Germany , and South Africa.

- Mount Royal University -- For two years six faculty members at Mount Royal University have practiced the Decoding interview protocol on each other and on interested colleagues. Members of the group will discuss how they have used Decoding in a large course redesign project for biology courses, treated interview transcripts as data for a study of the interview process itself, and acted as experienced interviewers for another group of colleagues engaging in a self-study of faculty learning in international service learning courses.
- Universität Bielefeld -- In response to the context of teaching and learning in higher education in Germany, faculty are being exposed to Decoding through a writing process inspired by Sondra Perl (2004). This exercise allows deep self-reflection in a safe space, supported by collegial feedback and respects faculty's need for autonomy. They reported that it helped them uncover ways of disciplinary doing and knowing, break tasks down for students, and develop better writing assignments.
- Gallaudet University -- Primarily geared toward deaf, deaf-blind, and hard of hearing students and dominated by American Sign Language and written English, Gallaudet provides a uniquely rich environment for Decoding both academic and linguistic bottlenecks. When our underlying goal is nurturing critical reasoning, how do we design learning opportunities that allow students to tap into their skills in their primary language, while also developing parallel skills in their non-primary language(s)? Using Decoding, supported with videos from classrooms, we have strategically redesigned class activities and course curricula in multiple disciplines. This work informs our institutional culture, pushing us toward embracing linguistically diverse, multi-modal, and visually-focused learning environments.
- University of the Free State Qwaqwa -- On a small satellite campus in South Africa the Decoding process is being applied to the bottlenecks that prevent instructors from becoming more involved in SoTL, A qualitative study of perceptions and attitudes to SoTL will be followed by the development of strategies to overcome this resistance.
- Discussion -- Participants will discuss the applicability of the Decoding investigations in a variety of contexts.

Bibliography:

David Pace and Joan Middendorf, Decoding the Disciplines: Helping Students Learn Disciplinary Ways of Thinking (New Directions in Teaching and Learning, Vol. 98 (Fall 2004)

Arlene Diaz, Joan Middendorf, David Pace, and Leah Shopkow, "The History Learning Project 'Decodes' a Discipline" in Kathleen McKinney, Ebbs, Flows, and Rips: The Scholarship of Teaching and Learning In and Across the Disciplines (Indiana University Press, 2013)

Sondra Perl (2004): Felt Sense. Writing with the Body. Portsmouth, Boynton/Cook.

3:30 PM | **Room 2104B** | **Disciplinary approaches to teaching, learning and SoTL**

C05 SOTL IN VISUAL ART: A PORTRAIT OF CREATIVITY IN ACTION

Panel (90 minutes)

Diana Gregory (1), Sam Robinson (1), Joe Thomas (1), Don Robinson (1), Matt Haffner (1)
(1) Kennesaw State University (Kennesaw, United States)

This panel discussion presents a case study of the application of the scholarship of teaching and learning (SoTL) in a specific discipline — visual art — in the environment of a large, suburban, public university. 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). The primary problem to be addressed was a perceived lack of imagination and originality in student artwork in the Bachelor of Fine Arts in art and Bachelor of Science in art education degree programs. Using a two-pronged approach, a faculty learning community studied the meanings and processes of creativity and their implications for teaching and learning, while the administration simultaneously initiated a new portfolio review process. The portfolio review was developed over a two year period and resulted in curricular changes that improved retention and progress to graduation, created philosophical unity among divergent faculty and shifted the focus from issues of authority and power to a concern for productive student experiences and actual student learning outcomes. The SLOs were also developed to align with the institution's newly defined university-wide competencies, including skills and dispositions within the field, effective communication, and creative problem solving. The VALUE rubrics for creativity, oral and written communication, and critical thinking served as guidelines for the development of rubrics piloted in fall 2012. Evaluation of early data demonstrated the need (very early in the learning process) for a specific course addressing creative problem solving and conceptual inventiveness, which has resulted in curricular revisions to the foundational courses in the degree programs.

This panel presentation "paints a portrait" that reveals the ways in which the SoTL process directly affected the improvement of SLOs after the faculty examined the standards specified through the National Association of Schools of Art and Design and the American Association of College and Universities VALUE rubrics. Speakers will delineate problems inherent in the process, explain creative solutions that emerged, and demonstrate how national standards tracked progress in the program. A rapid-fire Pecha Kucha presentation will complete this formal portrait. The interactive discussion will focus on the process of using SOTL to improve student learning by utilizing qualitative examples (student artwork) and data analysis that illustrates the development of rubrics and conveys the successes, failures, and best practices within visual art teaching and learning. Participants will critique methods for the development of these processes, and spark ideas that may be relevant for a wide variety of problems and situations. Although the disciplinary-specific portrait focuses on the visual arts, the applications of SOTL that were used here can be applied to other disciplines and practices.

3:30 PM | **Room 2105** | **Leadership, academic development and SoTL**

C06 CREATING A "SAFE SPACE" TO DEVELOP AND SUPPORT PASSION FOR SOTL

Workshop (90 minutes)

Deborah Kiceniuk (1)
(1) Dalhousie University. Centre for Learning and Teaching (Halifax, Canada)

Our current social and educational environment demands new and innovative learning experiences for students that are based on evidenced-based practice and institutional goals. However, implementing and managing a successful change process in post-secondary institutions requires more than just a 'great idea'. In an economic climate that encompasses an environment of accountability, it is increasingly difficult to implement innovative teaching ideas without a plan for their future 'sustainability'. This session will address the notion that for change to happen we must create 'safe spaces' for our 'great ideas' to become part of the fabric of our institutions. Since 2008, the Centre for Learning and Teaching (CLT) at Dalhousie University, Halifax, Canada has been providing opportunities for teachers to make their ideas a reality through a funding program for academic innovations. As part of the funding award, projects must take an evidence-based approach. The challenge of this endeavor has been to provide a 'safe space' to risk new innovative teaching ideas, while also developing a passion and interest to use a SoTL approach to teaching and learning. In addition, raising interest and passion can also lead to teachers recognizing the benefits of SoTL that are often a hidden outcome of the SoTL process. These benefits include: improving student learning; enhancing the contributions to the field of teaching and learning; and, enriching the experiences of teachers (Chism, 2008).

In response to these issues, the CLT has taken a multi-tier approach to encouraging risk-taking in teaching and to encourage SoTL as an integral part of the development of academic innovation. This multi-tier approach includes a 2-tier granting system, the Change One Thing Challenge, and a workshop with a take-away SoTL guidebook. During this activity, participants will: have an opportunity to take part in a workshop designed to support teachers and develop an innovative teaching idea using the SoTL guidebook; discuss and provide feedback about the approaches that have been promoted at Dalhousie; and share ideas about approaches to develop interest in SoTL in their own institutions. This present workshop will be of interest to teachers and administrators with a passion to develop creative leadership support for SoTL that they can integrate into their own institutional culture.

Chism, N. V. N. (2008, April). The scholarship of teaching and learning: Implications for professional development. Key presentation at the Thai Professional and Organizational Development (POD) Network 2-Day Workshop, Bangkok, Thailand.

3:30 PM | **Room 205C** | **Disciplinary approaches to teaching, learning and SoTL**

C07 CRITIQUE AS A SIGNATURE SOTL PEDAGOGY IN THE HUMANITIES AND THE ARTS

Panel (90 minutes)

Phillip Motley (1), Nancy Chick (2), Lisa Kornetsky (3), Jennifer Heinert (4)
(1) Elon University (Elon, United States); (2) Vanderbilt University (Nashville, TN, United States); (3) University of Wisconsin-Parkside (Kenosha, WI, United States); (4) University of Wisconsin Colleges (West Bend, WI, United States)

Critique is a distinct pedagogy in the arts and humanities that involves students giving each other feedback about their work. The process requires students to make astute observations about the work created by their peers, think critically and reflectively about that work, and to then formulate and articulate their observations in a way that is useful to those peers in either a formative or summative way.

This panel will explore whether or not the process of critique (also called "peer review" or "workshop") is a signature pedagogy in some important disciplines within the arts and humanities, in particular, writing, the visual arts, and the performing arts. The panel will provide views on specific disciplines where the processes of critique, peer review, or workshop are inextricable from the learning experience for students and will encourage the panelists — and the audience — to interrogate this pedagogy together.

The panel will begin with a brief overview of what the process of critique broadly entails, seeking answers to basic questions such as are there ground rules that all critiques follow regardless of discipline, specific intent or desired outcome? After that, each panelist will describe the process in his or her respective discipline. The first panelist will discuss critique as a foundational tool for teaching and student learning in visual arts and design disciplines. The second panelist will provide views on how critique is integral to teaching in the performing arts. The third will represent views from English and writing — both composition and creative writing. Finally, the fourth panelist will provide an overarching view of how critique can be seen as a signature SoTL pedagogy in the arts and humanities. As part of each of the four panelists' short overviews of how critique fits into their particular fields, special attention will be paid to common concerns and approaches, and to considerations that are unique to a particular discipline.

References:

Chick, Nancy, Aeron Haynie, & Regan A.R. Gurung. (2008). "From Generic to Signature Pedagogies: Teaching Disciplinary Understandings by Teaching through the Disciplines." In Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind. Eds. Gurung, Chick, & Haynie, 1-18. Sterling, VA: Stylus.

Kalish, Catherine S., Jennifer L.J. Heinert, & Valerie M. Pilmaier. (2012). "Reinventing Peer Review Using Writing Center Techniques: Teaching Students to Use Peer-Tutorial Methodology." In Collaborative Learning and Writing: Essays on Using Small Groups in

Teaching English and Composition. Ed. Hunzer, 30-42. Jefferson, NC: McFarland.

Klebesadel, Helen & Lisa Kornetsky. (2008). "Critique as Signature Pedagogy in the Arts." In Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind. Eds. Gurung, Chick, and Haynie, 99-120. Sterling,VA: Stylus.

Meacham, Rebecca. (2008). "Vision and Re-Vision in Creative Writing Pedagogy." In Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind. Eds. Regan Gurung, Nancy Chick, and Aeron Haynie, 59-80. Sterling,VA: Stylus.

Motley, Phillip. (in press). "Learning — to and from — the Visual Critique Process." New Directions for Teaching and Learning.

3:30 PM | Room 206A | Inquiry into student learning

C08.1 CULTIVATING RESEARCH CURIOSITY AND CREATIVITY IN GRADUATE SOCIAL WORK STUDENTS: THE KEY TO FUTURE PROFESSIONAL SUCCESS

Individual Paper (30 minutes)

Nancy Freymond (1), Marina Morgenshtern (2), Todd Adamowich (3)
(1) Wilfrid Laurier University (Kitchener, Canada); (2) Lecturer (Kitchener, Canada); (3) PhD candidate (Kitchener, Canada)

Social workers encounter complex, evolving situations in their everyday practice. Their ability to generate new and relevant knowledge and to refine professional helping skills to meet emerging human need utilizing an evidence base is central to ensuring ongoing competent practice. However, the profession of social work lags in research productivity; additionally many MSW students prefer not to engage in research training and graduates tend not to use research skills on entry to the work force. The literature is explicit in its detailing of the complex and often negative relationship that social work students have with learning research.

The purpose of our program of research is to find effective ways to create a welcoming learning environment for graduate students to cultivate their interest in research. What are the multiple issues that shape graduate students' relationship to learning and doing research? How can we stimulate their curiosity and openness to undertaking future research?

This presentation focuses on the third of three studies in a program of research dedicated to exploring MSW students' engagement with learning and doing research. This study examined practices in the learning environment that both increase and diminish MSW students' interest in research. This study relied on survey findings (n = 101) and qualitative data from three focus groups (n=15) conducted with students as well as social work faculty.

The findings suggest that the research training environment tends to be inadequate and uninspiring. At its core, research training is conceptualized as an activity separate from direct social work practice. Students indicate interest in research training when methodologies relevant to direct social work practice are engaged and research learning involves doing research rather than talking about it.

For students to appreciate the interdependency of research and social work practice, these must become co-constituted activities in the research learning environment. Curriculum that is clear in its intention and objectives, a focus on a range of methodologies that extend to arts-based forms, and research-led learning within and beyond the research classroom are key elements in cultivating curiosity and creativity in MSW students.

The reported study raises questions about the extent to which schools of social work should value a more creative and comprehensive approach to research training that problematizes how knowledge is produced and promotes social change. On the other hand, it raises questions about the extent to which research training should be encouraged in a professional school that aims to enhance and reinforce social work process skills.

It is our intention to engage in discussion about the challenges and prospects of research training in a professional school. We would like to raise questions and reflect on the pedagogical agenda of research training within professional schools in academia. Peer feedback and discussion would facilitate our better understanding of different instructional approaches to research training.

4:00 PM | Room 206A | Inquiry into student learning

C08.2 RESULTS AND APPLICATIONS OF THE CRITICAL THINKING ASSESSMENT TEST (CAT) ADMINISTERED TO TECHNOLOGY CAPSTONE COURSE STUDENTS

Individual Paper (30 minutes)

Matthew Harvey (1), Steve Freeman (1), Gretchen Mosher (1), Charles Schwab (1)
(1) Iowa State University (Ames, United States)

Critical thinking skills are important for the success of college graduates in their future endeavors. Teaching and learning activities that help develop these skills are required in an effective undergraduate program. The Iowa State University Department of Agriculture and Biosystems Engineering has implemented a process using the Critical Thinking Assessment Test (CAT) to assess the critical thinking skills of technology students completing their undergraduate education. This test assesses the four domains of evaluating/interpreting information, problem solving, creative thinking, and effective communication. The test was developed by Tennessee Technological University, under the sponsorship of the National Science Foundation, and the university continues to provide scoring support.

The assessment of every student in the curriculum's Technology Capstone Course has provided useful quantitative measurements of student critical thinking skills. The test has been administered five times and the results classify students as being competent critical thinkers (generally able to fully demonstrate the desired ability), developing critical thinkers (partially able to demonstrate the ability), or emerging critical thinkers (almost always unable to demonstrate the desired ability). The aggregate results for students to date have them classified as developing.

The use of a quantitative measurement tool for critical thinking skills was new to this department. Previous and current subjective assessments of student critical thinking skills now have additional support for identifying opportunities for improvement and increasing the number of positive critical thinking activities in the curriculum. The literature shows that reflective teaching practices are critical for improving student learning. The use of the CAT assessment tool and the test results support the evaluation and analysis of teaching efforts to continuously improve the development of critical thinking skills in undergraduate students.

Future work in this area includes the continued testing of all Technology Capstone Course students, developing an expanded critical thinking skills assessment program (to include evaluation of skills at determined milestones in the curriculum), and using critical thinking assessment results to drive the improvement of curriculum and individual instruction.

The audience will be engaged in a discussion of the CAT, undergraduate critical thinking skills, and the role of critical thinking tests to support the scholarship of teaching and learning.

4:30 PM | Room 206A | Inquiry into student learning

C08.3 WHAT DID THEY LEARN ONLINE TODAY? STUDENT KNOWLEDGE TRANSLATION PLANS

Individual Paper (30 minutes)

Susan Elgie (1), Leila Lax (2), Judy Watt-Watson (3), Michael McGillion (3), Judith Hunter (2), Jon Oskarsson (3), Tabetha Rose (4), Jeff Rose (4)
(1) Higher Education Quality Council of Ontario (HEQCO) (Toronto, Canada); (2) Faculty of Medicine, University of Toronto

(Toronto, Canada); (3) Lawrence S. Bloomberg Faculty of Nursing, University of Toronto (Toronto, Canada); (4) Axon Interactive Inc. (Toronto, Canada)

The development of MOOCs and other online learning has caused concern in both media and academia about how much students learn online. Surely as important is students' intentions for the knowledge they gain (Vosniadou, 2007). This information is usually hidden. After completing the Pain Education Interprofessional Resource (PEIR) at the University of Toronto, students were asked to reflect on their learning and outline their knowledge translation (KT) plans. This presentation will include a description of scaffolding for KT (Strauss, Tetroe & Graham, 2009), an analysis of student responses, and recommendations for practice.

The Program

An interdisciplinary team of experts in pain, education, and online resource creation developed PEIR to improve pre-licensure health sciences students' knowledge of post-surgical pain assessment and management (Lax et al, 2011). PEIR consists of three online multi-part modules and includes a simulated case, didactic commentaries, audiovisual materials, embedded assessments with concurrent feedback, and online readings.

The pilot study took place in autumn 2013. Students were recruited from seven health sciences fields. In addition to pre- and post-tests, students were invited to complete a Knowledge Translation (KT) Plan. For each learning objective students were asked first to reflect on their learning and then to outline what actions they would take to improve their knowledge. Student KT reflections and explicit action planning provided scaffolds for continued intentional knowledge building and translation to practice.

Student responses were captured and analyzed using qualitative methods. Counts were taken to facilitate comparative analysis.

Research Questions

- What did students include in their reflections?
- What did students identify as their next steps in translating their learning to practice?
- Can we interpret outcomes effectively using Bloom's revised taxonomy (Anderson & Krathwohl, 2001) of cognitive educational objectives?

Findings

Our initial findings include variability in levels of reflection. Some students said almost nothing, while some presented accurate and even elaborated summaries of learning. Knowledge translation plans typically included a theoretical or applied learning goal, but sometimes direct implementation into future practice. Students identified a variety of learning strategies.

The objectives were deliberately devised using Bloom's revised taxonomy. We found intriguing relationships between the level of the question, the elaboration of the reflection and the nature of student goals.

The implications for educational practice of this project include the importance of using an assessment design that is formative and drives student learning and application of that learning.

During the presentation, we will undertake a KT exercise.

References

Anderson, L. W., & Krathwohl, D. R. (eds.) (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.

Lax, L, Watt-Watson, J., Lui, M., Dubrowski, A., McGillion, M., Hunter, J., MacLennan, C., Knickle, K., Robb, A. & Lapeyre, J.

(2011). Innovation and design of a web-based pain education interprofessional resource. Pain Research and Management, Journal of the Canadian Pain Society, 16(6):427-432.

Straus SE, Tetroe J, & Graham, I. Defining knowledge translation. CMAJ. 2009;181(3-4):165-168.

Vosniadou, S. (2007). The cognitive–situative divide and the problem of conceptual change. Educational Psychologist, 42(1), 55–66.

3:30 PM | Room 206B | Inquiry into teaching practices

C09.1 TOWARDS A TYPOLOGY OF CANADIAN GRADUATE SEMINAR TEACHING AND LEARNING PRACTICES

Individual Paper (30 minutes)

Michael Power (1), Gale Parchoma (2)
(1) Université Laval (Quebec City, Canada); (2) University of Calgary (Calgary, Canada)

Questions about the nature and structure of contemporary graduate seminars have received international and national attention from academic associations, university administrators, political leaders, and funders. Much of this attention has focused on finding ways to promote innovative graduate teaching and learning practices. The 2010 European Association for Quality Assurance in Higher Education workshop, the Canadian-led 2007 international Council of Graduate Schools' initiative, and the 2005 Canadian Association for Graduate Studies "Innovation in Graduate Education" international conference have all questioned how to enhance graduate-level learning to better align with the 21st century knowledge economy. Central themes, including post-graduate employability, national and international mobility, transdisciplinarity, and the impact of neo-liberal innovation policies on graduate learners' experiences, have led to concerns about access to meaningful graduate learning opportunities. One result of the access research agenda has been a wealth of peer-reviewed literature on blended and online graduate seminar teaching and learning practices that purport substantive differences and challenge 'traditional' campus-based practices.

Within this context, notions of traditional campus-based graduate teaching and learning practices, in the form of the seminar, appear more assumed than researched or theorized. Indeed, contradictory indicators abound when it comes to defining just what innovative graduate seminar teaching is or ought to be. Definitions of innovative graduate seminar teaching have been linked to political agendas, influenced by methodologies and measurements, and discipline-based perspectives, and conceptualised differently by internal and external stakeholders. Steen, Bader, and Kubrin (1999) set out designs for graduate seminars in their typology such as "the lecture format," "the professor-led discussion," "the student-led discussion," and "the read and present format" (p. 168), which they argue are often enacted in various combinations within a given seminar. While the typology is problematic in that it is not empirically based, it seemingly stands alone as a theorized classification of designs for teaching graduate seminars and therefore provides an initial backdrop against which to examine alternatives.

There is thus an overall dearth of peer-reviewed literature on the topic (Jaques, 2000; Lopez & Gallifa, 2008) and scant Canadian French- and/or English-language contributions. The Canadian seminar is of particular interest being at the crossroads of both European and American seminar traditions. This paper is thus based on an exploratory inquiry into graduate seminar teaching in Canada which has three aims: 1) examining alignment among espoused didactiques/pedagogies, learning designs, and enacted practices in graduate teaching, 2) constructing a typology of graduate seminars, and 3) gaining a better understanding of faculty perspectives on the purpose(s) of graduate education. We will present and discuss preliminary results obtained from small-scale study of faculty members teaching graduate-levels courses at one major French-language university and one major English-language university. Faculty members were interviewed, observed in class and their syllabi analysed in order to document the structure of their graduate courses and the models/approaches they applied in their teaching practices. Results suggest a wide and creative variety of seminar models and practices aimed at either professional or academic profiles.

4:00 PM | Room 206B | Inquiry into teaching practices

C09.2 CULTIVATING A PASSION FOR TEACHING: GRADUATE STUDENT TEACHING DEVELOPMENT AS ITERATIVE AND CREATIVE PRAXIS

Individual Paper (30 minutes)

Sara Carpenter (1), Megan Burnett (1), Carol Rolheiser (1)
(1) University of Toronto (Toronto, Canada)

Graduate student teaching development is situated at the intersection of research on the development of teaching practice and student learning. However, it is often theorized in relation to two pragmatic aims: 1) effectiveness of students in their role(s) as teaching assistants or graduate student course instructors, and 2) preparation for their future role as faculty. From this body of research, which dates back over twenty years, a clear mandate has emerged: when TAs are provided with high quality pedagogical training, evidence suggests increased self-efficacy in the teaching project as well as a noticeable, if unsteady, trajectory towards deeper attention to student learning. As graduate students are intentionally included in the teaching activities of higher education, their confidence, capacity, and priorities change. These 'pedagogical shifts' are not uniform, but highly personal and related to larger social and cultural practices within varying institutions.

However, a continued struggle in graduate student teaching development is not only to increase effectiveness in the classroom, but to instill an engagement in teaching as part of holistic scholarly practice -- in other words, to cultivate a passion for teaching. This is particularly challenging when students are being socialized into an institutional context that prizes productivity and innovation, most often related to research, and incentivizes research outcomes over teaching successes. At the same time, graduate students are preparing themselves for an unknown and changing world of work, in which they must compete and thrive in a market of contingent, short-term, and contract academic work and opportunities outside of the academy.

This paper theorizes the iterative process of generating a programmatic model to support the teaching development of graduate students at a large, research-intensive university. Drawing from multiple sources, including graduate student reflection and evaluation data, a recent mixed-methods study, a collaborative auto-ethnography by graduate student peer trainers, and reflections from program administrators, this paper charts the pedagogical shifts in this approach to graduate student teaching development and theorizes about the nature of learning environments needed to support risk-taking, creative thinking, iterative processes, and the development of a pedagogical identity amongst graduate students. Working with a wide range of theories from teaching development, adult education, and workplace learning, we argue that moving the thinking beyond 'best practices' and into the messier terrain of critical, creative, experimental, and thus innovative, teaching has been influenced by our own shifting conceptualization of the nature of TA training and graduate student development.

4:30 PM | Room 206B | Inquiry into teaching practices

C09.3 A CASE STUDY OF FACILITATING LEARNING AND RESEARCH ENGAGEMENT IN A FOURTH YEAR HUMAN NUTRITIONAL SCIENCES UNDERGRADUATE COURSE

Individual Paper (30 minutes)

Asako Yoshida (1), Semone Myrie (1)
(1) University of Manitoba (Winnipeg, Canada)

Developing research skills is a commonly identified learning outcome in many undergraduate program curricula. However, practical discussions regarding explicitly developing student research skills have only started emerging in recent years. Discourse asking how university teaching staff and support professionals can better facilitate the development of research skills and engagement in undergraduate students, is relevant to enhancing undergraduate programs. The course instructor and a librarian

examined this question as a case study in a well-established, fourth-year research course offered through the Department of Human Nutritional Sciences, University of Manitoba. They adopted the Research Skills Development (RSD) framework, developed at Adelaide University, Australia, with the intention of better facilitating student learning for a small class of 9 students in the 2014 winter semester. They utilized the RSD framework as a conceptual model to collaboratively reorganize and realign learning and instructional activities. The strength of the RSD framework is its adaptability, regardless of the disciplinary context, course requirement, or academic level. Using the RSD framework, the instructor and the librarian explored the concept of effective instructions and class activities, and the instructor developed appropriate assessment rubrics for the course assignments. To assess students' research skill learning outcomes, online surveys were administered at the beginning and end of the course to measure student self-assessment of research skills. The surveys were identical, each comprised of 19 Likert-scale questions adapted from Willison's 2012 RSD framework study. Assessment of the survey results indicated that there were positive learning outcomes in four key research skill areas: framing research questions; effectively browsing and evaluating potential sources for their inquiry; effectively analyzing information for the purpose of writing a paper; and effectively communicating an argument or a thesis. Five additional research skill areas indicated positive trends. There were some variations among students in how their self-assessments changed at the beginning and end of the course. Overall, the RDS framework contributed to the development of better learning environments in the course by providing general guidelines to the course instructor and the librarian. It guided their collaboration in cultivating students' abilities to shape their own research questions and perspectives. As the next steps, student interviews could be conducted to provide better insight into students' learning experiences; using the RDS framework and its adaptation for a larger class should also be investigated, and further integration of the support from the writing instructor and tutors could be examined.

3:30 PM | **Room 207** | **SoTL and the changing landscape of higher education**

C10 DOCUMENTING AND TRANSFORMING INSTITUTIONAL TEACHING CULTURES

Workshop
(90 minutes)

Peter Wolf (1), Sandy Hughes (2)
(1) University of Guelph (Guelph, Canada); (2) Wilfrid Laurier University (Waterloo, Canada)

There are increasing demands and pressures to find metrics that account for the quality of student learning and teaching. While there is a shifting focus to measure and document the achievement of learning outcomes, we advocate for identifying and developing processes that can also demonstrate the value, importance, and enhancement of the quality of teaching that our institutions provide. A culture with improved teaching quality is likely to improve student learning (Cox, McIntosh, Reason, & Terenzini, 2011). Continuing from preliminary work presented lasted year (EDC 2013), we have developed a survey instrument, Teaching Culture Perception Survey (TCPS), adapted from an Institutional Management in Higher Education report (IMHE) (Hénard & Roseveare, 2012). The survey identifies indicators that aim to measure the perceptions and value an institution places on the quality of teaching.

Our goal is to develop a process that will enable post-secondary institutions to find new opportunities to build a culture that values teaching and learning-centered philosophies. The project focus is to evidence & enhance institutional teaching culture at (Ontario) universities through direct feedback from constituents and key institutional indicators in order to provide concrete feedback and recommendations for continuous improvement. This project is a unique process to examine, maintain and enhance the quality of teaching in post-secondary education. There are no existing large scale surveys of organizational culture regarding teaching quality in Canada. Participants will have an opportunity to share their insights into the political terrain, provide feedback on the survey, identify additional indicators to consider, and discuss ways in which the work could be expanded beyond Southern Ontario. We believe the project model could be adapted and piloted for broader use with colleges and universities more broadly, with potential for national impact.

Project members include:

Jill Grose, Brock University
Paola Borin, Ryerson University
Peter Wolf, University of Guelph
Lori Goff, McMaster University
Donna Ellis, University of Waterloo
Erika Kustra, University of Windsor
Deb Dawson, Western University
Sandy Hughes, Wilfrid Laurier University

References:

Cox, B. E., McIntosh, K. L., Reason, R. D., & Terenzini, P. T. (2011). A culture of teaching: Policy, perception, and practice in higher education. Research in Higher Education, 52(8), 808-829.

Hénard, F., & Roseveare, D. (2012). Fostering Quality Teaching in Higher Education: Policies and Practices: An IMHE Guide for Higher Education Institutions, Institutional Management in Higher Education, Organisation for Economic Co-operation and Development www.oecd.org/edu/imhe.

Kezar, A. & Eckel, P. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? Journal of Higher Education, 73(4), 435-460.

Wolf, P., Goff, L., Joe, B., Kustra, E., & Hughes, S. (2013). An Institutional and Provincial Teaching Indicators Advocacy Paper. Educational Developers Caucus Annual Conference, Crossing Boundaries, Building Capacity. February 20 - 22, Wilfrid Laurier University.

3:30 PM | Room 308A | Leadership, academic development and SoTL

C11.1 THE DEVELOPMENT OF SOTL THROUGH LEADERSHIP IN INTERNATIONAL COLLABORATIVE WRITING GROUPS

Individual Paper (30 minutes)

Beth Marquis (1), Mick Healey (2), Katarina Märtensson (3)
(1) McMaster University (Hamilton, Canada); (2) HE Consultant & University of Gloucestershire (Howden, United Kingdom); (3) Lund University (Lund, Sweden)

A number of professional development initiatives designed to support SoTL scholars have been advanced in recent years (e.g., Hubball, Clarke & Poole, 2010; Weaver et al., 2013). In spite of the success of many of these endeavours, the fact remains that teaching and learning inquiry can be an unfamiliar pursuit for many academics (Tremonte, 2011; Kelly, Nisbet & Oliver, 2012). Ongoing research into effective means of supporting such scholars is thus required.

The literature has also seen recent calls for increased collaboration (Gale, 2007) and internationality (Higgs, 2009) in teaching and learning scholarship. As MacKenzie and Meyers (2012) have shown, however, it can be challenging to establish international SoTL collaborations that respond effectively to such calls. Like activities that help to develop SoTL scholars, then, initiatives that promote strong international SoTL collaborations are vital to the continued growth of the field.

This presentation reports on an initiative designed to meet both of these needs through the development of SoTL-focused international collaborative writing groups (ICWGs), which ran in conjunction with the 2012 ISSOTL conference. This initiative,

which was modeled on the long-standing International Network for Learning & Teaching Geography writing groups, allowed nine groups of 7 or 8 scholars, from 13 countries worldwide, to co-author reflective pieces about teaching and learning topics of shared interest. Each group contained people with a range of seniorities and previous experiences of undertaking SoTL and at least one student. The groups initially worked at a distance to prepare an outline, before meeting in person for two days prior to the conference to develop their ideas and receive feedback from others. Following the workshop, the groups had almost three months to complete and submit their finished papers to Teaching & Learning Inquiry. Articles from the initiative that successfully passed through the journal's peer review process were published in a special issue (Authors, 2013).

In a previous study, which explored the experience of the ICWG participants (Authors, 2014), leadership within the groups came out as a significant factor in the initiative's ability to support SoTL scholars and foster meaningful international collaborations. We thus undertook follow up research to learn more about what characterized this leadership, and to explore participants' perceptions and recommendations for leadership in the ICWG context.

In October 2013, ICWG participants were invited to complete an online survey, which contained a mixture of open-ended and Likert-type questions about leadership in the ICWGs. While data analysis is ongoing, preliminary findings reaffirm the significance of leadership to the ICWG's success and emphasize the value of leadership approaches that foster community building and encourage members to take responsibility for particular tasks.

This session will present the results of this study, and will encourage attendees through structured discussions throughout the presentation to critique the research and consider ways in which its findings about effective leadership might be applied to other SoTL contexts. Given the connections between leadership and creativity (Zacher & Johnson, 2014), we will also suggest some potential implications of our findings for developing creativity in SoTL.

4:00 PM | **Room 308A** | **Leadership, academic development and SoTL**

C11.2 BEYOND COMPLIANCE: ENABLING ENGAGEMENT WITH GRADUATE OUTCOMES TO IMPROVE STUDENT LEARNING

Individual Paper (30 minutes)

Rachel Spronken-Smith (1), Carol Bond (1), Angela McLean (1), Nell Smith (2), Stanley Frielick (2), Martin Jenkins (3), Stephen Marshall (4)

(1) University of Otago (Dunedin, New Zealand); (2) AUT University (Auckland, New Zealand); (3) Formerly of Christchurch Polytechnic Institute of Technology (Coventry, United Kingdom); (4) Victoria University of Wellington (Wellington, New Zealand)

In the current neoliberal academic environment it is expected that institutions identify graduate outcomes for their students. However, aside from accountability, there is a more sound pedagogic rationale for specifying graduate outcomes, providing such outcomes are well embedded in curricula through teaching and assessment. In this session I will present findings from a national project in Aotearoa/New Zealand that aimed to develop a systematic way to evaluate engagement with graduate outcomes and to explore such engagement in higher education institutions. We used a mixed methodology approach. First, we undertook a stocktake of institutional engagement with graduate outcomes across the tertiary sector by surveying leaders of teaching and learning units in universities and polytechnics. Ten leaders were also interviewed to gain more in-depth data. Second, we sought cases of good practice and selected eight programs who were engaged with graduate outcomes across four institutions (AUT University, Otago and Victoria Universities and the Christchurch Polytechnic Institute of Technology). The cases included vocational degrees such as Broadcasting, Physiotherapy and Oral Health, as well as more general degrees such as Applied Science, Design, Marketing, Music and Tourism. For each case we both surveyed and interviewed (or ran focus groups) with staff and students. Third, we used a Maturity Modelling approach to identify and map indicators of engagement at the institutional and program levels. Results revealed patchy engagement across the polytechnic and university sectors. There was strong engagement with

the planning, systems and delivery of graduate outcomes, particularly in the polytechnic sector, but much lower engagement with their assessment and evaluation, and overall, weak engagement with professional development support for graduate outcomes. Analysis of institutional and program data allowed the generation of a framework for enablers of engagement with graduate outcomes. The key enablers are external drivers, structural and procedural enablers, developmental enablers, achievement enablers and contextual enablers. Participants will be asked to consider these enablers and reflect on the presence (or absence) in their particular context. Our findings can inform institutional policies and practices to promote engagement with graduate outcomes in order to improve the student learning experience.

4:30 PM | **Room 308A** | **Leadership, academic development and SoTL**

C11.3 THE ROLE OF THE SCHOLARLY SOCIETY: DEMONSTRATING LEADERSHIP BY ENABLING NEW SCHOLARS TO ACTIVELY ENGAGE IN SOTL

Individual Paper (30 minutes)

Lee Partridge (1), Deborah Clark Clark (2), Lesley Petersen (3)
(1) The University of Western Australia (Perth, Australia); (2) Charles Sturt University (Bathurst, Australia); (3) Eastern Institute of Technology (Hawke's Bay, New Zealand)

Numerous scholarly societies exist specifically to enhance teaching and learning in higher education (eg. AISHE, ASHE, HERDSA, POD, SRHE, STLHE, SEDA, ICED). Central to their mission are notions of "collaboration" (ASHE) and "support" (POD), "promotion of innovation and good practice" (SEDA) and "encouragement of debate and publication" (SRHE). They achieve this in a variety of ways but most typically by hosting conferences and events, publishing journals, monographs, guides and newsletters. While membership is not restricted by geographical location, some societies make particular reference to their jurisdiction as being the main focus of their activities (eg. AISHE (Ireland), HERDSA (Australasia), POD (US and Canada), STLHE (Canada), SEDA (UK)).

This presentation outlines an innovative approach taken by one scholarly society to engage new scholars in SoTL. New scholars are described as academics, both early career and more experienced, who have not previously published a scholarly work in the area of teaching and learning. For academics from disciplines other than education, the path to SoTL is often a daunting one. Different from their own disciplinary ways, SoTL can be a bridge too far, resulting in academics choosing not to participate.

The case study of the HERDSA experience details the genesis of the new scholars program which was facilitated by a small research grant. A program of five, two hour online synchronous workshops was developed by three members of the HERDSA executive. The workshops were delivered over five consecutive weeks using the communication technologies, Edmodo® and Adobe Connect®. Participants were provided with resources prior to each workshop in the form of readings, Powerpoint® slides or videos, which were hosted on a dedicated Edmodo® site. The first three sessions covered the topics "Introduction to the Scholarship of Teaching and Learning," "Literature reviewing, writing a research plan, the ethics approval process and writing data collection questions" and "Analysing your data and planning your writing" respectively. The final two workshops were devoted to "Shut up and Write" sessions where the participants wrote for uninterrupted blocks of 20 minutes interspersed by facilitated discussion and sharing of progress with other participants. Thirteen academics from eight universities across Australia and New Zealand participated in the program.

Evaluation of the program was carried out via an anonymous online survey and individual interviews with five of the participants. Participants were overwhelmingly positive about the opportunity the program offered them. They commented on the expert and collegial support and encouragement they were given to see the possibilities of engaging in SoTL, not just within their own institution but across geographical locations. They valued the practical aspects of the program, the quality of the resources, the chance to receive feedback on work-in-progress, and the integration of technology to make the community of practice possible.

This case study signals to other scholarly societies a way in which they might move beyond the more common practice of hosting conferences and events, publishing journals, monographs, guides and newsletters to an engaging and collaborative process of facilitating SoTL, not merely within single jurisdictions but internationally.

3:30 PM | Room 308B | Inquiry into student learning

C12.1 STUDENT LEARNING VIA CROSS-CURRICULAR LEARNING IN COMMUNICATION SCIENCES AND DISORDERS

Individual Paper (30 minutes)

Jennifer Friberg (1), Heidi Harbers (1)
(1) Illinois State University (Normal, United States)

One of the challenges faced by creating a manageable graduate curriculum to prepare future speech-language pathologists is the development of an integrated curriculum that encourages learning across clinical experiences and individual courses. Often, graduate curricula compartmentalize areas identified for mastery into "silos;" individual courses covering topics germane to one disorder area/specialty. These disorder-specific courses may prevent students from understanding that clients are often impacted by more than one disorder at a time.

Thus, most students take a class about language disorders while enrolling in a speech disorders course at another juncture in their course of study. While they understand that children could have a language and a speech disorder concomitantly, they do not engage in integrative problem-solving about those types of cases, potentially limiting their development of advanced clinical thinking skills. Realizing that this is a limitation in our current curriculum, our project sought to address this shortcoming in the clinical preparation of speech-language pathology (SLP) graduate students at Illinois State University. While SLP literature has briefly discussed problem-based learning as a way to engage students in learning (Ginsberg, Friberg, & Visconti, 2012; Visconti, 2007), no investigations into the use of cross-curricular project such as this has been reported in SLP literature.

Method. Course instructors for two courses (Pediatric Language Disorders and Speech Sound Disorders) collaborated to create a case study project. Groups of students were assigned case studies and as a part of the project were asked to: develop an assessment plan addressing all speech and language concerns, interpret assessment results to family members, and create a treatment plan. All case studies integrated aspects of language AND speech disorders, creating the opportunity for students to interact with course curriculum across their separate class boundaries. Both course instructors created grading rubrics to assess student learning separately, with grades earned for each class reflecting that course's content.

Before and after completion of this collaborative clinical project, students were invited to complete a survey to indicate how the project impacted their learning, whether the project helped them to understand course content related to managing children with complex communication needs.

Results. Data were collected for the project in December 2013; analysis is ongoing and is expected to be completed by mid-May 2014. Data will be analyzed using descriptive statistics to characterize the perceptions of the study participants. Content analysis will be used to report information from open-ended survey questions.

This proposed paper will present the design of the project, summarize data collected from students, and present student perceptions of the overall efficacy of this type of project in promoting deep clinical learning. The authors will reflect on the impact of the project upon future course offerings and will explain how student feedback led to changes in how the project will be used in the future. Additionally, the authors will engage the audience by using a discussion-based format to reduce passive listening and maximize active participation by audience members.

4:00 PM | Room 308B | Inquiry into student learning

C12.2 EMBRACING A NIGHTMARE: ASSESSING LEARNING IN A HYBRID SPEECH COMMUNICATION COURSE

Individual Paper (30 minutes)

Colleen McMahon (1), Frank Slak (1)
(1) Gonzaga University (Spokane, United States)

It is logistical nightmare for those assigned to teach a two-credit hybrid Introduction to Speech Communication course to include as many public-speaking opportunities as possible, while providing a meaningful learning experience for students in the other requisite communication components. This challenge is well known among communication scholars. For example, Porter & Dillon (2010) note: "Trying to cover intrapersonal, interpersonal, small group, public speaking…in one course is almost foolhardy." Clearly this is a dynamic tension that many speech communication instructors encounter. Although we were faced with this dilemma, we chose to embrace the challenge of maximizing student learning in the two-hour course by integrating interpersonal and small group communication into one public speaking assignment. This, in turn, gave birth to an inquiry into assessment of student learning.

Speech instructors have utilized various methods for assessing student performance as public speakers (i.e. rubrics), but there are very few instruments available for assessing student learning with regard to interpersonal and small group communication. That was the first of our challenges.

The second challenge was born of intellectual curiosity into what students were really learning. This particular research all began as a simple "extra credit" inquiry on a routine quiz following two-person presentations on selected portions of the course text. Students were asked to list and discuss in detail what they had learned from the assignment. Buoyed by responses indicating students' perception of their learning from three different perspectives—interpersonal interaction, public speaking in a collaborative setting, and the materials covered by the chapter—we shared results with interested colleagues. The inquiry was then collegially expanded to apply to a small-group assignment and eventually grew into this two-part query: (1) Could we prepare applicable rubrics to assess small-group learning from both the instructor's and the group's perspective? (2) What thematic learning was occurring from the metacognitive inquiry into what students believed they had learned from the assignment?

What makes this study unique is that it goes beyond simply assessing student learning through the use of rubrics and grades alone. Suskie (2009) acknowledges that "[g]rades alone do not usually provide meaningful information on exactly what students have and have not learned," nor do they "reflect all learning experiences." The addition of the metacognitive portion of the study reflects students' actual perceptions of what they have learned. In an article, "Metacognition and Student Learning," author James Lang quotes a definition by Stephen Chew, professor and chair of the Psychology Department at Samford University: "Metacognition is a person's awareness of his or her own level of knowledge and thought processes. In education, it has to do with students' awareness of their actual level of understanding of a topic." (Lang, 2012) We hypothesized that this metacognitive analysis would yield the most fruitful findings with regard to learning on multiple levels.

3:30 PM | Room 309A | Inquiry into teaching practices

C13.1 NURTURING SOURCE INTEGRATION IN STUDENT WRITING: AN INTERDISCIPLINARY LESSON STUDY

Individual Paper (30 minutes)

Amber Peplow (1), Brenda Refaei (1), Rita Kumar (1), Lauren Wahman (1), Laurie Bailar (1)
(1) University of Cincinnati Blue Ash (Blue Ash, United States)

In this paper, we discuss the results from a collaborative SoTL project looking at nurturing source integration in student writing in two very different general education courses: Freshman Composition and Business Communication. This study grew out of a common dissatisfaction in the ability of students to effectively integrate sources and their tendency to string quotes together in their writing.

The work of Rebecca Moore Howard and Sandra Jamieson in the Citation Project indicates that students struggle with citation of sources because they have not understood the source material. These findings echo research conducted by Mary Lynch Kennedy who found that truly fluent readers engaged in more planning than the not so fluent readers and they also used more reading strategies. Similarly, Dorothy Wells pointed out that "[q]uite a few essential skills related to reading and thinking are . . . involved" in using sources appropriately.

One of these skills is the ability to quote source material. Wells asserts, "Where to incorporate a quote in text, how much of a passage to use, how to edit a quoted passage using brackets and ellipses, how to work a quote into text fluidly and coherently, and how (and whether) to introduce it, are all considerations beyond the abilities of basic writers, who need sufficient practice, feedback, and reading experience with quoted material to produce a research paper. . ." (63).

An interdisciplinary team of five faculty members representing the library, writing center, communication, and first-year composition participated in a Lesson Study project to find more effective methods for nurturing a student's ability to quote source material. Wells' description of the skills students need in order to integrate quotes became the basic outline for our lesson design.

Our findings suggest that students can better integrate citations when they are shown how, given time to practice, and reflect on how they are using sources in their writing. The results indicate that it is important that integration of sources be taught separately from documentation of sources. But as with any skill, students need many opportunities for practice. In addition to presenting our results, we will facilitate an interactive discussion of the problems with source integration in student writing, and we will share student samples of source integration.

Reference:

Howard, Rebecca Moore, Tricia Serviss, and Tanya K. Rodrigue. "Writing from sources, writing from sentences." Writing & Pedagogy 2.2 (2010): 177-192.

Kennedy, Mary Lynch. "The composing process of college students writing from sources." Written Communication 2.4 (1985): 434-456.

Wells, Dorothy. "An Account of the Complex Causes of Unintentional Plagiarism in College Writing." WPA: Writing Program Administration 16.3 (1993): 59-71.

C13.2 THE EVALUATING PRACTICE OF TEAM PROJECTS IN DISCOVERY LEARNING: TARGET, PROCESS AND VERIFICATION

Individual Paper (30 minutes)

Qi GAO (1), Haishao Pang (1)
(1) Beijing Institute of Technology (Beijing, China)

A team project is an efficient tool of discovery learning in higher education. It has been widely used in different subjects and courses from science to engineering.

Distinguished from general group learning, in which students achieve their respective learning goals through discussion with their companions, a team project involves a joint effort to obtain a rewarding result through the work of the whole team. Members of a project team must be responsible for the quality and progress of their own project. All members should do their best to solve problems together, using different kinds of resources. The target of a team project is nurturing the abilities of exploration, cooperation, participation and communication of team members. The final rating of individuals should represent each person's contribution to the project and its acceptance by other team members.

Based on these principles, we practice certain processes and rules in evaluating team projects.

Firstly, the topic of the project should be open and limited. 'Limited' means all teams could solve same problem under similar conditions, so the comparison of results from different teams would be objective and realizable. 'Open' means there is no unique solution to the problem. Each team should experience the entire proceeding, including analysis, design and implementation.

Secondly, the team should be self-organized. The members of every team should aggregate spontaneously rather than be assigned. The only restriction is the size of a team: 4 to 6 members. Due to the mutual acceptance of team members, the fundamental issue of cooperation has been built in. The tasks of a project are also assigned through the principle of self-organization. The team does not have a significant leader or core. All team members claim tasks according to their specialities. This practice came from Agile Development and has been verified, so should improve the efficiency and quality of team work.

Thirdly, the evaluation of team work should be competitive. We use peer-assessment techniques. All teams present their solutions at the end of the course. Then all teams evaluate other teams' results and rate them. The average score of each team is used as its final score. To enhance objectivity, the marks given by the tutor and teaching assistants are counted. The competitively rating should encourage team members to contribute to their projects. The final presentation and promotion of results also satisfy the target of a team project — the development of communication skills.

Finally, the total score of a team is calculated with the final score of the team multiplied by the number of team members. Then the total score is allocated among team members by internal negotiation. This method used to evaluate the individuals in a team project should be acceptable/fair and help students understand the importance of the division of work and social collaboration.

We tested this process in 2 courses over 2 years. Overall, 239 students in 4 classes comprised 44 project teams. The cross analysis of the project score, final exam score and teacher's rating revealed that the evaluation method used for team projects reflected the real learning outcomes for each student. A follow-up questionnaire confirmed that the results of team project evaluations are credible and significant.

4:30 PM | Room 309A | Inquiry into teaching practices

C13.3 "I COULD SYNTHESIZE WHAT I WAS LEARNING": THE BENEFITS AND PITFALLS OF SHORT WRITING ASSIGNMENTS AS A TEACHING TOOL ACROSS DISCIPLINES

Individual Paper (30 minutes)

dik Harris (1), Sarah Turner (1), Sarah Delisle (1), Marcy Slapcoff (1), Eva Dobler (1)
(1) McGill University (Montréal, Canada)

While examining the benefits and pitfalls of using short writing assignments in undergraduate classes at one Montréal university in Canada, we have found writing to be integral to the development of critical thinking and learning skills among students. Yet, there is little research that uses student and/or instructor feedback to examine the value of short writing assignments, namely assignments requiring modest student and instructor time (Rose and Theilheimer 2002, Alaimo, Langenhan and Nichols 2009, Slinger-Friedman and Patterson 2012). Through student and instructor reflections, this project addresses this gap and provides insight into student learning as well as teaching practices. Drawing on a conceptual framework incorporating Writing to Learn (WTL) and Writing in the Discipline (WID) literatures, we examine the use of short writing assignments to help students reflect on core aspects of classes and courses and to think critically. The practicalities of managing and assessing such assignments for instructors were also points of inquiry. We employed student surveys and instructor interviews for five undergraduate classes including Biology, Entomology and Geography, ranging in size from 21 to 253 students, to gain in-depth qualitative and quantitative insights. Written assignments ranged from reflective journals to blog posts and short evaluative pieces. In addition to improving critical and analytical skills, students reported that the assignments helped them to link course material to their everyday life and to gain a better understanding of course material of both a conceptual and applied nature. For instructors, these assignments were both an effective teaching tool and a problematic one. While instructors reported seeing an improvement in students' analytical skills and writing abilities, such as the articulation of core ideas and syntheses of critiques, they found that these assignments can also be resource intensive. Grading time and a lack of resources and guidance for developing and implementing new assignments are a challenge. This paper explores the assignments we developed, with their strengths and weaknesses, and highlights how future teachers can learn from them and adapt them to other class contexts.

3:30 PM | Room 309B | Inquiry into teaching practices

C14.1 MANIKIN-BASED SIMULATION: ONLINE ORIENTATION AND STUDENT ANXIETY

Individual Paper (30 minutes)

Dominic Giuliano (2), Loretta Howard (3), Rachel Statz (3), Christine Bagnell (3), Madolyn Linka (3), Rebecca Taylor (3), Marion McGregor (3)
(1) Candian Memorial Chiropractic College (Toronto, Canada); (2) Canadian Memorial Chiropractic College (CMCC) (Toronto, Canada); (3) CMCC (Toronto, Canada)

Introduction: This retrospective study examined the role of student preparation and its relation to anxiety levels in manikin-based simulation. The Canadian Memorial Chiropractic College (CMCC) developed an online orientation module that students completed prior to their manikin-based simulation experience. A modified Visual Analogy Scale (VAS) was used to record students' perceived anxiety.

Methods: Anxiety scores of 524 4th year chiropractic interns were gathered over three consecutive academic years (2010-2012). The 2010 and 2011 academic year interns were given an in-person orientation to the laboratory as part of their two hour simulation experience, whereas the third group (2012) completed the online orientation module prior to attending the lab. By completing the online module prior to the simulation session, approximately 25-30 minutes of additional learning time was created in the lab, allowing for a richer learning experience. There was no recruitment process or control group as the simulation

lab was a mandatory requirement of the clinical curriculum.

Results: Results indicated that mean scores were not statistically different (p= 0.13) between the three academic years. Standard deviations were consistently the same or near the same for all three academic years.

Conclusions: Implementation of the online orientation module in preparation for the simulation-based training had no statistically significant effect on students' self perceived anxiety scores. Having the students complete the online module, afforded an additional 25-30 minutes to the simulation experience. As the results indicated no significant difference between the students' perceived anxiety, the simulation experience was made richer and we would argue, enhanced the learning experience itself. The implications of manikin-based simulation training are known to involve both physiological and psychological components. Results of this study demonstrated no effect on perceived changes in anxiety associated with viewing an online orientation module prior to a simulation based exercise. As such, further research is required to examine the relation between preparation and effects of preparation on other facets of the simulation experience, and how they contribute to enhancing or inhibiting student learning.

4:00 PM | **Room 309B** | **Inquiry into teaching practices**

C14.2 THE EFFECTIVENESS OF ONLINE AND IN-CLASS ASSIGNMENTS ON STUDENTS' LEARNING IN PRINCIPLES OF MICROECONOMICS

Individual Paper (30 minutes)

Mohammad Mahbobi (1)
(1) Thompson Rivers University (Kamloops, Canada)

Pedagogical research suggests that online assignments and quizzes provide students with more opportunities to reach a range of constructive learning outcomes (Brothen & Warmback, 2004), and Johnson & Kiviniemi (2009). It has been shown that students' compliance with assignments has declined over time, Burchfield & Sappington, (2000) and Clump, et al. (2004); Sappington, et al. (2002). Given this decline, instructors need techniques to increase reading and understanding of assigned course materials. One such technique involves cross-questioning students on assignments (Narloch et al., 2006). In this regard, a research question for analyzing the effectiveness of both on-line and in-class quizzes and assignments throughout a semester was defined. Quantile Regression was employed to analyze the effectiveness of online versus in-class quizzes and assignments on the academic performances of 169 students and their determining factors for first year students in Principles of Microeconomics.

The objective of this paper is to examine the effectiveness of both online and in-class quizzes and assignments along with other main determinants on first year students' performances. Further, the relationship between their performances and prior academic achievement in high school as well as other socio-economic factors will be identified. Using Quantile Regression along with the outcomes out of a non-compulsory anonymous online Student Background Questionnaire, the main objective of the project was to analyze the results of the three in-class midterms, which were based on three different types of required quizzes and assignments. In particular, this paper examines how the distribution of the performance of the first year students can be affected by crucial determinants including high school performance, age, gender, etc.

4:30 PM | Room 309B | Inquiry into teaching practices

C14.3 LEARNING IN THE LIMINAL: BEING, BECOMING, TRANSITIONING, TRANSFORMING; PHASE I

Individual Paper (30 minutes)

Bev Mathison (1)
(1) Mount Royal University (Calgary, Canada)

As a university professor grounded in hermeneutics, I believe that we are all "beings at the limit...always hovering about those frontiers that mark the passage between same and other, real and imaginary, known and unknown...[where] (t)here is no credible authority to sanction passports and verify identities" (Kearney, 2003, p. 230). With this as a fundamental principle to my work as a researcher and instructor, I feel compelled to assist students develop their understandings of who they are on their path to deepened self-awareness. With a background in Education and Teacher Preparation, I, too, was a 'stranger at the limit' when I arrived to the Department of Child and Youth Studies at Mount Royal University, and from this, I knew that students were also "beings at the limits" with no map or self-help book to guide self (writ deeper) understandings of who they are (writ student identity) and who they are becoming (writ professional identity).

After joining the Department of Child and Youth Studies in 2010 I was accepted into the Nexen Scholarship of Teaching and Learning program in the fall of 2011. I subsequently initiated a research project involving an inquiry into how students in our Child Studies degree program were coming to an understanding of their role as students and future practitioners. Because employment opportunities for Child Studies graduates fall within a very broad spectrum, at times I found myself wallowing in perplexity, wondering who "these students" are, where "they" came from, why "they" are here, and what "they" were going to "do". After a few spontaneous conversations with students on this matter, I discovered that they were wondering the same thing. I found this deeply intriguing, especially since these 'spontaneous conversations' were held with students who were in the final stretch of their Child Studies degree and would soon be entering the workforce.

Working from the premise that it would benefit students to have an opportunity to pause, think, and articulate their understandings of who they are, where they came from, why they are here (in a practical, not existential sense), and what they are going to "do", this research project came into being.

The presentation will consist of my preliminary findings pertaining to the question, "What are first year Child Studies students learning about who they are becoming as child studies practitioners in a first year preparation course?"

Although this is specific to a certain field (i.e., child studies), the fundamental essential of the pursuit of practitioner identity has application to numerous other fields.

6:00 PM | Room 2000CD | Assessment, accountability, and SoTL

PS01 GLASS TO THE WALL: A QUALITATIVE STUDY ON NEGOTIATED GRADING IN A SENIOR CAPSTONE COURSE

Poster Session

Sally Haney (1)
(1) Mount Royal University (Calgary, Canada)

This study offers an examination of what happens when senior university students are invited into the assessment arena. My poster highlights themes emerging from a qualitative analysis of 42 recorded conversations between 14 journalism students and me in a capstone experiential course entitled Online Editorial Board. The conversations concerned the evaluation of student work and negotiation of their grades.

A review of the literature indicates much scholarly work has been done in the area of assessment and grading. Few projects, however, take us into the physical spaces in which student learning is reviewed and assessed by student and teacher, together. This study expands our understanding of what negotiated assessment looks like, and sounds like. A preliminary analysis of the recordings is revealing a number of competing themes, including enthusiasm and discomfort, power and helplessness, and creativity and constriction.

The study was designed and carried out in a senior journalism course in which students took on senior editorial roles in the management of our online news publication. During the course, I met with each student three times. Each conversation was recorded, and involved students taking me on a guided one-to-one tour of their learning with students then proposing a letter grade to evaluate their progress. The letter grade was tied to a grading schema that connected A, work to meeting all or nearly all goals set out in their self-authored learning plans, B, work to meeting most goals, C, work to meeting some goals, D, work to meeting few goals, and F, work to meeting no goals. Each of the sessions resulted in the awarding of 25 per cent of the final grade, totaling 75 per cent. The remaining 25 per cent of the course grade was connected to discussions of theory and practice.

This SoTL study was designed with help from my university's SoTL institute, and received ethics clearance.

6:00 PM | Room 2000CD | Assessment, accountability, and SoTL

PS02 TESTING A RASCH-BASED BORDERLINE METHOD FOR SETTING CUT SCORE IN AN OSCE STATION

Poster Session

Jean-Sébastien Renaud (1), François Ratté (1), Julie Thériault (1)
(1) Université Laval (QUEBEC, Canada)

Background;

The borderline regression method (BRM) is currently one of the most popular methods of setting a cut score in an objective structured clinical examination (OSCE) station, which is a major learner-centered assessment in the health sciences. The BRM assumes that the checklist items and the global rating item assess a common competency. However, these assumptions are not always verified and the psychometric properties of the global rating scale are unknown. We present a Rasch-based borderline method (Rasch-BM) of setting a cut score in an OSCE station that avoids the aforementioned disadvantages of the BRM.

Summary of work;

We used an OSCE station (n = 183) composed of an 18-item checklist and a 5-point global rating item (1=Unacceptable, 2=Limit/Unacceptable, 3=Limit/Acceptable, 4=Acceptable, 5=Superior). Using the Rasch Partial Credit model (PCM), the cut score was set where a student has a the same probability of receiving a global rating of 2 or 3. For comparative purposes, we also estimated the BRM cut score.

Summary of results;

Rasch analysis suggested that the 18+1 items measured the same underlying competency. Using the Rasch-BM, eight students failed the OSCE station (fail rate = 4%), while 24 failed using the BRM (fail rate = 13%).

Conclusions;

The Rasch-BM insures that each item, including the global rating item, taps the same underlying competency. The operationalization of borderline performance in Rasch-BM and BRM is different, leading to different fail rates.

6:00 PM | **Room 2000CD** | **Disciplinary approaches to teaching, learning and SoTL**

PS03

Poster Session

TWO SOTLERS ENTER A CONVERSATION: A PHENOMENOLOGICAL EXPLORATION OF THE RESULTING CREATIVE, FLUID, AND INTERDISCIPLINARY TERTIARY SPACE

Wenona Partridge (1), Carolyn Hoessler (1)
(1) University of Saskatchewan (Saskatoon, Canada)

We invite you into a phenomenological exploration of SoTL and why inter-disciplinary SoTL conversations are so challenging yet nurturing of creativity (e.g., Simmons et al., 2013; Case, 2013).

SoTL draws together individuals from specific disciplinary perspectives into a shared space. During interdisciplinary SoTL dialogues and presentations, individuals bring to this shared space disparate understandings of the experiences of teaching and SoTL. Even shared topics, such as learning outcomes or case studies, are manifested during dialogue through a disciplinary lens. This poster is a description of the space created and what we propose is the process behind its creation and sustenance. In particular, our poster depicts the experience of one person steeped in philosophy engaging with another marinated in psychology and education, in conversations about SoTL, to form what we call a tertiary space.

Seen through a philosophical lens, this SoTL dialogue, which we call tertiary space, is a fusion of the components of the two selves engaged in the conversation. Each tertiary space is a constitutive whole that cannot be individuated in terms of its parts. This sense of constitution mirrors Schechtman's (1996) narrative account of the self, by which personal identity cannot be reduced to any single feature. This account of the self is relational and takes into account the context in and through which the concept of personhood arises. The constituted tertiary space of SoTL conversations is likewise conceived as relational, in which ideas are forged like alloys carrying properties distinct from the original selves just as tin and iron together form steel.

Our conceptualization of tertiary space, in contrast to sociolinguistic Third Space theory (Bhabha, 2004), describes SoTL dialogue as not the entrance into a prior societal group, but a constituted space that is fluid, adaptable and arising from the conjunction of those engaged in the dialogue. We do not contribute to nor join SoTL; our conversations (tertiary spaces) are SoTL.

If SoTL can be said to be a tertiary space such that it is made anew through each unique combination of individual selves engaged in dialogue, then SoTL is neither simply an additive collection of ideas nor a separate entity. When SoTL is viewed as dynamically

constituted with each project, presentation, or conversation, it is inherently fluid, open to incorporating multiple disciplinary perspectives, and challenging to define, restrict or label.

Further exploration is needed of what happens to the tertiary space when we leave the conversation. Is the same space revisited or a new space constituted when we next meet? Is a tertiary space constituted when reading a SoTL paper or only through in-person dialogue? Are traces of the tertiary space etched into the individual selves, leaving those in the conversation irrevocably changed?

On our poster, join us in collaboratively depicting what individuals bring to a SoTL conversation and the resulting tertiary space in which ideas are stretched, confronted, and morphed.

References available on the poster.

6:00 PM | Room 2000CD | Disciplinary approaches to teaching, learning and SoTL

PS04

Poster Session

CORRELATIONS BETWEEN STUDENT MATH BACKGROUND AND CLASS PERFORMANCE IN A COLLEGE CONCEPTUAL PHYSICS COURSE

Lynne Raschke (1), Katheryne Anderson (1)
(1) The College of St. Scholastica (Duluth, United States)

The College of St. Scholastica teaches a one-semester, conceptual physics class for students from a variety of majors, including pre-service teachers, students intending to become occupational therapists, and students fulfilling a natural sciences general education requirement. Conceptual physics courses such as this one have no math pre-requisite and the focus is on student learning of physics concepts and their application in the real world. However, the class did utilize some basic math skills at the level of introductory middle-to-high school algebra. Despite the relatively low level of math skills required for the class, informal observations of student performance seemed to indicate that students with less math background struggled more in the class. As a result, we undertook an investigation into whether there was a correlation between students' math backgrounds and their overall performance in the class. Student performance was assessed in three areas: elements that tested conceptual knowledge, elements that required applying physics knowledge to a real-world situation, and elements requiring quantitative problem-solving. Four years of class data show that, even after controlling for student GPAs, students with less math preparation performed worse not only in the quantitative aspects of the course, but also on the conceptual and applied knowledge questions. This raises the question of why in fact this disparity in student performance exists and how we might better support student learning and development in this type of general education science class.

6:00 PM | Room 2000CD | Emerging technologies and SoTL

PS05

Poster Session

MODELING MULTIMEDIA TROUBLESHOOTING: STRUCTURED STRATEGIES FOR HELPING STUDENTS SAFELY IDENTIFY, EVALUATE AND UTILIZE FREE WEB-BASED RESOURCES FOR CLASS PROJECTS

Jessica Birthisel (1)
(1) Bridgewater State University (Bridgewater, United States)

It has become increasingly evident over the last decade that students from a variety of disciplines must develop multimedia skills in order to compete in the post-graduation job market; thus, as Jonassen, Howland, Moore & Marra (2002) explain, multimedia work has become a popular form of interactive literacy in the classroom. Web-based applications have opened up a variety

of cheap or free tools for creative multimedia storytelling. The low-cost availability of these tools increases the likelihood that students will seek out this software for their individual devices, and, in an almost hybrid format, students become responsible for downloading and implementing software for course projects outside of the classroom. This introduces complications to the learning process; Seen (2008) observes that when courses seek to deliver technological skills within a hybrid-type format, this creates more negative perceptions and outcomes than when the exact same skills are taught in a face-to-face format. Another study suggests that asking students to utilize off-campus technological resources for school assignments can create uneven user experiences and problems for students (Czerniewicz, Williams, & Brown, 2009). Relatedly, the introduction of web-based resources introduces "unexpected events" into the learning experience, many of which "cannot be controlled in the way many other educational tools can" (Glassman & Burbidge, 2014, p. 28). Enhancing student understanding of safe web practices and technological troubleshooting is increasingly important in order to ensure that glitches, bugs, and spam don't interfere with students' creative processes and learning outcomes. In line with the conference theme of "emerging technologies and SoTL," and utilizing the "structured troubleshooting" pedagogy of modeling outlined by Ross (2004) and Ross & Orr (2009), this poster will demonstrate some of the tactics, strategies, and resources I utilize in a 200-level Multimedia Storytelling course in order to help students meet the following outcomes that extend above and beyond basic storytelling and production skills: identifying credible review sites before using free web-based or downloadable software, locating and navigating online help forums related to specific technologies, obtaining free or open source versions of more expensive software or comparable software for various operating systems, understanding relevant file types and free file conversion tools, and discovering spam navigation strategies that allow them to avoid clicking something dangerous.

Jessica Birthisel, Ph.D.
Assistant Professor of Communication Studies
Bridgewater State University
jessica.birthisel@bridgew.edu
774-826-6963

6:00 PM | Room 2000CD | Emerging technologies and SoTL

PS06 *Poster Session*

STUDENT TO STUDENT LEARNING: THE BENEFITS OF AN EMBEDDED PEER MENTOR IN AN ONLINE ENVIRONMENT

Bridgett Galvin (1), Karen Villalni (2)
(1) Framingham State University (Framingham, United States); (2) Instructor Framingham University (Framingham MASS, United States)

The focus of this project was threefold. First, the project highlights the collaboration of students in conducting SOTL research into the learning process. Second, it examines the use of an embedded peer mentor in an online environment. Third, it suggests ways in which instructors might use existing data generated from an electronic format to assess the effectiveness of their course delivery structure. Creating a quality online learning experience is a challenge for all educators venturing into the world of digital learning. While there are standards for good course design (Quality Matters) and technology support staff available to aid in the development of online courses, effective pedagogical strategies to increase learning are less well identified. With the assistance of a graduate student serving as a co-investigator, we examined the role of a peer mentor embedded in an online graduate course for Education majors. The class consisted of 20 students who completed the course asynchronously over a 15 week period. Each week the students were required to complete one module that included participation in a discussion board, completion of written assignments, critiquing web-sites, reading original works, as well as a text material. They also completed weekly quizzes over each topic. The peer mentor was introduced through a Peer Mentoring Discussion Board: HELP: Ask A Peer.

The role of the peer mentor was to serve as a guide for students to aid in navigating the course. Students were also made aware of the "HELP: Ask the Instructor" discussion board as a resource as well. Blackboard was the platform used for delivery of the course and data was retrieved from the course site as well as e-mail accounts for both the peer mentor and the instructor. We compared frequency and content of e-mails and discussion board questions addressed to the instructor and the peer mentor. We also reviewed the time periods that students submitted requests for help or clarification. Results suggest that students utilize the peer mentor for guidance and clarification on due dates, accessing materials, and clarification of preparation of assignments. However, they corresponded with the instructor on issues regarding grading, fairness of test items and submission of late work. The frequency of posts to the instructor board was also compared to the course taught in previous terms. Comparison of those data suggest that the use of a peer mentor greatly reduced the number of e-mails and posts on the standard HELP board in which the instructor was the only contact resource. Moreover, by checking the times for posting help requests and completion of the week's activities we were able to examine the effectiveness of due dates for discussion postings with respect to creating an "ongoing" discussion. Results are discussed relative to using Blackboard as a means for collecting information regarding pedagogical strategies and assessing effectiveness of the course design.

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PS07

Poster Session

A BLENDED APPROACH TO LOGIC INSTRUCTION IN PHILOSOPHY: ANALYSIS OF PRELIMINARY RESULTS

Kevin Graham (1)
(1) Creighton University (Omaha, United States)

While many colleges and universities are now delivering some undergraduate courses online, scholars are only beginning to explore the value of blended instructional methods that incorporate both traditional face-to-face instruction and online instruction. Some studies, such as Folley (2010) and Jefferies and Hyde (2010), suggest that blended instructional methods can address students' desire for more interactive learning and easier access to learning resources outside of scheduled class meeting times. Other studies, such as (Vernadakis et al. 2011), have examined the benefits of blended instructional methods for student learning in scientific and technical fields. The project discussed in this poster presentation explores less well-charted territory by examining the potential benefits of blended instructional methods for student learning in a humanities field, namely, philosophy, where such methods have not yet been widely utilized.

I have taught an upper-level undergraduate philosophy course in symbolic logic to an audience of 12 to 25 third- and fourth-year students approximately once every four semesters since 1998. I have been generally pleased with the degree to which my students have fulfilled the course learning objectives, but I became concerned that I have been unable both to help my weakest students to meet the course learning objectives and to enable enough of my strongest students to exceed the course learning objectives.

In student evaluations of the course, students regularly expressed the desire to spend more class time working through logic problems collaboratively. In reflecting about the possible causes of the unsatisfactory performance of my weakest students, I began to wonder whether decreasing the amount of class time devoted to lecturing and increasing the amount devoted to collaborative problem solving would lead to improved student performance on the course learning objectives, particularly the performance of my weakest students.

In preparation for my 2013 offering of the course, I recorded 28 audio lecture captures that I made available to my students through our learning management system. In preparation for a typical class meeting, I assigned students to complete a reading from the textbook, to view the corresponding lecture online, to work through a set of logic problems, and to come to class

prepared to work through some of the problems collaboratively.

The proposed poster presentation will analyze the assessment data from my first blended offering of the symbolic logic course in comparison to assessment data from earlier, traditional offerings of the course. Preliminary conclusions about the value of blended instruction of a symbolic logic course will be drawn and questions for further research will be posed.

Bibliography

Folley, Duncan. 2010. "The Lecture is Dead Long Live the e-Lecture." Electronic Journal of e-Learning 8 (2): 93-100.

Jefferies, Amanda and Ruth Hyde. 2010. "Building the Future Students' Blended Learning Experiences from Current Research Findings." Electronic Journal of e-Learning 8 (2): 133-140.

Vernadakis, Nikolaos, Panagiotis Antoniou, Maria Giannousi, Eleni Zetou, and Efthimis Kioumourtzoglou. 2011. "Comparing Hybrid Learning with Traditional Approaches on Learning the Microsoft Office Power Point 2003 Program in Tertiary Education." Computers & Education 56 (1): 188-199.

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PS08 DESIGN OF LINK: A TOOL FOR STUDENTS TO EXPRESS CONCEPTUAL CONNECTIONS

Poster Session

Joe Rodriguez (1), Ali Erkan (1)
(1) Ithaca College (Ithaca, United States)

Since 2008, we have been exploring ways in which learning in an introductory history class can be enhanced by the use of software that allows students to create and visualize connections between different concepts. Our goal has been to make it apparent that while linear arrangements and the associated perspectives (such as a chronological order) are sometimes unavoidable, concepts are ultimately arranged in the form of a web (network) and that the creation of meaningful webs of concepts is itself a learning exercise.

Our initial attempts started out with wikis since a wiki allows one to create distinct pages for distinct concepts and to interconnect these pages to express relatedness. While the visualizations we drew from such student-produced wikis proved to be revealing, we encountered a number of obstacles that prevented our approach from leading to a precise instrument. Some of these obstacles were pedagogical in nature; the scaffolding question, for example, is in fact the topic of a panel [Tag Based Networks: A Scaffolding Mechanism for Students to Express Conceptual Connections]. Others were technological in nature so we were able to overcome them by creating our own software; the focus of this poster is the design of our latest system, called "Learning in Networks of Knowledge" (LINK).

We outline how students first create precursory webs (to demystify the notion of "conceptual connection") through a labeling activity and how these webs are then refined to truly convey the students' understanding of conceptual interconnectedness. We overview some of the architectural decisions and use-cases. We also explain how this tool will be available to the community (i.e. our dissemination plans). Finally, we make the case that while the resulting system has its roots in a history class, we believe it is usable in other courses. One example could be in the computer science context: "what are the standards, techniques, and tools of a Geographic Information System?"

The presenters are Joe Rodrigues (an undergraduate from Ithaca College who is a member of the development team) and Ali Erkan (Joe's advisor and co-PI of the project).

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PS09

Poster Session

FIRST YEAR UNIVERSITY STUDENTS: THE IMPACT OF DEMOGRAPHICS, LEARNING STRATEGIES AND MOTIVATION ON ACADEMIC SUCCESS

Elizabeth Bowering (1), Joanne Mills (1)
(1) MSVU (Halifax, Canada)

Despite stringent admission policies, highly qualified faculty, and effective teaching practices, approximately 25% of the first year cohort drops out after their first year of university studies. While the current research, based mostly in the USA, suggests some cognitive and psychosocial variables correlated with academic success, it is unknown whether these research findings are applicable to first year students registered at Canadian universities.

As such, on four occasions in 2011-2012 and 2012-2013, we assessed over 250 of our university's incoming first year undergraduate student cohort in terms of their knowledge and use of Learning Strategies (i.e, critical thinking, rehearsal, effort regulation) and Motivational Characteristics (i.e., external versus internal locus of control, test anxiety) via completion of an online Motivated Strategies for Learning Questionnaire. Demographic information was gathered from the University database (e.g., high school GPA, age, gender as well as Fall 2011 Term GPA and April 2012 Cumulative GPA).

Not surprisingly, the most frequently used Learning Strategy was Rehearsal and the least used were Peer Learning and Critical Thinking. With regard to Motivation, Extrinsic Goal Orientation (i.e., grades and rewards) was most frequently endorsed while Self Efficacy for Learning and Performance (i.e., self-appraisal to master a task) was endorsed infrequently. Significantly positively correlated with each of the Fall and Cum GPA's were the Motivation Scale score as well as subscale scores for Self Efficacy for Learning and Performance, Control of Learning Beliefs, Metacognitive Self Regulation, and Time and Study Environment.

These findings suggest that students who exhibit an internal locus of control and also plan, monitor, and regulate their cognition and time/study environment are more likely to be academically successful. In contrast, Test Anxiety was negatively correlated with Fall GPA, suggesting that their anxiety decreased with experience in the academic environment. Finally, the participants' age was positively correlated with each GPA, which may suggest that older students are better able to balance competing demands. Analyses of our follow-up three data sets collected in 2011 and 2012 were carried out to determine reliability of the results over time.

In conclusion, our initial findings suggest that students who are better equipped to take on the first year university experience are those who exhibit an internal locus of control and also self-regulation. Our research demonstrates that success at the undergraduate level is enhanced when students are self motivated and develop a passion for their learning. Faculty would do well to initiate that internal drive and then nurture it within students. Screening students at the outset of their first year of study may help identify "at risk" students in need of support services.

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PS10 MOTIVATION AND BENEFITS OF FORMATIVE OSCE DEVELOPED AND MANAGED BY STUDENTS

Poster Session

Hélène Moffet (1), Jean-François Roux (2), Gisèle Bourdeau (3), Jean-Sébastien Renaud (4), Anne-Mélissa Roy (4), Isabelle Savard (4), Kadija Perreault (5)

(1) Département de réadaptation, Faculté de médicine, Université Laval (Québec, Canada); (2) Department of Rehabilitation, Faculty of Medicine, Université Laval (Québec, Canada); (3) Département de réadaptation, Faculté de médecine, epartment of Rehabilitation, Faculty of Medicine, Université Laval (Québec, Canada); (4) Vice-décanat à la pédagogie et au développement professionnel continu, Faculté de médecine, Université Laval (Québec, Canada); (5) Département de réadaptation, Faculté de médecine, Université Laval (Québec, Canada)

To graduate from the Master's in physiotherapy program at Université Laval, students must pass the final competency certification exam, which is an Objective Structured Clinical Examination (OSCE). One strategy we use to support students in their preparation for this exam is a formative OSCE developed and managed by students. The aims of our presentation are to share our experience using this formative OSCE, and to highlight the motivation and benefits reported by two cohorts of students who participated in this learning activity.

The formative OSCE is proposed to the students in the final year of their master's program just before the 20 week-clinical placements. The students participate in this activity on a voluntary basis. Teams of 4-5 students develop a station of a complex clinical case in a particular context of practice. These cases must assess some essential competencies included in the competency profile of the program. The course coordinators help the students in the development of their cases and take care of logistics. The day of the formative OSCE, students mount the stations and play the different roles one after the other (candidate, examiner, simulated patient, family member or other professional). At the end of the day, they complete an electronic questionnaire that assesses their motivation and the perceived benefits of the formative OSCE.

In 2013 and 2014, a total of 113 students (participation rate: 93 %) participated in the formative OSCEs. They developed a total of 24 stations. The main reasons for participating in this activity were to learn and gain an indication of the level of development of their own competencies. The roles that were perceived as the richest for learning were that of the candidate and the examiner. More than 75% of the students believed that the formative OSCE contributed to decreasing their level of stress regarding the final OSCE and scored their level of stress at 5 on a 10-level scale (VAS). The great majority of students found that the formative OSCE helped them identify their strengths and weaknesses and oriented them in their future exam preparation. They strongly recommended this activity to future students. When comparing the results on the questions related to motivation and perceived benefits, no differences were found between the 2013 (n=52) and 2014 (n=61) cohorts except that a larger proportion of students in 2013 agreed with the statement "My experience as a developer of a station was very formative" (98% in 2013, 86% in 2014; Mann-Whitney p=0.002).

In conclusion, the formative OSCE is a very relevant learning activity that was highly appreciated by the students. This activity contributes to decreasing their level of stress regarding the final OSCE exam and enhances self-confidence in their competency. By identifying more precisely their strengths and weaknesses, it is believed that students will be better equipped to plan the last steps of their preparation for the final OSCE exam. Next steps will be to assess the impact of an electronic tool created from the formative OSCE stations on student learning and self-confidence.

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PS11 **FOSTERING THE DEVELOPMENT OF SCIENTIFIC REASONING SKILLS AND "GRIT" IN ORGANIC LABORATORY STUDENTS: AN INVESTIGATION OF STUDENT LEARNING**

Poster Session

Brenda Harmon (1)
(1) Oxford College of Emory University (Lilburn, United States)

What does learning look like in an inquiry-based organic laboratory course where, as the culminating experience, students are required to develop their own procedure to isolate caffeine from the other ingredients in an energy drink? In order to prepare students for this authentic task, students are not given 'cookbook' procedures to follow, but are asked to read about organic laboratory techniques and work together in teams to develop their own methods to solve a series of "real-world" problems that increase in complexity throughout the semester. The techniques are combined in many different variations so that they should accumulate a 'tool kit' which will allow them to complete the challenge on their own. Being able to develop their own procedures and finally accomplish such a daunting task is a very empowering experience for sophomore-level students. Because the students develop their own procedures, there are many mistakes and blind alleys that are part of the inquiry process. These rich learning experiences are designed to develop deep learning approaches to mastering the content of the course, as well as bring students to the realization that mistakes are a huge and necessary part of the scientific process.

This SoTL study is a first examination of what happens when students engage in this laboratory learning experience. The series of "real-world" problems I have developed often lead to data failure - by design - so that students are challenged to 1) recognize when data failure occurs and 2) evaluate their laboratory procedures to find limitations, flaws, or sources of error. Most students have been conditioned to go into the laboratory and follow a detailed set of complex tasks in order to get "the right answers". Nothing could be further from the true inquiry nature of science. The process of evaluating their own procedures and using evidence to discover methodological flaws is hoped to push students into higher levels of thinking in Bloom's taxonomy. In this study, I examine qualitative evidence to monitor both cognitive and affective gains of students enrolled in the course. I developed a modified rubric (Timmerman, 2010) to assess scientific reasoning skills using student notebooks and laboratory reports. I also developed an open-ended survey based on the ROLE survey (Lopatto, 2003), an assessment instrument for students engaged in research and coded course evaluation comments. Cognitively, I looked for evidence that my students are making progress toward an important course outcome: the ability to question and examine evidence more rigorously. Affectively, I examined the impact this learning experience has on increasing self-reliance and the ability to embrace mistakes as an important part of the inquiry process. Finally, I investigated the combined impact of both cognitive and affective gains on the incremental development of my students' thinking, using the Perry and Piaget models . I hope to use this preliminary study to improve student learning in future iterations of my course and to develop a much more in depth SoTL investigation.

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PS12 *Poster Session*

DEVELOPING SCIENTISTS: FOSTERING COMMITMENT, PERSEVERANCE, AND TOLERANCE FOR UNCERTAINTY IN STUDENTS BY EMBEDDING AUTHENTIC RESEARCH INTO A GENERAL CHEMISTRY COURSE

Nichole Powell (1)
(1) Oxford College of Emory University (Oxford, United States)

We have developed an inquiry-based general chemistry laboratory course that culminates in an authentic research module. The course incorporates features of an inquiry-based education as identified in the National Science Education Standards, as well as key facets of scientific practice such as the ability to embrace the uncertainty that accompanies the pursuit of an unanswered question while also developing the level of commitment necessary for acquiring meaningful evidence (1, 2). The laboratory curriculum seeks to closely model an undergraduate research experience by mentoring rather than leading students through the scientific thinking process. The aim is to allow students to practice the thinking skills scientists use when they approach problems and to develop the skills and attitudes that we value as scientists (3).

This SoTL study is a first examination of what happens when students engage in this authentic undergraduate research learning experience. We examined qualitative evidence to monitor both cognitive and affective gains of students enrolled in the course. Cognitively, we looked for evidence that the students are making progress toward an important course outcome: the ability to question and examine evidence more rigorously. We developed a modified rubric to assess scientific reasoning skills using student notebooks, laboratory reports, and oral presentations (4). Affectively, we examined the impact the authentic research experience has on students: 1) developing commitment to a laboratory project, 2) increasing self-reliance and the ability to embrace mistakes as an important part of the inquiry process, and 3) developing tolerance for dealing with uncertainty. We examined student perceptions regarding these affective gains by developing an open-ended survey based on the ROLE survey, a widely accepted assessment instrument for students engaged in research (5). We hope to use this preliminary study to improve student learning in future iterations of the course and to develop a much more in-depth SoTL investigation.

(1) Edelson, D. C. Realising authentic science learning through the adaptation of scientific practice. Int. Handb. Sci. Educ. 1998, 1, 317–331.

(2) Inquiry and the National Science Education Standards: A Guide for Teaching and Learning; Olson, S.; Loucks-Horsley, S., Eds.; The National Academies Press, 2000.

(3) Hunter, A.-B.; Laursen, S. L.; Seymour, E. Becoming a scientist: The role of undergraduate research in students' cognitive, personal, and professional development. Sci. Educ. 2007, 91, 36–74.

(4) Timmerman, B. E. C.; Strickland, D. C.; Johnson, R. L.; Payne, J. R. Development of a "universal" rubric for assessing undergraduates' scientific reasoning skills using scientific writing. Assess. Eval. High. Educ. 2011, 36, 509–547.

(5) Lopatto, D. The essential features of undergraduate research. Counc. Undergrad. Res. Q. 2003, 23, 139–142.

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PS13 USING STUDENT-CONSTRUCTED CLINICAL CASES AS THE BASIS FOR OTHER STUDENTS' FINAL ASSIGNMENTS

Poster Session

Kadija Perreault (1), Isabelle Savard (1), Nathalie Mathieu (2), Hélène Moffet (3)
(1) Faculté de médecine, Université Laval (Québec, Canada); (2) CSSS Alphonse-Desjardins, Centre Hospitalier Universitaire Affilié (CHAU) de Lévis; Faculté de médecine, Université Laval (Lévis, Canada); (3) Faculté de médecine, Université Laval; Centre interdisciplinaire de recherche en réadaptation et intégration sociale (CIRRIS), Institut de réadaptation en déficience physique de Québec (Québec, Canada)

In this presentation, we will describe an innovative combination of evaluation methods used to enhance learning in a master's level course on pain in physiotherapy, as well as results following its implementation. Our aim is to share our experience using these methods of evaluation and contribute to the discussion on student involvement in evaluation and learning activities. Research in the last decades highlighted the lack of time devoted to training on pain in healthcare providers' basic training, including that of physiotherapists. In 2012, a new course focusing on pain and chronicity was integrated into the Master's in physiotherapy program at Université Laval (Québec). The 30-hour mandatory course includes a mix of lectures and workshops. The main goal of the course is to help students develop competencies in planning strategies to prevent and manage pain, while taking into account its multidimensional nature, for persons of all ages. The level of attainment of this goal is evaluated in a final team-based assignment that integrates key themes covered during the term, such as pain assessment, factors influencing the experience of pain, and interventions. Each team first elaborates a clinical case based on course content, previous experience in practice-based training, and relevant sources found in the literature. The clinical cases are then reviewed and graded by the course coordinator who provides feedback that students take into account in order to adjust their clinical case, make sure it is complex enough and as close as possible to an authentic situation. Then, each team has to exchange its case with another team. The clinical cases created by by student colleagues serve as the basis for preparing the final assignment which consists of planning strategies to prevent and manage pain for the person described in a given clinical case. During the process, discussions between teams are organized in order to enhance learning.

We have been using these evaluation methods since 2012. Every year, we made minor changes to the outline of the assignment, based on student questions and comments provided through formal course evaluations, in-class discussions and student emails. We also took into account suggestions from the evaluators of the assignments. Most changes aimed at clarifying the student instructions and excluding any redundancies with content covered in other courses. In the three years the course has been given, students mentioned that they appreciate this combination of evaluation methods, because it allows them to integrate key content of the course in an original way. Students' results on this evaluation show that the great majority are successful in planning strategies to prevent and manage pain for the clinical cases provided by their colleagues. One of the main challenges associated with using these methods of evaluation is that of obtaining equivalent clinical cases between teams in terms of quality, coherence, completeness and complexity. We contend that these methods of evaluation could be of interest and adapted in other contexts.

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PS14 TEACHING CLINICAL PROBLEM-SOLVING USING CASE-BASED RESEARCH PROJECTS

Poster Session

Jayanti Ray (1)
(1) Southeast Missouri State University (Cape Girardeau, United States)

Speech-language pathologists prepare for their clinical careers by becoming conversant in clinical problem solving and the evidence-based practice patterns. "Evidence-based practice guidelines are explicit descriptions of how patients should be evaluated and treated. The purpose of the guidelines is to improve and assure the quality of care by reducing unacceptable variation in its provision. (Golper et al., 2001, p.2)." The goal of EBP is to integrate clinical expertise, best current evidence, and client values to provide high-quality services reflecting the interests, values, needs, and choices of the individuals that are served.

Incorporation of meaningful or applied clinical research related to EBP patterns early on in undergraduate/graduate curriculum has been proven to facilitate additional skills that are not traditionally part of professional training (e.g., Atiya, 2002). In medical/professional educational models, students are required to demonstrate competence in curricula via reflective thinking, critical thinking, self-directed learning, and positive learning experience (Levine, 2003; Lohse, Nitzke, & Ney, 2003). The purpose of this study was to explore whether any significant difference exists between the performance of students with clinical research experience and students without similar experience.

Thirty-two undergraduate/graduate students, recruited from the graduate program in communication disorders, participated in the clinical study. Sixteen students were assigned to the experimental group and conducted case-based research projects. Another sixteen students were assigned to the control group and underwent typical clinical training with their clients. The participants in both groups were matched based on their clinical and academic experience. The clinical research experience involved typical clinical endeavors. An additional exposure to journal articles that support evidence-based practice was incorporated into clinical service delivery. The students in the experimental group also participated in hands-on clinical research experience. The experimental instructional model integrated the scientific method and clinical problem solving. The control group participated in the traditional clinical experience offered through the regular clinical courses. A pre- and post-test questionnaire, consisting of multiple-choice items, was given to both the groups at the beginning and end of the clinical training schedules.

At the end of the semester, the clinical performance of both groups was assessed using the department's clinical performance instrument. Both groups participated in pre- and post-tests on evidence-based practice (EBP) in clinical research. The experimental group scored significantly higher than the control group on the post-test. No significant difference in performance was noted between the two groups on traditional clinical appraisal forms. During clinical observations of students, it was noted that the experimental group demonstrated abilities in retrieving appropriate knowledge bases for given clinical scenarios and diagnosing different disorders. The experimental group was able to express appropriate rationales for specific intervention techniques. They were also able to: write evidence-based goals for the treatments, collect and analyze data effectively and analyze their own clinical skills periodically. In addition, they were able to demonstrate appropriate clinical decision-making skills. The results of the study show that the curricular approach using clinical research was successful in promoting advanced clinical problem-solving skills in students.

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PS15 MEASURING ENGAGEMENT LEARNING ACTIVITIES: INITIAL RESULTS

Poster Session

Edward Morgan (1), Elizabeth Lloyd-Richardson (1)
(1) University of Massachusetts Dartmouth (North Dartmouth, United States)

Matriculation figures, costs, and the outcomes of higher education are a national concern, and evidence of student learning outcomes is essential. Simply evaluating the merits of a university education via a grade point average fails to capture essential details about learning processes. Fostering and measuring student learning during integrative learning and real-life engagement activities is critical to the overall educational mission, is not well understood, and presents several challenges (New and diverse contexts for SoTL). These activities require students to apply the knowledge, skills and capacities gained throughout the UMass Dartmouth experience, and to reflect on the interaction of these and their own professional and personal development (Sometimes recognized as metacognition). Traditional assignments are not sufficient to measure the outcomes of this form of learning. The approach we propose can improve both learning itself and evidence of student learning in student engagement activities such as service-learning, undergraduate student research projects, Education Abroad activities, and courses with a focus on integrative learning, for e.g. capstone projects, in addition to contributing to scholarship in metacognition (Assessment, accountability, and SoTL).

Focus of inquiry: Student Abroad experiences rarely begin with clear learning objectives, have experience goals that relate to General Education learning objectives, or result in documentation of learning achievements. This micro-pilot project was a test of concept process; we attempted to implement weekly reflections and periodic interviews to examine how it is possible to foster and measure learning during engagement activities. This contributes to current SOTL discussions by asking: Can we produce stronger learning results? Will this result in more evidence of learning? What are the costs in time? What skills are needed to teach using this approach? By further exploring and identifying the tacit or implicit knowledge obtained via students' learning experiences, we will be able to assist both the institutional teaching community and students in identifying the strengths and benefits of these educational experiences, how students' background, identities, and experiences shape their interpretations of the world, and how this may help students in future career pursuits (Inquiry into student learning).

In this poster Ed Morgan will report what we learned in the Spring 2014 Micro-Pilot to Measure Engagement Learning Activities. We employed Master's level Psychology students (3 @ 2-3 hours/week) who, while serving as Research Assistants for the study and with an assigned caseload of 2-3 study participants during the semester, monitored student responses in a Learning Reflection Document and replied with probing questions to increase recognition of learning moments and document and archive the data collected. We will share:

1. Summaries from working with students in two undergraduate Study Abroad courses with the aim of exploring the effects of, as well as the costs and benefits of Interviews and Learning Reflections.

2. Explorations of the measurement of Explicit and Tacit Knowledge, Skills, Attitudes

3. Detailed data collected on the amount of time needed to accomplish the various tasks involved in conducting interviews and carrying out associated assignments

I hope to be able to discuss with other interested parties their own work in probing student learning.

PS16 **BUILDING LEARNING COMMUNITIES IN UNIVERSITIES THROUGH THE CREATIVE ACTIVITIES OF CLUBS AND SOCIETIES**

Poster Session

Paula DaCosta (1)
(1) OISE, University of Toronto (Oshawa, Canada)

Presenter: Paula DaCosta, PhD Student, LHAE/OISE/UT

Abstract

Literature on student engagement (Kuh, 2008) suggests that a supportive campus environment is characterised by supports which help students to thrive socially as well as academically and that an enriching educational experience entails participation in learning communities. Given that student learning is central to student success, one question that warrants further exploration is how learning is nurtured, not only within and but outside of formal classroom settings. Learning communities are highly valued as a means of promoting both social and academic involvement (Zhao & Kuh, 2004) and fostering the connections and collaborations among students and faculty (Gablenick, MacGregor, Matthews & Smith, 1990). This research explores the conceptualization of learning communities within the informal settings of clubs and societies in universities. It draws on conversations about the activities that take place in clubs and societies in which immigrant students from the Caribbean participate, and the students' perception that their experiences within these settings contribute to their academic performance in university.

Basis for Discussion

My exploration of the value of clubs and societies for nurturing creativity and enhancing learning is based on an earlier research project in which I interviewed 5 landed immigrant students from the Caribbean. One view that was common to all the participants in the research project was the idea that collaborative learning was not limited to their interactions within the classroom but extended to their roles and activities in their social groups/clubs. Each student perceived that clubs and societies formed a valuable part of their learning experiences in university. Caribbean students represent a minority within the wider student populations of universities in Ontario. Because they constitute a small group, Caribbean students believe the opportunities to engage with their peers and "be themselves" contributed significantly to their university experience in their new country. The students perceived their clubs as spaces in which they could work together to solve class-related problems, reinforce their own skills by teaching and mentoring each other (Dodge & Kendall, 2004), engage with each other as peer reviewers and editors; building scholarship and research in areas of interest to the student population with the support of faculty, and offering academic and professional advice to each other. In other words, the weekly club meetings were not merely a social experience but an academic enterprise in which learning could be achieved and easily assimilated. Among Chickering's and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education" the principle of cooperation among students is valued. The principle may be understood as cooperation within the confines of collaborative groupings inside the classroom. However, there is significant learning that may be achieved within informal groups outside of the classroom. My proposed area of research will facilitate further exploration and discussion on ways in which clubs and societies provide opportunities for students' development in universities in creative and less traditional ways.

6:00 PM | Room 2000CD | Inquiry into student learning

PS17 STUDENT PERCEPTIONS AS CATALYSTS FOR CHANGE IN TEACHING AND LEARNING IN HIGHER EDUCATION

Poster Session

Ashley Welsh (1)
(1) University of British Columbia (Vancouver, Canada)

In higher education, the development of effective learning strategies is extremely important for student success within and across academic disciplines. Unfortunately, many students struggle with developing meaningful strategies and tend to fall behind in some or all of their courses (Ambrose et al., 2010). More specifically, undergraduates often lack the metacognitive skills to effectively plan, monitor, and evaluate their strategies for enhanced learning (Anderson et al., 2009; Tanner, 201). This concern calls for scholarship that engages students in a dialogue about the supports and barriers they perceive as influential to their learning and experience. The objectives of this poster presentation are: 1) to share the details of a research project that explores the factors students perceive as enhancing and impeding their learning, metacognition, and confidence within an introductory organic chemistry course; and 2) to engage with scholars about how this information could be used to inform future iterations of the course curriculum and pedagogy for enhanced student learning.

This particular research project took place in two sections of an introductory organic chemistry course for biological science students at a research-intensive university in Canada. Introductory organic chemistry is a challenging, cumulative course that requires students to develop and/or adapt to a more complex set of learning strategies than those used in their previous chemistry or science courses. Regrettably, many students fail to develop the appropriate learning strategies to keep up with and to learn the course material (Grove & Bretz, 2012; Lynch & Trujillo, 2010).

A pre-post survey instrument (n=144), classroom observations, written feedback/reflections, and one-on-one interviews with 26 students were used to pinpoint what factors students perceived as enhancing and/or impeding their learning. While successful students displayed effective metacognitive strategies and time management skills, most students expressed difficulty with implementing the appropriate strategies for planning, evaluating, and monitoring their learning. These students stated that, despite the presence of multiple resources to enhance their learning strategies (i.e. virtual/face-to-face office hours, summary sheet templates, study strategy workshops, online discussion forum, problem set assignments), they felt overwhelmed with the amount of material to be learned and lost confidence in their ability to succeed. Students' preconceived beliefs about science learning, their lack of metacognitive strategies, and their concerns with grades and course content seem to overshadow their ability to engage with their learning and the course content. This study has revealed the importance for adapting curricular and pedagogical practices to refine the amount of content to be learned and to provide targeted in-class activities/resources to support students' metacognitive development and confidence.

Students are key players in teaching and learning practices; therefore their experiences are significant for the improvement of curricular and pedagogical movements within institutions of higher education. Soliciting feedback and advice from undergraduate students not only provides insight into the inner workings of their learning, but also engages students as active participants in the scholarship of teaching and learning in higher education.

6:00 PM | Room 2000CD | Inquiry into student learning

PS18 *Poster Session*

THE EFFECT OF THE CASE STUDY METHOD ON STUDENT ALTERNATE CONCEPTIONS ABOUT GENETICS AND EVOLUTION

Kathy Gallucci (1)
(1) Elon University (Elon, United States)

One theory of learning explains that students possess alternate conceptions that are highly resistant to change, which impede student learning (Bransford, et al., 2000). Students replace or reorganize alternate conceptions through accommodation. Conceptual change theory proposes that accommodation requires that authentic conceptions be intelligible, plausible, and fruitful, and that dissatisfaction with the alternate conceptions (dissonance), can be addressed directly by teaching strategies (Posner, et al., 1982). Recent reform pedagogies that have been successful in addressing these alternative conceptions include inductive techniques (Jensen & Finley, 1996) and constructivist, active-learning techniques that have been more effective in promoting learning in science classrooms than traditional didactic lectures and objective assessments (Handelsman, et al., 2004). Case studies can be used to create the dissatisfaction required to illustrate the intelligibility, plausibility, and fruitfulness of an authentic conception. Indeed, Palmer (2003) found that students experienced accommodation of scientific concepts in a context-based conceptual change intervention study. With appropriate case study selection by the instructor, accommodation may be promoted in the undergraduate biology classroom. The research question addressed in this study was, "Which alternative conceptions do students have about genes and evolution, and does the case study method promote accommodation of scientific concepts in those topics?" Introductory non-science major undergraduates were given four open-ended questions on case examples used to reveal alternative conceptions in their understanding of genetics and evolution. The same questions were used in the post-test, after instruction using the case study method as the central pedagogy, to determine what level of conceptual change had occurred. Answers were graded with rubrics that outlined four levels of conceptual understanding. The results showed that student scores increased significantly ($p < .05$) for all four questions, showing enhanced conceptual change in both topics. In this study, the case study method was shown to be an effective pedagogy that addresses conceptual change.

Works Cited

Bransford, J. D., Brown, A. L. & Cocking R. R. (2000). How people learn: Brain, mind, experience, and school.

Washington, DC: National Academy Press.

Jensen, M., & Finley, F. (1996). Changes in students' understanding of evolution resulting from different curricular

and instructional strategies. Journal of Research in Science Teaching, 33(8), 879-900.

Handelsman, J., Ebert-May, D., Beichner, R., Bruns, P., Chang, A., DeHaan R., et al. (2004). Scientific teaching.

Science, 304, 521-522.

Palmer, D. H. (2003). Investigating the relationship between refutational text and conceptual change. Science

Education, 87, 663-684.

Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W.A. (1982). Accommodation of a scientific conception:

toward a theory of conceptual change. Science Education, 66(2), 211-227.

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PS20 *Poster Session*

EVALUATING THE EFFECTIVENESS OF A MODIFIED EMERGING SCHOLARS PROGRAM IN THE FIRST TWO YEARS OF COLLEGE MATHEMATICS

Jessica Deshler (1), David Miller (1)
(1) West Virginia University (Morgantown, United States)

The Emerging Scholars Program (ESP) is based on the Mathematics Workshop Program (MWP) that Uri Treisman developed in the late 1970s and early 1980s at University of California-Berkley to support minority student success in Calculus classes (Fullilove and Treisman, 1990). ESP programs have been implemented across the US in calculus courses and have expanded to other disciplines (Asera, 2001). At West Virginia University (WVU), the ESP program has been extended from Calculus I through Differential Equations for cohorts of students. Each cohort takes ESP Calculus I together and remains together through subsequent mathematics classes over the first two years as scheduling permits.

WVU ESP courses differ in several ways from the original MWP. Instead of pulling students from different Calculus I classes into weekly ESP problem sessions, we recruit and enroll students into a specially designated ESP section of Calculus. This class meets fewer days per week for longer sessions resulting in an additional one to two hours with students per week than the traditional sections. The content delivery method was also modified to incorporate inquiry-based learning (IBL). IBL refers to any pedagogical technique that replaces traditional lectures with student-centered activities and has become the method of reform in many undergraduate mathematics courses. The class focuses on students working in small groups on problems and presenting solutions to the class. The WVU ESP program also recruits first-generation college students into the program (regardless of ethnicity). West Virginia is a rural state with many first-generation students from the state attending WVU in their first year who may lack the support structure (at home or at the university) to succeed in college.

While the underlying philosophies, outcomes and local contexts of ESP programs are as diverse as the student populations they serve (Hsu, Murphy, & Treisman, 2008), fundamentally, they have a common mission: to support mathematics achievement of minority students, a population with traditionally poor performance in mathematics.

In this report, we compare the success of WVU ESP Calculus students since the program's inception in 2009 to that of non-ESP students with similar demographic and preparation backgrounds. Qualitative and quantitative data will be presented, showing that students in the WVU ESP program perform as well as students in the traditional sections, acquire a deeper appreciation of mathematics and form supportive learning communities during their first two years in college.

Citation:

Asera, R. (2001). Calculus and Community: A History of the Emerging Scholars Program. New York: National Task Force on Minority High Achievement, College Board.

Hsu E., Murphy, T.J., and Treisman, U, (2008). Supporting High Achievement in Introductory Mathematics Courses: What We Have Learned from 30 Years of the Emerging Scholars Program, in Making the Connection: Research and Practice in Undergraduate Mathematics Education, Carlson, M and Rasmussen, C. (Eds.), Mathematical Association of America, Washington DC, pp. 205 – 226.

Fullilove, R.E., and Treisman, U. (1990). Mathematics Achievement Among African American Undergraduates at the University of California, Berkeley: An Evaluation of the Mathematics Workshop Program, The Journal of Negro Education, 59 (3). pp. 463-478.

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PS21 *Poster Session*

TRANSFORMATIVE LEARNING THEORY TO PRAXIS: THE DEVELOPMENT OF A PILOT COURSE — MINDFULNESS AND BEHAVIORAL HEALTH

Jacquelyn Lee (1)
(1) University of North Carolina Wilmington (Wilmington, United States)

Background / Relevance

Transformative learning is characterized by a deepening of how one is in relationship to the world -- a shift in understanding oneself, body awareness, relationships, and perspective-taking (O'Sullivan, 2003). The hallmark of this adult learning theory focuses on an expansion of consciousness, and indeed, this type of learning is both meaningful and impactful in the long-term. The practice of mindfulness is a means by which transformative learning can be cultivated.

Mindfulness is defined as "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). Baer and colleagues (2006) operationalize mindfulness to include five facets: observation, description, non-judgment, non-reactivity, and acting with awareness. Rooted in Eastern approaches, mindfulness has become increasingly prevalent in Western healthcare efforts during recent years, most notably in mental health treatment. Drawing connections between physiological and psychological health, a strong body of empirical research supports the notion that mindfulness is associated with decreased emotional distress, a more positive state of mind, and enhanced quality of life (see Greeson, 2009 for a review). Growing attention to the benefits of mindfulness has spread beyond health disciplines to an array of other areas, including education.

Method / Outcomes / Overview

As such, the purpose of the present research is to provide in an-depth picture of the development of a pilot course: Mindfulness and Behavioral Health and its transformative impact. Course structure, content, as well as in and out of class opportunities for engagement will be explored. Through weekly and final written critical reflections, students' perspectives will provide a qualitative understanding of their experiences in the course. Instructor critical reflection will examine the impact of mindfulness upon pedagogical practices, observations of student experiences, and the potential significance of the content in higher education.

Rationale / Contribution to SoTL Conversation / Conference Theme

Attention to the habits of the mind, as promoted in transformative learning, is exactly the essence of mindfulness practice. It can promote intentional responsiveness to these patterns, thereby opening up students to new ways of being in relationship to learning and being in the world. However, little attention has been paid to the relevance of this content in higher education, despite a notable shift to focus on the development of the whole person, including cognitive, affective and social aspects. Innovative and creative, curricular inclusion of mindfulness offers both educators and students a transformative path.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report methods to explore facets of mindfulness. Assessment, 13, 27-45.
Greeson, J. M. (2009). Mindfulness research update: 2008. Complementary Health Practice Review, 14(1), 10-18.
Kabat-Zinn, J. (1994). Wherever you go, there you are: Mindfulness meditation in everyday life. New York: Hyperion.
O'Sullivan, E. (2003) "Bringing a perspective of transformative learning to globalized consumption." International Journal of Consumer Studies, 27 (4), 326–330

6:00 PM | Room 2000CD | Inquiry into teaching practices

PS22 ASSESSING STUDENT LEARNING: A SOURCE OF ETHICAL CONCERN FOR COLLEGE TEACHERS

Poster Session

Luc Desautels (1), Christiane Gohier (2), France Jutras (3), Philippe Chaubet (2)
(1) Cégep régional de Lanaudière à L'Assomption (Repentigny, Canada); (2) Université du Québec à Montréal (Montréal, Canada); (3) Université de Sherbrooke (Sherbrooke, Canada)

What should be done with final grades approaching, but not quite reaching, the threshold for success? Is it acceptable to adapt competence standards when dealing with a handicapped student or one struggling with mental illness? Is it possible not to be unduly influenced by an institution's academic success plan? How can objectivity be fostered when assessing traineeship, and especially trainees' professional behaviour?

All these are ethical problems that challenge teachers significantly, as confirmed by preliminary results of a collaborative research project focusing on the development of ethical reflection among college teachers (SSHRC, 2010-2013). In this research, conducted with two groups of college teachers in Montréal (2012) and Québec City (2013), we found that:

- The problem of assessing students' learning was mentioned at the first meeting of each group;
- One of the cases is singled out for the main discussion in one of the five subsequent meetings of each group;
- When all the verbatim segments are ranked, the "Student Assessment" category (6.27%, n = 137/2186) ranks second in number of occurrences, just behind the "Values" category (7.41%).

Ways of understanding and dealing with with these ethical issues will be proposed: adopting common guidelines, developing professional judgment and fostering peer ethical deliberation.

This poster ties in with the theme of the conference because ethical problems, if they are not well resolved, can inhibit creativity and passion; moreover, this collaborative research fits two of the conference threads: a) inquiry into higher education teachers' practices and b) assessment.

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PS23 L'ÉTUDE DE CAS COMME STRATÉGIE PÉDAGOGIQUE AUX ÉTUDES SUPÉRIEURES

Poster Session

Rosalie Lalancette (1)
(1) Université Laval, Faculté des sciences de l'éducation Département d'études sur l'enseignement et l'apprentissage (Québec, Canada)

Au cours des dernières décennies, le domaine de l'éducation est témoin d'un virage pédagogique vers des approches constructivistes et ce, dans les différents ordres d'enseignement. Ce virage demande que la formation enseignante s'intéresse aux stratégies pédagogiques cohérentes avec une conception de l'apprenant en tant qu'acteur de son processus d'apprentissage en tenant compte à la fois de sa singularité en tant qu'individu et du contexte éminemment social dans lequel les savoirs et les apprentissages se développent (Astolfi, 2008). Malgré cette mouvance, l'adoption de stratégies pédagogiques cohérentes avec l'approche constructiviste ne va pas de soi (Boutin, 2007). Qu'en est-il dans les établissements d'études supérieures? Compte tenu que les enseignants du post-secondaire n'ont pas été obligatoirement formés en pédagogie, sont-ils outillés pour la mise en œuvre, en classe, de stratégies favorisant l'appropriation des savoirs telles que préconisées par les approches constructivistes?

Comme le relève Perrenoud (2008), les stratégies pédagogiques privilégiées dans l'enseignement post-secondaire, et plus particulièrement à l'université, font appel à des présentations magistrales encadrées dans des conceptions traditionnelles de l'apprendre dans lesquelles on conçoit l'apprenant comme un récepteur passif des informations. Pourtant, des stratégies pédagogiques ayant fait leur preuve dans le passé sont appelées à prendre place dans la scène scolaire de façon renouvelée. Parmi celles-ci, se distingue l'étude de cas; méthode prisée dans la recherche en sciences sociales et humaines, elle n'a cessé d'être employée dans l'enseignement de plusieurs domaines disciplinaires.

Dans le but d'éclairer la recherche dans ce domaine, cette communication cherche à documenter cette pratique pédagogique. Il s'agira, plus précisément, de présenter de façon synthétique une revue de littérature qui retrace les origines de l'étude de cas et son utilisation autant en recherche qualitative (Yin, 1984), qu'en tant que stratégie pédagogique dans différents domaines disciplinaires (Christensen & Hansen, 1994). D'un point de vue critique, il sera aussi question d'évaluer sa pertinence ainsi que de rendre compte des limites et atouts documentés autant pour l'enseignant que pour l'apprenant. Cette communication peut être une ressource aux besoins d'une pédagogie post-secondaire porteuse de réussite, ou selon le mot de Romainville (2005), d'une « authentique didactique universitaire ».

Ouvrages cités :
Astolfi, J. P. (2008). La saveur des savoirs. Disciplines et plaisir d'apprendre. Paris : ESF.
Boutin, G. (2007). De la réforme de l'éducation au « renouveau pédagogique » : un parcours chaotique et inquiétant. Revue Argument, 1(9). Repéré à http://www.revueargument.ca/article/2006-10-01/367-de-la-reforme-de-leducation-au-renouveau-pedagogique-un-parcours-chaotique-et-inquietant.html.
Christensen, C.R. & Hansen, A. (1994) Teaching and the Case Method: Text, cases, and readings (3e éd.). Boston : Harvard Business School Press.
Perrenoud, P. (2008). Construire des compétences dès l'école (5e éd.). Paris : ESF.
Romainville, M. (2005). Quelques interrogations sur l'échec à l'Université. Les Cahiers de Recherche en Éducation et en Formation, 39, 18-22.
Yin, R. K. (2014). Case study research: design and methods (5e éd.). Thousand Oaks: Sage Publications.

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PS24 FEW ACCREDITED CPD ACTIVITIES TARGET CLINICAL BEHAVIOR CHANGE

Poster Session

France Légaré (1), Adriana Freitas (2), Philippe Thompson-Leduc (2), Francine Borduas (3), Francesca Luconi (4), Andrée Boucher (5), Holly Witteman (6), André Jacques (7)
(1) Department of Family Medicine, Université Laval, and Public Health and Practice-Changing Research Group, CHU de Quebec Research Centre (Quebec, Canada); (2) Public Health and Practice-Changing Research Group, CHU de Quebec Research Centre (Québec, Canada); (3) Université Laval (Québec, Canada); (4) McGill University (Montreal, Canada); (5) Université de Montreal (Montreal, Canada); (6) Department of Family Medicine, Université Laval and Public Health and Practice-Changing Research Group, CHU de Quebec Research Centre (Quebec, Canada); (7) Collège des Médecins du Québec (Montreal, Canada)

Purpose

Continually improving patient outcomes requires that physicians start new behaviours, stop old behaviours, or adjust the way they practice medicine. Continuing professional development (CPD) is the method most commonly used by physicians to improve their knowledge and skills. However, despite regular physician attendance at these activities, change in clinical behavior is rarely observed. We sought to identify which of Bloom's domains are targeted by the learning objectives of CPD activities offered by medical associations, regulatory bodies, and academic institutions in the province of Quebec, Canada.

Methods

This study was a secondary analysis of an existing database that originated in a before-and-after study for the development of a theory-based instrument to assess the impact of CPD activities on clinical practice. CPD activities offered to practising physicians between November 2012 and March 2013 met the following criteria: 1) they were accredited by a medical association, a regulatory body, or an academic institution in the province of Quebec; 2) they were related to a behaviour relevant to clinical practice; 3) they were a group-based educational activity, preferably conducted as a live activity for groups of 50 participants or fewer. Two independent reviewers classified the stated objectives of each CPD activity according to the definition of the learning domains described in Bloom's taxonomy (cognitive, affective or psychomotor). We computed the frequency of each learning domain targeted by the learning objectives of each activity to evaluate how often the different levels of learning were targeted in CPD activities. We also computed the inter-rated reliability of agreement between reviewers. Discrepancies in classifications were resolved through consensus.

Results

A total of 404 learning objectives described the goals of the 110 CPD activities identified in this study, representing an average of four learning objectives (SD = 1.6, range 1-10) per activity. We observed that the majority of the learning objectives targeted the cognitive domain of learning (n=389) which consists of six levels of increasing complexity: knowledge, comprehension, application, analysis, synthesis and evaluation. Most of these concentrated on "knowledge" (n=94) and "comprehension" (n=94).The outcomes of these activities relate to the recall of previously learned material and the ability to grasp its meaning. Higher levels of the cognitive domain were less often targeted by the learning objectives analyzed. "Analysis" (n=65), "synthesis" (n=18) and "evaluation" (n=20) together represented only 25% of the learning objectives analyzed. We observed that the other two of Bloom's learning domains, affective (learners' attitudes or emotions toward a subject) and psychomotor (use of motor skills in clinical practice), were targeted by only 1.5% (n=6) and 2.2% (n=9) of learning objectives respectively.

Conclusion

Most accredited CPD activities within this sample were generally not designed to promote clinical behaviour change because the focus of these activities is on remembering and understanding information instead of preparing physicians to put knowledge into practice by analyzing information, evaluating new evidence, and planning operations that lead to behaviour change. Educators and CPD providers should take advantage of well-established theories of health professional behaviour change, such as socio-cognitive theories, to develop their activities.

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PS25 **FLEXIBLE ASSESSMENT: A STRATEGY FOR PROMOTING ENGAGEMENT AND LEARNING IN LARGE UPPER-YEAR UNDERGRADUATE COURSES?**

Poster Session

Candice Rideout (1)
(1) University of British Columbia (Vancouver, Canada)

Large undergraduate classes challenge instructors to create learning opportunities that will accommodate the needs and preferences of diverse individual learners while remaining logistically manageable. Using Social Cognitive Theory as a framework to understand the dynamics of learning, we know that learning environments affect students' cognitions and behavior. Flexible assessment approaches, in which students choose the evaluation activities they will complete and the relative contribution of each to their final grade, enable students to modify their learning environment in ways that could promote their engagement and achievement. However, previous studies of flexible assessment strategies (such as self-imposed deadlines and grade-dropping)

have not generally shown benefits for student learning and achievement. In this study, 465 students in three sections of a large undergraduate upper-level nutrition course were given the option of determining how their final grade would be calculated (within limits provided by the instructor). In particular, students could decide to opt out of a demanding assignment and/or change the relative weight of the mandatory midterm and final examinations. Students decided which assessments they would complete and the value each would contribute to their final grade at the beginning of the term; no changes were permitted after the second week of class. In total, 252 students (54%) changed how their final grade was calculated, with 139 (30%) opting out of the assignment, 100 (22%) increasing or decreasing the value of the assignment and 13 (3%) making other changes. Scores on the cumulative final exam were compared to determine if content mastery differed among students choosing different assessment strategies. Compared to students who used the evaluation scheme proposed by the instructor, students who modified the way in which their final grade was calculated scored slightly higher on the final exam (76.5% versus 74.7%, $p=0.005$). However, those students were also more likely to regularly attend class and participate in class activities (including clicker questions) and participation in those activities was more strongly related to overall achievement than was changing how one's grade would be calculated. Analysis of covariance indicated that attending class and participating in class activities accounted for the observed difference in grades ($p<0.0001$); when this covariate was considered, the impact of choosing a different assessment approach was no longer significant ($p=0.13$). In this observational study of students in large upper-year undergraduate classes, providing a flexible assessment strategy was a logistically feasible way to provide students with the option of modifying the learning environment to meet their perceived needs. Making changes to the proposed evaluation scheme was associated with greater attendance and participation in class activities and, thus, greater overall learning as reflected by scores on the cumulative final exam. Future work will use both qualitative and quantitative approaches to directly assess the role of a flexible assessment strategy in students' engagement and learning.

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PS26 IMPROVE WITH METACOGNITION: A COLLABORATIVE WEBSITE RESOURCE

Poster Session

Lauren Scharff (1), John Draeger (2), Aaron Richmond (3)
(1) U. S. Air Force Academy (USAFA, United States); (2) SUNY Buffalo State (Buffalo, United States); (3) Metropolitan State University of Denver - Colorado (Denver, United States)

Metacognition refers to an intentional focusing of attention on the development of a process, so that one becomes aware of one's current state of accomplishment, along with the situational influences and strategy choices that currently influence, or have previously, influenced. accomplishment of that process. Metacognition enables students to learn how to learn (Wirth & Perkins, 2008) and contributes to their academic success (Dunlosky et al., 2013; Isaacson & Fujita, 2006). It is through metacognition that students and instructors are able to articulate their goals, select effective strategies, accurately judge progress towards those goals, and fine-tune those strategies along the way. The poster will share efforts to create an online teaching commons (Huber & Hutchings, 2005) that seeks to foster the collaborative investigation of the role of metacognition in teaching and learning.

The website resource (http://www.improvewithmetacognition.com) was created with several goals in mind. First, to provide a collection of resources for individuals who might be interested in learning about metacognition research (e.g., links to articles; books; video clips), applying metacognition research (e.g., in-class activities, tips for students), engaging in metacognition research (e.g., advice for carrying out a Scholarship of Teaching and Learning project, feedback questionnaires, types of variables and data to consider). Second, to share instructor experiences related to metacognition via a blog. Contributors to this blog currently include instructors from across the United States, but we are interested in broadening our list of contributors. Some will be committed to regular postings and others will share their experiences with the group on a more ad hoc basis. Third, to provide a discussion board where individuals interested in metacognition can post notes about interesting new articles or resources, or

ask questions about implementation. Finally, to establish an online faculty learning community to foster collegial support and collaborative research opportunities.

For instructors, the site provides resources for those engaged in reflective teaching, scholarly teaching, and the scholarship of teaching and learning (Richlin, 2011). For students, metacognition not only promotes more effective learning now, it can put them on the path of lifelong learning. The site asks all of us to reflect upon how metacognition figures into our learning processes. As communities in higher education, it encourages us to investigate how metacognitive strategies might need to be altered to account for class size, general education courses, online courses, or differences between various disciplines. Our site promotes the ongoing and systematic investigation of metacognition as it contributes to teaching and learning, and provides a means by which faculty and students can exchange ideas and create collaborations around the topic of metacognition.

6:00 PM | Room 2000CD | Inquiry into teaching practices

PS27 IDEA GENERATION AND THE Q-SORT AS COLLABORATIVE LEARNING TOOLS

Poster Session

Samuel Lawrence (1)
(1) University of Central Oklahoma (Edmond, United States)

With the innovation of new strategies and tactics for engaging students, classroom instruction is constantly renewed. A candidate phenomenon for SoTL inquiry involves a collaborative learning activity that combines idea generation with Q-sort methods. Students reflect upon their experiences in a communication context (e.g., giving or listening to a speech, being interviewed, etc.). They collaborate within small groups by generating words and phrases that summarize their experiences with the context.

Following the idea generation task, the instructor initiates the Q-sort by directing the class's attention to a whiteboard in which geometric shapes at the top designate columns. Small groups take turns placing descriptors in a column. A group may add to an existing column if the descriptor is related to previously contributed descriptors (as synonyms or antonyms). For example, "formal" may be added to a column that already has "conversational." Or the group may start a new column if the descriptor is unrelated to words listed under other columns. The final step in the Q-sort involves moving descriptors to another column if students determine that the fit to the new column is better.

The class then formulates summary labels for each column. The instructor refrains from suggesting labels and relies upon the class's suggestions. What emerges inductively and publicly are dimensions of meaning that the students created. These student-generated meanings then provide an enriched context for storytelling and discussion.

The theoretical underpinnings for combining idea generation with the Q-sort suggest potential SoTL inquiries. First, social constructivist theories highlight the consequentiality of interaction in developing higher mental functions. Second, cultivating these mental functions requires an understanding of the interactional organization of the collaborative learning activity in which students are engaged. Third, students' ownership of their experiences with communication contexts potentially motivates them to find personal relevance in course concepts and to formulate plans for continued learning.

This activity occurred to me as I planned the second meeting of my upper division interviewing class. I wrestled with teaching introductory concepts such as definitions and types of interviewing contexts. I considered having students write their own definitions of interviewing and to compare them with the authors'. This approach spoke too much to the head and not enough to the heart. So I searched for ways of getting students to reflect upon their experiences as an "interviewee" using their own vernacular rather than externally imposed terms. Overall the activity was highly meaningful to my students. This early success has spurred me to apply it in my introductory public speaking class using prompts such as "giving a presentation is…", "listening to a presentation is…" and "listening to a presentation with PowerPoint slides is…" Finding ways to probe the efficacy and limitations of the activity portends a budding program of SoTL-based inquiry.

6:00 PM | Room 2000CD | Inquiry into teaching practices

PS29 A FRAMEWORK FOR CREATIVITY THROUGH DIALOGUE IN HIGHER EDUCATION

Poster Session

Anne Marie Ryan (1), Suzanne Sheffield (2)
(1) Dalhousie University (Halifax, Canada); (2) Dalhousie University, Centre for Learning and Teaching (Halifax, Canada)

Find a common passion, preferably with someone outside your discipline. Mix a commitment to meet together regularly with a willingness to explore ideas, and the resulting dialogue can be transformative and creative for the individuals involved, as well as for their colleagues and students. Rooted in our own and others' experiences, and in the literature, we propose a framework for dialogue in academe as a means to think creatively together.

Our framework is informed by the literature that highlights the value of dialogue, community, creativity and the birth of new ideas, and rooted in our own experience of the power of dialogue to affect change in our teaching practice and consequently, in our students' learning. In a dialogue there is openness: a "thinking together" that moves beyond an exchange of ideas to a co-creation of new ideas. Dialogue as a form of open thinking-together is addressed in detail by Isaacs (Dialogue and the Art of Thinking Together, 1999) and Bohm (On Dialogue, 2004), and is an aspect of academia that many long for, but few find (Kraft, Teaching Excellence and the Inner Life of Faculty, 2000). Glaveanu (Paradigms in the Study of Creativity, 2009) suggests we should "…build spaces for dialogue and creativity for both self and others", and addresses the social nature of creativity. Cikszentmihalyi (Creativity: Flow and the Psychology of Discovery and Invention, 1996) and Sawyer (Creative Teaching, 2004; Education for Innovation, 2006) similarly stress how conversations involving a thinking-together ultimately lead to creativity. Our own conversations have led to thinking in directions that our solo thinking would never have taken us and to sustaining the passion that originally set us on the journey to dialogue. The coming together of different worldviews expands our understanding of our own discipline as we start to see it from a new perspective.

Our framework is also grounded in our experience of integrating these key components of dialogue in our work with others. As Palmer (The Heart of Higher Education, 2010) notes: "… the power of a transformative conversation (is) to spread ripples far beyond the first stone dropped into the pond…." We have melded approaches to our own dialogues into our work with groups of faculty who are exploring their own teaching development. We have enriched our classrooms by incorporating conversation into our interactions with students, in seminars and in lectures. This approach is supported by the work of Sawyer (2006), who speaks to the concept of "disciplined improvisation" in which a collaborative exchange allows for nurturing creativity. Wegerif (Reasoning and Creativity in Classroom Dialogues, 2005) similarly contends that providing an underlying structure to classroom dialogue leads to verbal creativity and creative problem-solving. We further clarify this rooted-in-practice framework by sharing our preliminary research findings based on interviews with other faculty who engage in teaching and learning dialogues. We posit that new and creative ideas and ways of thinking coming from such dialogue can permeate and transform faculty teaching and students' learning, if we are explicit about this process.

6:00 PM | Room 2000CD | Inquiry into teaching practices

PS30 CREATIVITY ASSESSMENT, AN ARCHITECTURAL DESIGN PROFESSOR'S TACIT SKILL

Poster Session

Claudia Enrech (1)
(1) Ecole nationale supérieure d'architecture de Lyon (Vaulx-en-Velin, France)

The main objective of this study is to reveal how, in French architectural education, the role played by student creativity is primarily a tacit expectation during their five years of training. Consequently, the assessment of creativity becomes a tacit skill for

professors of architectural design. This situation produces frustration on both sides -- among students and teachers. However, imagining new/original spatial ideas and resolving contemporary urban problems (with, in addition to several rational parameters, an esthetic focus) are evidently creative issues. In order to enhance architectural design instructors' professional specificities and skills, it seems crucial to explore the nature of this creative expectation, as well as to guide professors in the field on how they might best clarify the assessment criteria they apply in considering creativity.

The architectural design studio is central to architectural training during the five years leading to the diploma in architecture (required in France, by decree). The main stages of this learning model, the "studio" (or famous "atelier de projet"), scarcely vary during the 10 semesters of the program, the most common variables being the duration of the activity, project location, the scales used, the documents and models required, the references from the teachers in the program). Studio projects almost always end with students presenting their productions for a final evaluation by jury. . Often, after the evaluation, students express dissatisfaction about the way their productions were assessed and the results they achieved. And teachers express disappointment about the "quality" of student productions. Clearly, there seems to be what Mr. Biggs would call a "constructive alignment" problem.

Certainly, one difficulty lies in the definition of "creativity." We have collected over a hundred of them! There are also innumerable fields of application of the concept.

In this poster, after having analyzed many definitions, we propose two major conceptions of creativity, as applied to the architectural and urban field. We then present the results of interviews with architectural design professors (from the beginning and end of the architecture studies cycle) from two French schools of architecture (Nantes and Lyon) and examine their reactions to our proposed approach to creativity.

6:00 PM | **Room 2000CD** | **Leadership, academic development and SoTL**

PS31 THINKING ABOUT FACULTY MENTORING WITHIN A COMMUNITY OF PRACTICE MODEL

Poster Session

Patricia Calderwood (1), Emily Smith (1), Paula Gill Lopez (1), Faith-Anne Dohm (1)
(1) Fairfield University (Fairfield, United States)

In higher education settings, when people think of mentoring configurations, they most frequently call up the dyadic model, that of an experienced senior colleague guiding a less-experienced colleague. A second mentoring configuration, mentoring networks, extends the dyadic model toward mentoring that is distributed within a network, where colleagues seek or give focused mentoring specific to a context. A third mentoring configuration is co-mentoring, which features collaboration, responsiveness, reciprocity and inclusiveness. Dyadic, networked and co-mentoring in higher education have been extensively studied (Luna & Cullen, 1995; Sorcinelli & Yun, 2007; Yee & Hargis, 2012; Zachary, 2005; Zellers, Howard, & Barcic, 2008).

We present a model for faculty mentoring that emerged from the practical and conceptual dilemmas we faced as members of an elected committee trying to facilitate mentoring within a professional graduate school (Authors, 2013). We wrestled with several dilemmas as we attempted to formalize the mentoring interactions that support faculty development: How do we institutionalize voluntary and spontaneous mentoring interaction? How do we support a collaborative climate in an inherently individual and competitive reward system? How do we design for trust? Our questions, struggles, and reflection led us to consider the potential of faculty mentoring within a community of practice (CoP) model (Lave & Wenger, 1991). In this poster, we highlight the ways in which three mentoring modes co-exist within a Community of Practice (CoP) framework. In particular, we explore how multiple mentoring relationships and configurations arise organically during shared activity, where participants mentor and are mentored, and where mentoring is a signature practice and primary mechanism for learning the CoP's practices. This model puts our shared engagement in practice, rather than individual actions, at the center of faculty mentoring and development. The model

also demands consideration of and investment in managing challenges of accessibility and equity with regard to mentoring participation within the CoP. Finally, our poster highlights and maps our current participation in mentoring communities of practice as faculty and faculty administrators (new faculty mentors, facilitators of co-mentoring learning communities, department chairs, associate dean/dean, and director of a CTL).

References

Authors (2013).
Luna, G. & Cullen, D. (1995). Empowering the faculty: Mentoring redirected and renewed. ASHE-ERIC Higher Education Report No. 3.Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
Lave, J., & Wenger, E. (1991). Situated Learning. Cambridge: Cambridge UP.
Sorcinelli, M. D., & Yun, J. (2007). From mentor to mentoring networks: Mentoring in the new academy. Change, 39(6), 58-61.
Strauss, A. & Corbin, J. (1990). Basics of qualitative research: grounded theory procedures and techniques. Newbury Park: Sage Publications.
Yee, K., & Hargis, J. (2012). Indirect Faculty Development and the Role of Sociability. Journal on Centers for Teaching & Learning, 4, 61-78.
Zachary, L. J. (2005). Creating a mentoring culture: The organization's guide. Jossey Bass.
Zellers, D. F., Howard, V. H., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. Review of Educational Research, 78(3), 552-588.

6:00 PM | **Room 2000CD** | **Leadership, academic development and SoTL**

PS32

Poster Session

A TEACHING CULTURE INVENTORY TO ASSESS AND ENHANCE THE DEPARTMENTAL LEARNING SPACE

Rachel Spronken-Smith (1)
(1) University of Otago (Dunedin, New Zealand)

While much has been written about the place of good teaching in higher education, less has been written about how to develop a teaching culture within a department. Yet, as Knight and Trowler (2000) argued, unless the departmental culture promotes good teaching, there is little impetus for academics to improve their teaching. Thus we should focus on the departmental space if attempting to nurture creativity and passion in teaching and learning. Moreover, as Knight and Trowler proposed, we should target the leaders of departments, as they are the key to improving the teaching culture. Accordingly, in my poster, I present a Teaching Culture Inventory that is designed to assist departmental leaders to take stock of their teaching culture. The Teaching Culture Inventory comprises a checklist of 60 items that are clustered into nine categories: planning for teaching; articulation of graduate profiles and graduate attributes; providing a supportive environment for student learning; fostering close research-teaching links; providing rich and diverse educational opportunities; using technology wisely in teaching; promotion of the scholarship of teaching and learning; quality assurance and quality enhancement of teaching; and professional development for teaching. The Teaching Culture Inventory aims to promote reflection on the departmental teaching culture. Through this tool, it is hoped that departmental leaders are better placed to improve student learning in their departments. The inventory has been used in a leadership programme with Heads of Department and feedback has been very positive. In discussing the Teaching Culture Inventory with the ISSOTL audience, I hope to further refine the inventory.

Knight, P. T. and Trowler, P. (2000) Department-level cultures and the improvement of learning and teaching, Studies in Higher Education, 25, 1, 69-83.

6:00 PM | Room 2000CD | Leadership, academic development and SoTL

PS33 BL4ED: UPTAKE AND OUTCOMES AT A RESEARCH-INTENSIVE INSTITUTION

Poster Session

Geneviève Maheux-Pelletier (1), Natasja Saranchuk (1)
(1) University of Alberta (Edmoton, Canada)

The current study aims at exploring the potential of blended learning for educational development (BL4ED) in a pre-test, post-test design that evaluates the effectiveness of a blended learning series on course design offered to teaching staff at a large Western Canadian university. The results will be interpreted using Kirkpatrick's model (1994) for evaluating educational outcomes to critically observe outcomes attributable to an instructional development program.

The literature on educational development (ED) reports that ED programs generally yield positive outcomes, in particular high overall satisfaction and self-reported positive changes in attitudes and behaviours when programs are immediately relevant and practical (Steinert et al. 2006). However, stand-alone workshops are not the most effective in triggering change. Instead, Gibbs (2013) and Steinert et al. (2006) propose that intensive or extended programs that encompass strategies such as self-directed learning are more likely to induce a paradigm shift from teacher-centred to student-focused approaches to learning.

One possible way to reconsider ED programs for self-regulated learning is to go blended, i.e., to "substitute online learning for a portion of the traditional face-to-face instructional time" (Owsten et al. 2013: 38). As Dzuiban et al. (2004) suggest, blended learning (BL) can bring "genuine transformation within the academy" (8) as it forces institutions to rethink space and time boundaries, funding and organizational strategies while also altering learning approaches and intellectual activities. Instructors who experience the benefits of BL as learners may become keen BL adopters for their own teaching, hence serving as active agents in transforming the learning environment for all.

The series is offered in the spring 2014 to the teaching staff of a large Western Canadian university. All 31 self-selected workshop participants agreed to take part in the study. They participate in an 8-hour learning series over a four-week period, consisting of three 90-minute face-to-face sessions each preceded by 60 to 75 minutes of online and self-directed activities (lecture captures, videos, reflections and design activities). For the pre-test, participants filled out a survey about their teaching experience as well as the Approaches to Teaching Inventory (ATI; Trigwell, Prosser & Taylor 1996). For immediate and delayed post-tests, participants will fill out the ATI again, a questionnaire to self-report achievement on the learning outcomes set for the learning series, and questions measuring changes in beliefs, attitudes & behaviours as a result of the learning series (adapted from Cilliers & Herman, 2010).

This study will inform educational developers about the potential of BL4ED at a research-intensive institution and address the lack of systematic evaluation of ED activities in higher education reported by many scholars in the last decade (e.g., Bamber 2008; Cilliers & Harman 2010, Gosling 2008, Prebble et al. 2004, Steinert et al. 2006, Stes et al. 2010, Stes et al. 2012).

6:00 PM | Room 2000CD | Leadership, academic development and SoTL

PS34 ENABLING THE CULTURE AND PRACTICE OF APPLIED RESEARCH AT SELKIRK COLLEGE

Poster Session

Shannon Lanctot-Shah (1), Susan Hackett (1), Theresa Southam (1)
(1) Selkirk College (Castlegar, Canada)

Background: Conducting Applied Research (AR) at Selkirk College is a valuable experience for faculty, students, Selkirk College and the area we serve. In 2012 an anonymous, electronic survey was administered, inviting all teaching staff at Selkirk College

to describe the facilitating factors and barriers to development of their scholarship was administered. The AR project, developed based on the survey feedback and in collaboration with the Selkirk College Teaching and Learning Institute (T&L), has developed an Innovative Grant fund. This fund allows research teams to apply for funding and then engage in a year of workshops and supports designed to foster increased applied research.

Literature Review: Donnermeyer (2008), noted that educational institutions of all sizes have a wealth of knowledgeable human resources who are often deeply entrenched in their day-to-day teaching responsibilities and need support to join together and create multidisciplinary teams. Cox (2004) supports the need to build faculty learning community programs that invite everyone - faculty, community members, and students - to participate. Adopting a broader understanding of scholarship such as Boyer's Model and incorporating AR into the work of college teachers facilitates the development of teaching and learning skills (Gump, 2006).

Method: This mixed methods research project collected quantitative and qualitative data. Ethics approval and consent to participate in the study was obtained. A needs assessment and evaluation of the grant application process was conducted. A series of four workshops were offered. Following each workshop, participants provided feedback and helped to guide the next steps of the project, based on the need to support their individual projects.

Data Analysis: The final data consolidation and members' participation will be gathered via a face-to-face focus group and world cafe style data analysis following the project presentations in November 2014. Data from the 2012 survey to the September 2014 workshop will be included.

Discussion: Conducting AR in a small rural college has unique challenges and requires supports from a number of key avenues. Traditional methods of conducting research at a university with access to large grants and resources are not readily available. However, with dedicated and engaged teachers and a creative approach to moving resources and facilitating knowledge exchange, these barriers can be addressed and excellent work can be generated.

Next steps: The key to this project is to determine a sustainable program that can buildon learning and facilitate more interest in AR. A summative evaluation of the entire AR project will help to clarify and identify areas for improvement and growth. Knowledge translation of this project will assist other similar organizations to move forward in this valuable and rewarding field of professional development.

6:00 PM | Room 2000CD | New and diverse contexts for SoTL

PS35 THE ROMANTIC ARC: INTERSECTIONS OF TEACHING, LEARNING AND COMMUNITY SERVICE

Poster Session

Stephanie Storms (1), Patricia Calderwood (1), Melissa Quan (1)
(1) Fairfield University (Fairfield, United States)

This poster invites examination of intersections of pedagogical creativity and student learning outcomes arising from an undergraduate service-learning course in which students examined the social construction of schooling, teaching and learning, assisted student learning in a high need urban school, and engaged in the process of discerning whether to pursue a career in education.

We draw on the principles of SoTL (Potter & Kustra, 2011), community engagement and critical service learning (Clayton et al., 2010; Mitchell, 2008), and liminality (Cook-Sather, 2006) to interrogate our teaching and students' learning. Our reflections are anchored in participant observation, grounded theory and upon the principles of participatory action research. We reviewed our

bi-located pedagogical and logistical decisions and activities, course syllabi, and data generated from 5 sections of the course between September 2011 and June 2013 (including 100 service learning surveys, approximately 400 discussion postings, and 100 final exam papers).

Findings

The embedding of service learning into what, to our students, seemed like authentic professional work, influenced both our teaching, and learning outcomes for the undergraduates. Service learning influenced teaching design and implementation, becoming the living "text" of the course, necessitating creative changes in the course design, dual locales, learning activities and assessments, and our passion for and commitment to transformative and socially just education. Learning outcomes for our students were complex. Civic awareness and engagement increased for many, but not all. Emerging awareness of social justice issues generated romanticized rationalizations that ranged from entrenchment of preconceptions and biases toward solidarity with school staff, students and families. Our students struggled with understandings of self and diverse others as they developed a more nuanced understanding of teaching and learning, of human diversity, and of the value of community engagement. For some, a career as an educator grew in appeal, and for several of these, a vocation to work in that community and with students like those in the school blossomed. Other students, however, ended the experience certain that this was not their path. Many initial conceptions, mediated by the service learning, were reinforced through romantization of evidence coupled with experience. This either supported previous positive conceptions, contributing to an intensified idealized romance, or finessed contradictions so that the school, and the students' experiences, were identified as exceptions that stood apart, allowing a romantic idealization to co-exist with conflicting preconceptions.

References

Clayton, P. H., Bringle, R. G., Senor, B., Huq, J., & Morrison, M. (2010). Differentiating and assessing relationships in service-learning and civic engagement: Exploitative, transactional, or transformational. Michigan Journal of Community Service Learning, 16(2).

Cook-Sather, A. (2006). Newly betwixt and between: revising liminality in the context of a teacher preparation program. Anthropology & Education Quarterly, 37, 110-127.

Mitchell, T. D. (2008). Traditional vs. critical service-learning: Engaging the literature to differentiate two models. Michigan Journal of Community Service Learning, 14(2) 50-65.

Potter, M. & Kustra, E. (2011). The relationship between scholarly teaching and SoTL: Models, distinctions, and clarifications. International Journal for the Scholarship of Teaching and Learning, 5(1), Article 23.

6:00 PM | Room 2000CD | New and diverse contexts for SoTL

PS36 CTL AS COMMUNITY OF PRACTICE FOR FACULTY DEVELOPMENT: A CASE STUDY OF MENTORING

Poster Session

Patricia Calderwood (1), Suzanna Klaf (1)
(1) Fairfield University (Fairfield, United States)

Centers for Teaching and Learning (CTL), localized communities of practice for faculty development, help faculty to become more expert in teaching, and to become scholars of their own teaching and learning (Amundsen & Wilson, 2012; Green & Little, 2013; Sorcinelli & Yun, 2007; Zachary, 2005; Zellers, Howard & Barcic, 2008). As a case study, we analyzed our CTL activity to discern

if it fits a model of integrated mentoring within a community of practice ((Lave & Wenger, 1991; Smith, Calderwood, Dohm & Gill Lopez, 2013). We incorporated a qualitative approach to support grounded theory building including content analysis of center databases, documents and artifacts, surveys and participant observation. We then examined selected examples of the Center's formal and informal activities from July 2012 through December 2013 in light of the challenges and suggestions noted by Smith et al. (2013).

Findings

We discovered that the Center's signature activities (workshops, consultations, learning communities, collaborations) prompted dyadic mentoring, made multiple existing and potential mentoring networks visible and accessible, and catalyzed co-mentoring, cutting across three distinct models of faculty work. We learned that our faculty sought common ground, along with the knowledge infusion and skill building that was the primary purpose of their participation. The opportunity to engage together in authentic work holds great appeal. From this we learn that the shared, authentic activities that prompt co-mentoring can be leveraged through strategic design and outreach to serve this desire for the commons. When we consider co-mentoring's role in our sustained learning communities, we find significant value-added for our participants. We have learned that conceptualizing our Center as a mentoring community of practice is efficient and economical enough for a small staff to manage. It respects and celebrates our faculty and professional staff, interrupting the expert/novice divides, and breaks down some of the barriers between staff and faculty roles. Understanding that we are constructing a shared practice together, from the ground up, positions our Center as deeply connected to faculty work, rather than as an ancillary service provider. This is sustainable.

References

Amundsen, C. & Wilson, M. (2012). Are we asking the right questions? A conceptual review of the educational development literature in higher education. Review of Educational Research, 82(1), 90–126.
Green, D. A., & Little, D. (2013). Academic development on the margins. Studies in Higher Education, 38(4), 523-537.
Lave, J., & Wenger, E. (1991). Situated Learning. Cambridge: Cambridge UP.
Smith, E. R., Calderwood, P. E., Dohm, F. & Gill Lopez, P. (2013). Reconceptualizing Faculty Mentoring Within a Community of Practice Framework. Mentoring and Tutoring: Partnership in Learning, 21(2), 175-194.
Sorcinelli, M. D., & Yun, J. (2007). From mentor to mentoring networks: Mentoring in the new academy. Change, 39(6), 58-61.
Zachary, L. J. (2005). Creating a mentoring culture: The organization's guide. Jossey Bass.
Zellers, D. F., Howard, V. H., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. Review of Educational Research, 78(3), 552-588.

6:00 PM | **Room 2000CD** | **New and diverse contexts for SoTL**

PS37

Poster Session

CREATIVE APPROACHES TO NURTURING PASSION AND DIVERGENT THINKING AMONG GRADUATE STUDENTS RESEARCHING ECOSYSTEMS, SOCIETY AND HEALTH: COPEH-CANADA ECOHEALTH FIELD SCHOOLS

Maya K Gislason (1), Donald C Cole (2), Kaileah McKellar (3), Nancy Labonte (4), Margot Parkes (5), Johanne St.Charles (4), Research & Evaluation Team (6)
(1) University of Northern British Columbia, School of Health Sciences (Prince George, Canada); (2) Dalla Lana School of Public Health, University of Toronto (Toronto, Canada); (3) Institute for Health Policy, Management and Evaluation; University of Toronto (Toronto, Canada); (4) UQAM (Montreal, Canada); (5) UNBC (Prince George, Canada); (6) CoPEH-Canada (Prince George, Canada)

Since 2008, the Canadian Community of Practice in Ecosystem Approaches to Health has convened a EcoHealth courses at one of its three nodes (Western Canada, Ontario, or Québec-Atlantique-Acadie). Matured into a nine-day field school primarily with graduate students, the courses are guided by a specialized resource manual, include a variety of outdoor activities, take place in diverse ecosystems and involve a range of social actors (McCullagh et al 2012). Graduate students come to "ecohealth" with a mix of passions, ranging from earth centred stewardship, through political ecology to environmental justice and social and health equity. Our pedagogical challenge is to foster confidence and creativity in using trans-disciplinary systems approaches to understanding sets of interrelationships both within and across ecosystems, society and health. Our aim in this paper is to showcase this new context for capacity building, highlighting participants' perspectives on fostering creativity and passion.

Each year teaching team members and alumni answer short-term surveys conducted after the courses, which include both closed and open-ended questions. We extracted narrative responses under four key themes: 1) Being passionate about making a difference; 2) Enhancing creativity; 3) Fostering communication; and 4) Valuing safety, surprise and curiosity. For example, faculty spoke about awakening passion for learning about ecosystems, society and health by offering concrete examples of how students can make a difference by linking with a variety of social actors:

"The stakeholder meeting … was a pinnacle for me. There was a palpable transfer of power from academics (and students in academia) to the general group, to many more voices. It had a passion and real-ness that was unmatched in any other part of the course..." [Teaching team member].

Student's noted that course participation enhanced their theoretical and methodological creativity:

"The process of conducting the case study was a fantastic and integral part of the course. The recognition of the difficulties you face when trying to implement the theory was an excellent grounding and served to emphasize the need for flexibility and creativity in this type of approach." [Q 9a Student].

Students also identified a communication session as key to developing better communication skills within a highly novel, trans-disciplinary learning environment, pushing them to 'think outside the box'. Links among safety, surprise and curiosity within the learning environment were also highlighted; as one student observed, the course maintained a relaxed feel, despite the intensive course structure. Student creativity, curiosity, and positivity were also welcome surprises identified by faculty.

In this trans-university context, ecohealth courses have been deemed by teachers and students as successful in part because they channel passion, foster trans-disciplinarity and stimulate creativity among participants, through linking knowledge and action in the field.

McCullagh S, Hunter B, Houle K, Massey C, Waltner-Toews D, Lemire M, Saint-Charles J, Surette C, Webb J, Beck L, Parkes M, Woollard R, Berbés-Blázquez M, Feagan, Halpenny C, Harper S, Oestreicher S, Morrison, K (Eds.) (2012). Ecosystem Approaches to Health Teaching Manual. Canadian Community of Practice in Ecosystem Approaches to Health. Available at www.copeh-canada.org

6:00 PM | Room 2000CD | New and diverse contexts for SoTL

PS38 DESIGNING AN INTERPROFESSIONAL CONTINUING EDUCATION SESSION TO REDUCE MEDICATION LOAD FOR LONG TERM CARE RESIDENTS WITH ADVANCED DEMENTIA: OPTIMAMED

Poster Session

Edeltraut Kröger (1), Machelle Wilchesky (2), Marcel Arcand (3), Michèle Aubin (1), Nathalie Champoux (4), Pierre Durand (5), Anik Giguère (1), Michèle Morin (1), Philippe Voyer (1), René Verreault (1)
(1) Université Laval (Quebec, Canada); (2) McGill University (Montreal, Canada); (3) Université de Sherbrooke (Sherbrooke, Canada); (4) Université de Montréal (Montreal, Canada); (5) Université Laval (Quebec, Canada)

Background: Successful interventions to advance health care practices are mainly based on educational approaches geared towards health care professionals. Seniors with advanced dementia in nursing homes (NH) receive large amounts of medication. With disease progression, care goals shift from curative or preventive care to comfort care. In these circumstances, medication needs to be reviewed, adjusted or possibly discontinued because of changes in the benefit-risk ratio and reduced life-expectancy. Limited research exists on the subject of which previously appropriate medication may no longer be of benefit to these seniors or on approaches that would optimise choices for the most appropriate medication. According to a scoping review of the literature, effective approaches to address this problem need to be based on improved inter-professional collaboration between physicians, pharmacists, nurses and patients or their families.

Objectives: To develop an inter-professional continuing education (CE) model for action based on a custom-designed instrument to optimise choices around the appropriate use of medication for NH residents with advanced dementia.

Methods: Using our scoping literature review to identify criteria indicating which medication is appropriate for NH residents with advanced dementia and on the consequent successful approaches or choices made in this regard, lists of always appropriate, sometimes appropriate, rarely appropriate or never appropriate medication and characteristics of successful approaches were drawn up. A Delphi panel was convened, comprised of 3 physicians, 3 geriatricians, 3 pharmacists, 3 nurses, 2 social workers and an ethicist, all with experience in working with NH residents in Quebec. The Delphi results and inter-professional consultations were used to develop a custom-designed instrument to guide choices for medication; this instrument now constitutes the basis of an inter-professional CE model. Results from a survey on health care professionals' needs for CE were used in the development of the CE model.

Results: Consultation of the Delphi panel led to the elimination of the "never appropriate" category. Agreement between panelists about the suggested medication lists and approaches to use was high (81 % to 95 %). The lists allowed us to develop a nine page guide in collaboration with health care professionals targeted by this new source of information.

Conclusions: The French language instrument is currently being tested as part of a pilot study comprising six inter-professional and interactive CE sessions (physicians, pharmacists and nurses) in three Quebec Nursing Homes.

6:00 PM | Room 2000CD | SoTL and institutional cultures

PS39 RURAL NURSE EDUCATORS FACE THE CHALLENGE OF SCHOLARSHIP

Poster Session

Susan Hackett (1), Shannon Lanctot-Shah (1)
(1) Selkirk College (Castlegar, Canada)

Background: A component of the Canadian Association of Schools of Nursing (CASN) accreditation expectation includes demonstration of scholarship. Scholarship is required in all four domains – discovery, teaching, integration and application (CASN, 2013). In 2010/11 the faculty at a small rural college intentionally addressed understanding and developing a culture of scholarship. A Scholarship Development Facilitator was hired to conduct a needs assessment and support faculty in their scholarship development.

Literature Review: Scholarship has historically been placed in the university milieu and defined by the predominant tenure-track requirements for published research. Transition within nursing academia has led to the redefinition of scholarship to include a multidimensional view. College nurse educators have been traditionally recruited because of their practice expertise. They are often unfamiliar with how to engage in the multiple dimensions of academic scholarship. High workloads and a sense of feeling overwhelmed are commonly reported barriers to scholarship development.

Method: A qualitative descriptive approach asked the following questions in focus groups:
1. What were the participants' day-to-day lived experiences in scholarship development?
2. What challenges have they encountered?
3. What factors have facilitated their attempts to enhance their capacity for scholarship?

In 2014 a follow-up survey will be conducted to identify current facilitating factors and challenges in faculty development of scholarship.

Data analysis: From the initial four focus groups, narrative data was analyzed. Five prominent themes emerged:
1. Understanding what scholarship is;
2. Evolution of the culture of scholarship;
3. The balancing act;
4. Scarcity of resources other than time; and
5. Resources, relationships and rewards.

Discussion: Participants describe the tension that exists between the desire to conduct scholarship and the elusive quality of time available to achieve this goal. They describe the balancing act of scholarship, regular workloads, and family/personal life. Both faculty and college administration have an important role in advancing scholarship development by recognizing its importance, then minimizing challenges and enhancing facilitating factors.

Recommendations: Designated blocks of time within workload assignments; articulating scholarship expectations upon employment and as part of regular faculty performance appraisals; establishing mentorship and group partnerships; and recognition and rewards of scholarship accomplishments are all essential elements of scholarship development.

Recognition of the value of a follow-up survey with the nursing faculty in two or three years to discover what the current culture of scholarship is was identified by the research team. The survey will be conducted in spring 2014 and analysis of survey results will be completed in fall 2014.

6:00 PM | Room 2000CD | SoTL and institutional cultures

PS40 INTERNATIONAL SERVICE LEARNING: FACULTY AND INSTITUTIONAL INVOLVEMENT

Poster Session

Phillip Motley (1)
(1) Elon University (Elon, United States)

Many higher education institutions promote service-learning and study abroad as meaningful experiential learning opportunities for their students. Some universities have significant institutional cultures of both. However, the combination of the two pedagogies — in the form of international or away service-learning — seems to occur less frequently. While service-learning and study abroad have been widely studied, international service-learning is somewhat less explored (Jones, Kamela and Peeks, 2011). This poster will focus on efforts being made at one small liberal arts university to find ways for greater involvement in international service-learning.

Service-learning can be effective at providing students with opportunities to work for a real community partner on authentic tasks in authentic environments (Author, 2013). Service-learning is an experiential learning pedagogy that can help students relate what they're learning in class to issues they will likely face in real-world professional situations (Goldberg, Richburg, & Wood, 2006). By allowing students to work with an authentic community partner, they are provided the chance to work on a meaningful task, where success or failure can have implications beyond grades, and to appreciate common aspects of professional work. (Author, 2013). Service-learning gives students the chance to work in situations that are often ill-defined, messy, logistically challenging, and yet authentic. Conversely, traditional classroom-based courses can be difficult environments in which to simulate this type of learning (Richter-Hauk & Arias, 2008).

In many ways, international service-learning merges the best of both study abroad — students experiencing different cultures (people, customs, language, food, etc.) — with the applied, authentic nature of service-learning. This approach can provide students with the chance to learn disciplinary knowledge in a hands-on manner and also create possibilities for inter-cultural learning including issues of language, community, human rights, citizenship, social responsibility, diversity and social justice (McEachron and Ghosh, 2011). International service-learning also offers students the chance to learn in a highly immersive context where students can intensely focus on the information being presented AND the context in which that subject matter is being experienced.

This poster will briefly summarize the international service-learning literature to address the theoretical nature of international service-learning in relation to other forms of experiential learning, mainly in contrast to local or regional service-learning. The second part of the presentation will summarize the views of faculty that are currently doing international service-learning work at one institution. Interviews with faculty and staff have been conducted with questions such as the following: What do you want students to learn and accomplish via service-learning in general? Do you view international service-learning as being distinctly different from locally based service-learning, and, if so, how? Do you believe your institution should be more actively involved in international service-learning and why or why not? What are your views in terms of the costs and benefits associated with international service-learning? What do you perceive as being the challenges that might prevent other faculty from pursuing international service-learning?

6:00 PM | Room 2000CD | SoTL and the changing landscape of higher education

PS41

Poster Session

PHD BY PUBLISHED WORK: ACADEMIC STAFF REFLECTING ON HOW TO HIGHLIGHT THE CREATIVITY AND ORIGINALITY IN SYNTHESES OF THEIR WORKS

Susan Smith (1)
(1) Leeds Metropolitan University (Leeds, United Kingdom)

The growing diversity of doctoral programmes within a globalised higher education environment contributes to knowledge and enhances innovation and creativity. (Halse and Malfoy, 2010; Lee, 2011). Diversity in doctoral education is part of wider changes in higher education across the globe that has moved from an elite system with few participants to a mass system, "massification" (Sankey and St. Hill, 2009).

Indeed, more teachers who work in Higher Education both in the UK and internationally are being required to have a PhD and there has been a subsequent expansion in enrolments. (Watts, 2012, p.1101). In parts of Europe, Scandinavia, South Africa and New Zealand this is a popular route, but in the UK the numbers are still relatively small.

Many staff who have worked without a PhD in Universities in the UK for many years are now being encouraged to enrol for a PhD by published works. This PhD by publication/by existing published works award allows academic staff who have published regularly in the public domain to use their peer reviewed writing for a PhD award.

This approach encourages staff to write new work around a coherent theme or review existing work (often written over many years) which may have been written on a particular subject or around a specific theme. In addition, candidates have to write a "reflective piece" or a "synthesis" of usually about 10,000-15,000 words which reflects their originality, coherence and connectivity and their contribution to knowledge in their subject area. It is the synthesis that is examined in a viva with a panel of internal and external examiners.

Focus groups of existing internal candidates (n=8) and an e-mail survey of 20 UK and international candidates for this route adopted a qualitative approach and concentrated on a range of issues which explored candidates' experiences and challenges in undertaking this route, both retrospectively or ab initio. Thematic content analysis of the transcripts and surveys generated some key emergent issues which explored experiences and consistency of practice. These related specifically to how candidates can enhance the creativity and originality of their synthesis and develop connectivity in their published work. The findings also reveal how the candidates can best be supported in their paper writing and synthesis writing.

This poster outlines their suggestions to i) enhance creative thinking and theme generation for synthesis writing ii) enhance the originality of their synthesis by drawing out particular elements from their published work iii) maximise the opportunity for using support networks (specifically writing groups) to share ideas, enhance their inquiry skills, and problem solve around theoretical and practical ideas for exciting and excellent academic writing and the subsequent demonstration of this in the viva.

Focus group participants reflected on how they could then enhance problem solving and innovation in their subject and embed it in their practice with their students and how this, in turn, impacted on their future teaching, their own learning and scholarly activity and how best they could be supported to ensure they successfully achieve the award.

6:00 PM | Room 2000CD | SoTL and the changing landscape of higher education

PS42 INQUIRY BASED PRACTICES IN TEACHER EDUCATION

Poster Session

Andrea Webb (1)
(1) University of British Columbia (Vancouver, Canada)

Research universities around the world are increasingly drawing upon experienced practitioners in professional fields as adjunct faculty to deliver student-learning experiences in diverse undergraduate and graduate program contexts. Adjunct teaching faculty provide the benefits of being immersed in the realities of practice, offer unique and rich insights into expertise and experience from the field, build valuable community partnerships with the university, and offer a cost-effective resource while freeing up many faculty members for research endeavors. Adjunct teaching faculty, while expert practitioners in the field, are not necessarily expert teachers in a research-intensive university environment. This poster will explore the development and impact of a strategic professional development initiative for adjunct teaching faculty in the Faculty of Education at a research-intensive university in Canada.

A substantive portion of the Bachelor of Education program is taught by adjunct teaching faculty who are seconded to the university for three to five days a week for approximately three years in duration. Heavy workloads (including responsibilities in their home districts) and limited available time create significant challenges for these practitioners to engage in formal professional development. In response to the demand, the Faculty of Education has supported a cohort-based program developed specifically for the seconded and sessional instructors. This three-year program seeks to create a supportive community in which adjunct teaching professors engage in inquiry into their teaching and learning practice through scheduled bi-monthly cohort meetings and a series of collaborative and independent development focused tasks. Using feedback from presentations, participant observation of and reflection on cohort meetings, and interviews with cohort participants, this project investigates to what extent inquiry based practices in teacher education have impacted the pedagogical practice of adjunct teaching professors in the Faculty of Education. Drawing upon the literature of self-study in Teacher Education (Alderton, 2008; Barak et al, 2010; Bullough & Pinnegar, 2001; Clarke & Erickson, 2007; Craig, 2009; Jasman, 2010; LaBosky, 2007; Pinnegar & Hamilton, 2011; Williams & Ritter, 2010) and autobiographical research in the Scholarship of Teaching and Learning (Duarte, 2007), the poster will include an explanation of the program, description of the participant's inquiry projects, discussion and reflection on the ongoing program.

My research and practical experiences with adjunct teaching faculty suggest that scholarly approaches to teaching and learning through a purpose-built professional development program creates connections with peers which helps to prevent professional isolation, build resilience, improve student learning experiences, and sustain partnerships between the university and the seconded faculty. This poster will be of interest to those involved with practioners working in higher education, adjunct teaching faculty, teacher education for university-based faculty, and researchers, providing insight into inquiry by faculty members and its potential impact on professional programs.

6:00 PM | Room 2000CD | SoTL and the changing landscape of higher education

PS43 DEEP VERSUS SURFACE LEARNING IN BLENDED AND FACE-TO-FACE LEARNING FORMATS

Poster Session

Jayanti Ray (1)
(1) Southeast Missouri State University (Cape Girardeau, United States)

Students who take a deeper approach to learning use many strategies in order to understand the concepts. They actively engage in understanding the content, relating ideas to one another, making use of scientific inquiry methods, and motivating themselves to test new ideas. On the other hand, students who engage in surface learning try to learn using repetition, rote learning, and memorization (Chin & Brown, 2000; Weimer, 2012). A wide plethora of cognitive/metacognitive strategies are employed by students to master complex concepts in health-care professions; however, little data exists regarding the efficacy of these strategies in enhancing student learning outcomes pertaining to surface versus deep learning. Teaching and learning behaviors in two different class formats may help analyze and understand how complex clinical concepts can be taught strategically to graduate students while engaging them with the content appropriately (Hay, 2007).

Given the paucity of research in teaching and learning in the field of communication disorders, the purpose of this quantitative-qualitative study was to explore the efficacy of blended course design in terms of evaluation of deep versus surface learning in graduate students. The current study was also intended to test the hypothesis as to whether graduate students enrolled in a blended class are likely to employ cognitive and metacognitive strategies similar to those used by students in a face-to-face class.

All of the students in class were expected to volunteer in the project as a part of the course offering. Fifteen graduate students were recruited from the blended graduate class (Craniofacial Anomalies). Fifteen participants from the face-to-face class taught during the previous year participated in the study. Data included multiple-choice questions that served as pre- and post-tests. After completing the modules on genetics, embryology, and craniofacial syndromes, students were asked to complete short quizzes and two brief case reports. Five participants from each cohort were randomly chosen and were asked to participate in a focus group discussion on the format of delivery of course materials as well as specific content.

Results indicated that the participants in the blended course scored higher than those in the face-to-face class. Based on the content analysis of responses to two comprehensive case studies, the answers of students in the blended course were qualitatively better than the face-to-face group. The blended class format was well received by students who particularly liked the organized slides and multimedia presentations. The students in the blended course outperformed the students in the face-to-face group in their analysis of information given to them for making clinical judgments, evaluations, and comparisons. The case reports were almost the same between the two groups based on content analysis. An analysis of student perceptions of learning in both environments revealed that students in the blended class had minimal trouble understanding certain concepts, as compared to the face-to-face group. They were able to analyse their own learning behaviors and organize their time and effort toward learning of course materials. They were also able to provide more elaborate explanations while referring to personal experiences relevant to the contexts.

PS44 THE EPIMSI VIDEO PROJECT: USING PEER MODELS TO ILLUSTRATE EFFECTIVE INQUIRY-BASED INSTRUCTIONAL PRACTICES

Poster Session

Michelle Edgcomb Friday (1), Kelly McConnaughay (1), Sherri Morris (1), Susan Frank (1), Cindy Wurmnest (1), Kelly McConnaughay (1)
(1) Bradley University (Peoria, United States)

Transforming classroom practice to include inquiry learning approaches can be intimidating because professional development instruction does not typically include observing inquiry-based instruction in a real classroom setting, where implementation may require messy, loosely structured classroom interactions. The purpose of our study was to determine if the use of video exemplars of inquiry-based K-12 classroom instructional practices as part of a professional development program could bridge this gap and positively influence educators' use of inquiry.

Participants in our study were drawn from a pool of K-12 educators participating in various en-face professional development programs. Participants viewed the Effective Practices in Inquiry-based Science and Math Instruction (EPISMI) video series, which highlights peer models using specific inquiry-based strategies through classroom footage, teacher interviews and expert narration. A mixed-methods approach that included a quantitative, Likert-type survey and an open-response survey on inquiry teaching strategies and practices was used to address the following questions:
1. How do educators view themselves in terms of their understanding and use of inquiry-based techniques?
2. What do educators identify as barriers to the use of their preferred instructional techniques?
3. Does use of the EPISMI videos in professional development influence educators' understanding and use of inquiry?
4. Does the use of the EPISMI videos in professional development influence educators' perceptions of barriers to inquiry-based instruction?

The experience of the peer models featured in the EPISMI videos was also evaluated. Semi-structured interviews were conducted and pre- and post-video production used to address the following questions:
1. How did the process of making the video exemplars compare to the participants' expectations for the project?
2. How did the process of making the video exemplars impact the participants' views of their practice?
3. How did the process of making the video exemplars impact the participants' views of their roles in the professional development community?
4. How did the participants view the effectiveness of the video exemplars as a means of professional development?

Our results demonstrate that EPISMI resulted in two patterns of transformation, one for the peer model educators who made the videos, and one for the novice inquiry users who viewed and discussed them. By viewing the videos, the educators who were novice inquiry users saw valid role models in practice. Importantly, the peer models varied in years of teaching experience, gender, and grade level taught, thus providing multiple real life contexts for textbook concepts. The videos allowed the viewers to see the benefit of inquiry-based practices through authentic student reactions to inquiry lessons. They had the opportunity to see students in all of their busy, noisy engagement.

Participation in EPISMI resulted in affective benefits for the peer models. Being asked to join the project was a validation of their current practice and evidence of their growth as inquiry-based educators, and served as positive reinforcement to continue inquiry-based approaches as a normal part of classroom instruction. On-screen interviews challenged them to further reflect on their teaching practices and articulate their insights for the benefit of others.

6:00 PM | Room 2000CD | Theories and practices of SoTL

PS45 SCHOLARSHIP IN ACADEMIC HEALTH CAREERS – A PRACTICAL GUIDEBOOK

Poster Session

Miriam Lacasse (1)
(1) Département de médecine familiale et de médecine d'urgence, Faculté de médecine, Université Laval (Québec, Canada)

Introduction:

In academic health careers, clinical responsibilities share time with research, education and management. Health professionals and graduate students who aspire to work in a scholarship perspective in one or more of these domains often need to be guided. However, few tools are available to support scholarship in academic health careers and guide novices in this process.

Objectives:

To develop a practical guidebook intended to guide health professionals and graduate students in the preparation, achievement and dissemination of their scholarship projects.

Methods:

This guidebook is a scholarship of teaching product that summarizes many sources of information in a practical teaching tool. The first three chapters review the origins and definitions of scholarship, the different types of scholarship and its evaluation criteria. The following chapters follow Glassicks' six standards for the evaluation of scholarship and review themes such as: research question/objectives, project preparation (including literature review, ethics, methodology, project achievement, dissemination through various scholarship products and reflexive critique. Practical exercises follow most chapters and relevant references or links are provided. This guidebook was peer-reviewed by clinical teachers and educators at the local and national levels.

Results:

The guidebook was positively received by the review committee, as a "valuable tool for any clinical teacher or student aiming for an academic career […]well referenced and practical". The reviewers' suggestions led to an improved final version with a clearer structure, more examples and a professional design.

Conclusion:

This practical guidebook has become a printed and electronic book used by medical residents at Laval University in their Academic medicine elective. It might also become a core reference for the Scholarship course in the upcoming Master's program in health careers education at Laval University. It will also be distributed nationally and internationally in collaboration with the Canadian Association for Medical Education. The guidebook will therefore not only promote creativity and passion in health education, but encourage health professionals to evaluate and disseminate their work in a scholarship perspective.

6:00 PM | Room 2000CD | Theories and practices of SoTL

PS46 RESEARCH ON TEACHING AND LEARNING IN HIGHER EDUCATION: ANNOTATED LITERATURE DATABASE

Poster Session

Nicola Simmons (1)
(1) Brock University (St. Catharines, Canada)

Faculty members and academic developers use scholarship in their evidence-based practice and often refer others to appropriate literature. These practitioners and researchers are often not familiar with education research and literature and may have no point of entry for their investigations (Weimer, 2010). In addition, academics researching teaching and learning issues are expected to be conversant with significant and diverse bodies of literature – much of which they may not have read. A frequent challenge is finding 'point of entry' literature around a particular topic, for example, deep and surface learning (Entwistle, 2000; Gibbs, 2010; Ramsden, 1992; Trigwell, Prosser, & Waterhouse, 1999), that will provide a starting point for further inquiry. In addition, it can be challenging to grasp the ongoing scholarly debates in literature with which one is not yet familiar. Further, as Christensen Hughes and Mighty (2010) note, "researchers have discovered much about teaching and learning in higher education, but … dissemination and uptake of this information have been limited. As such, the impact of educational research on faculty-teaching practice and the student-learning experience has been negligible" (p. 4). Disseminating teaching and learning research in ways that connect it to practice continues to be a challenge (Poole, 2009; author*).

In order to address these challenges, the author, supported by a small grant, has begun creation of a searchable website that will outline key literature about teaching and learning in various topics. The focus of the website is to provide short summaries of key literature and resources on topics about post-secondary teaching and learning. Each entry will comprise a topic heading, a list of alternative keywords, a brief overview of the current thinking on that topic, a short list of annotated key literature, and a concise description of ongoing debates in the literature.

The website will support scholarship of teaching and learning and educational development at the local, provincial, national, and potentially international level by providing academics at all career levels, particularly newcomers, with points of entry into the literature on higher education pedagogy. It is intended to be available to university and college scholars from across all disciplines who wish to improve their practice or conduct research pertaining to these topics.

In this poster, I offer a 'show and tell' of work to date on the website and invite your recommendations for additional topics. The website is intended as an evolving tool, and I welcome contributions from others, with note of authorship on the website.

*Full references provided on poster.

DAY AT A GLANCE
FRIDAY, OCTOBER 24, 2014

7:00 - 8:30	Breakfast for all attendees - Room 2000CD					
7:00 - 8:15	SIG meeting (breakfast) **Sociology** Room 308B	SIG meeting (breakfast) **Scholarship of Leading** Room 308A	SIG meeting (breakfast) **Arts and Humanities** Room 2105			
8:30 - 10:00	**Concurrent sessions - D**					
10:00 - 10:30	Break - Hall 2000					
10:30 - 12:00	**Concurrent sessions - E**					
12:00 - 1:30	Lunch for all attendees - Room 2000CD					
12:00 - 1:30			T&L I (lunch) **Attendees - Publications Advisory Committee** Room 2105			
1:30 - 3:00	Friday plenary **Three Lessons from Educational Psychology: Spacing, Deliberate Mixed Practice, and Formative Testing** Georges Bordage, University of Illinois at Chicago - Room 2000AB					
3:00 - 3:30	Break - Hall 2000					
3:30 - 5:00	**Concurrent sessions - F**					
5:00 - 5:15	Break					
5:15 - 6:30	SIG meeting **Student Engagement** Room 308A	SIG meeting **Pedagogy and Research for Online and Blending Teaching and Learning** Room 308B	T&L I **Attendees - Publications Advisory Committee** Room 2105	**Europe ISSOTL Meeting** 309A	SIG meeting **ISSOTL in History Affiliates Group** Room 309B	SIG meeting **Students as Co-Inquirers** Room 207
6:30 - 9:00	Dinner on your own					

8:30 AM | Room 2000A | Disciplinary approaches to teaching, learning and SoTL

D01 AN ACCOUNTANT, A GEOLOGIST, AND A HISTORIAN WALK INTO A BAR. . . .DECODING DISCIPLINARY EPISTEMOLOGIES

Panel
(90 minutes)

Joan Middendorf (1), Leah Shopkow (2), David Pace (2), Jim Barnett (3), Julie Timmermans (4)
(1) Indiana University (Bloomington, United States); (2) Indiana University, Department of History (Bloomington, United States); (3) School of Accounting and Finance, University of Waterloo (Waterloo, Canada); (4) Centre for Teaching Excellence, University of Waterloo (Waterloo, Canada)

One of the reasons for founding the Scholarship of Teaching and Learning (SOTL) was to serve as a base in the disciplines and to bridge the gap between teaching and research (Boyer, 1997). Disciplinary expertise can be inaccessible; experts are good at what they do, they do it naturally, without conscious effort. Thus it can be difficult for experts to show students how to operate in their discipline. Because of the inaccessibility of disciplinary knowledge, we started practicing Decoding the Disciplines in cross-disciplinary teams. Comparing the similarities and differences across various disciplines facilitated seeing each person's epistemology -- the mechanisms of thought that produce the characteristic knowledge and meaning within a discipline. Defining the epistemology can keep instructors focused on the most essential learning in a field and has been shown to increase student learning (Shopkow, Díaz, Middendorf, & Pace, 2013).

Being creative or passionate means different things in different fields, but these, too, can be spelled out as part of the epistemology. Emotions are an important part of learning; students, "reconstruct the teacher's oftentimes invisible mental actions in their own mind," (Immordino-Yang, 2011, 101). Decoding the Disciplines begins with specific bottlenecks to learning that students must master to succeed in that discipline. The bottlenecks serve as red flags identifying where the "critical thinking" is being used by the professor, but is not being made available to the students. Bottlenecks reveal naïve ways of operating and point to what is not understood about the ways of operating in the discipline. For example, students think professional historians "study historical facts, examine historical documents and artifacts, write about historical events, solve historical mysteries and travel and discover new artifacts" (p. 25). From the expert viewpoint this "response still defaults to seeing history as a singularity, something that can be clear, rather than the rather ambiguous and contested subject historians produce" (Shopkow, 2013, p. 26). We will show how important epistemology is to SOTL and will argue why it should be moved from the periphery to become the core of teaching—as central to teaching as it is to research.

- Presenters will describe contrasting epistemologies of three fields (accounting, geology, and history);
- Videos of faculty working with these concepts and of students emerging from decoded courses will be shared;
- Participants will begin to piece together the epistemologies of their fields, working backward from the three examples provided. They will identify bottlenecks to learning across several courses, describe specifically where students go astray, and then in teams help each other begin to uncover the expert mental moves that comprise their discipline's own epistemology.

Boyer, E. L. (1997). Scholarship reconsidered: Priorities of the professoriate.

Immordino-Yang, MH (2011) Implications of affective and social neuroscience for educational theory.

Raab, T., & Frodeman, R. (2002). What is it like to be a geologist? A phenomenology of geology and its epistemological implications. Philosophy & Geography, 5(1), 69-81.

Shopkow, L. (2013) From Bottlenecks to Epistemology in History. Changing the Conversation about Higher Education (Robert Thompson, Ed.). Rowman and Littlefield.

8:30 AM | Room 2000B | Inquiry into student learning

D02 ON PEDAGOGICAL INITIATIVES, TRANSFORMATIVE LEARNING, AND LEARNING-CENTERED PARADIGMS

Panel
(90 minutes)

Jody Horn (1), Rachelle Franz (1), Ed Cunliff (1), Deborah Shinn (2)
(1) University of Central Oklahoma (Edmond, United States); (2) University of Oklahoma (Edmond, United States)

A paradigm shift to student-centered learning at a mid-size university is being fueled by a transformative pedagogical initiative on a curricular and co-curricular level. This university uses transformative learning (TL) theory university-wide to move students into deeper, more involved learning while simultaneously cultivating the skills and abilities needed for employment and lifelong learning. Students' knowledge, skills, and abilities develop through the "Central Six" (i.e., discipline knowledge; leadership; research, scholarly and creative activities; service learning and civic engagement; global and cultural competencies; and health and wellness). These are authentically assessed for exposure, integration, or transformation. Purposeful course designs are inevitably shifting the university from an instruction- to learning-centered model. For instance, while creating their courses, faculty often re-acquaint themselves with their passion for the profession, i.e., student learning, not student instruction. This panel presents three courses (all with critical reflection) where student learning was mindfully planned. Participants will be able to take away from this panel ways (1) to create environments that will more likely result in significant learning; (2) to assess more significant learning, whether that is considered deeper, integrative, or transformative learning; (3) to integrate student skills and abilities that are necessary for lifelong success; and (4) to create a SoTL project through use of a transformative learning bibliography.

The facilitator is a university faculty developer engaged with this initiative. She will explain the initiative and how it is being implemented.

Panel

Rachelle Franz, along with her graduate student, Krista Fagala, show in her course "Healthy Life Skills" how the students' used health and wellness and service learning as pedagogical frameworks for creating a health course syllabi with a service learning component. This project sought to engage students in designing health programs for the community. Pre- and post- qualitative assessments found that students had achieved deep learning and were more aware of transformative learning.

Ed Cunliff and graduate students in his seminar on "Transformative Learning" used information from the neurosciences to enlighten the class! By beginning each session with light physical activities, they were able to energize and focus their brains on the shared time together. Students were also engaged in the formulation of shared expectations and the outline for the class itself. Students provided an assessment of the experience after significant reflection time.

In Deborah Shinn's class on "Human Sexuality II", she employs an experiential learning environment she designed with a lesson called "Matters of the Heart" where students engage with art to increase awareness and access to individual emotions and ability to non-verbally communicate. The students are creatively introduced to art by three senior level docents at a university art museum. The art is a catalyst for epiphanic student-moments about human sexuality and emotional agency. The lesson provides a situated perspective on emotion and passion, while drawing on the context of the student's experiences. Assessing movement in the students' learning is done through critical incident reflections.

8:30 AM | Room 2101 | Emerging technologies and SoTL

D03 COLLABORATION AND QUALITY: CONNECTIONS TO E(FFECTIVE)-LEARNING

Workshop (90 minutes)

Theresa Steger (1), Eileen DeCourcy (1)
(1) Humber Institute of Technology and Advanced Learning (Toronto, Canada)

This session is designed to engage participants in a discussion about supporting 'value-added' interactions between various college/university personnel involved in implementing an eLearning Strategy, with a goal of advancing quality on-line instruction in higher education. Online coursework has become increasingly popular in postsecondary education, (Parsad & Lewis, 2008), yet a majority of faculty are still skeptical about the quality of online learning (Allen & Seaman, 2012). Barriers to high-quality eLearning environments have been linked to "lack of understanding of the potential of online learning", the "perception that online learning is inferior" to face-to-face instruction, "lack of ability and time on the part of faculty to learn and adopt new technologies and methodologies" and "lack of instructional designers and programmers with expertise in creating high quality online courses" (Canadian Virtual University, 2012, p. 49).

Building upon the experiences of the co-presenters, workshop participants will consider the advantages and challenges that emerge when faculty collaborate with instructional designers, educational developers, and others to develop or re-design courses and programs for a range of technology-enhanced learning environments. The group will be invited to question who could be involved in the eLearning development process, what unique expertise individuals in various roles potentially bring to the process, the need for negotiation of roles and responsibilities, and strategies to support collaborative team work. Particular attention will be given to the stories of faculty who have engaged in eLearning development teams and their perceptions of new understandings that have emerged as a result of such collaboration. These new understanding will be connected to existing research on student outcomes and measures of quality of online courses (Jaggers & Xu, 2013).

Participants will contribute to knowledge creation about institutional and group processes that may lead to outcomes linked to quality eLearning environments for students. In addition, they will explore practices that will have sustainable impacts on individuals' professional development, and institutional practices that encourage authentic communities of learning among the various people involved in technology-enhanced course and program development. Individuals will be given the opportunity to link issues raised in the discussion to their own roles and to begin to reflect on how they might contribute to collaborative processes at their own institution to enhance the quality of eLearning available to students.

The intention of this workshop is to contribute to knowledge sharing and strategic planning (factors that have been shown to be lacking in online education contexts) to give institutions an improved ability to capitalize on the potential of digital technologies so as to improve quality of teaching and learning (Canadian Virtual University, 2012).

8:30 AM | Room 2102A | Leadership, academic development and SoTL

D04.1 BUILDING STAFF CAPACITY TO NURTURE CREATIVITY AND PASSION FOR LEARNING AND TEACHING THROUGH PERSONALISED PROFESSIONAL LEARNING AND DEVELOPMENT

Individual Paper (30 minutes)

Lorraine Bennett (1)
(1) Federation University, Australia (Lake Wendouree, Australia)

Twenty-first century higher education presents many new challenges and opportunities for the way staff engage with increasingly diverse student populations to nurture, achieve and sustain positive educational relationships and learning outcomes.

Advancements in enabling technologies have led to a rapid expansion of online courses resulting in a massive growth in the number of people, from disparate locations, accessing higher education. This is particularly evident in the recent emergence of free access, online courses, known as MOOCs, where thousands of enrollments are not unusual. The face of higher education is also changing in other ways. Often these changes are in conflict with open-access practices and create substantial dilemmas for educational leaders, policy makers and practitioners. Reported demands include: increased government and public scrutiny of higher education; the trend towards benchmarks, standards and world-wide rankings and an increase in external reporting requirements. In addition, employers want innovative and resilient 'work-ready' graduates, while students demand flexibility and choice in what, where, when and how they study.

There is substantial recognition across the higher education sector that this new educational paradigm presents significant challenges and at the same time new opportunities. Educational leaders, particularly those involved in the scholarship of learning and teaching, regularly advocate the need to reconceptualise approaches to pedagogy, curriculum development, learning activities, assessment, and learning environments. However, policy development and initiatives designed to support and build capacity of staff to utilise new technologies, to motivate and engage diverse online and on-campus student cohorts, to rethink learning contexts, and to meet employer expectations for innovative and flexible graduates, are not keeping pace with these new demands.

This presentation outlines an approach to building staff capacity that addresses some of the features of this changing higher education environment. The approach is based on a successful, personalised staff professional learning program that has at its very core the nurturing of creativity and passion. The program is offered at a regional University in Australia and is delivered through a Graduate Certificate in Education (Tertiary Teaching) (GCETT). Staff undertake the program part-time and are strongly encouraged to link their study directly to their workplace contexts and disciplines. The program was reconceptualised and implemented in 2011, and since then over 320 University and partner staff have enrolled in the program. By the end of 2014, at least 255 staff will have successfully completed the four courses. The GCETT draws on the recent work of neuroscientists on how the brain learns, and applies this knowledge to activity-based learning, games and play artefacts. The presentation describes the innovative mentoring and nurturing features of this program that are framed by concepts of: capacity building, customisation, contextualisation, culture, collaboration, cooperative learning, creativity, choice, continuous improvement, connectivity, challenge, contemporary research and resources, and, changes in practice. Delegates will be provided with examples and evidence of how these features are modeled and reinforced in the GCETT, and how they have impacted upon and influenced teaching practice, particularly with respect to nurturing creativity and passion.

9:00 AM | Room 2102A | Leadership, academic development and SoTL

D04.2 LEARNING TO TEACH, TEACHING TO LEARN: ENCOURAGING FACULTY EXCELLENCE AT ONTARIO COLLEGES AND UNIVERSITIES

Individual Paper (30 minutes)

Richard Wiggers (1)
(1) Higher Education Quality Council of Ontario (Toronto, Canada)

For most postsecondary students, what matters most is a good basic education. Yet the norm for college and university faculty has been to hire for subject expertise, and, when it came to teaching, to simply learn by doing. More recently, as learning outcomes, curriculum design and the integration of technology become increasingly important in postsecondary classes that are often larger and more diverse, it is becoming more important to ensure that college and university faculty are adapting effectively to the new and constantly changing realities.

This presentation will focus on information collected during a series of interviews conducted by HEQCO staff during the fall of 2013 with officials at nearly all of Ontario's 24 colleges and 20 universities, as well as a separate study done on part-time faculty in Ontario universities. The questions themselves updated and enhanced information drawn from an earlier template developed by the Council of Ontario Educational Developers (Nicola Simmons, COED, 2010, Database of Canadian educational development centres). The updated research was also an effort to respond to two 2012 Ontario government reports:

- The Auditor General reviewed undergraduate teaching quality in the province by examining the course evaluation process at three universities. The report concluded that "a university's most important mandate is that it does a good job of teaching its students and preparing them for the future workforce" (Auditor General, 2012).

- The Commission on the Reform of Ontario's Public Sector examined the higher education system and concluded that both institutions and the provincial government need to "refocus resources and rewards towards teaching in post-secondary institutions" and to "refocus provincial funding to reward teaching excellence" (Commission on the Reform, 2012).

The presentation will open with a reminder of the realities and challenges that currently face Ontario's college and university faculty. Student enrolments at Ontario's postsecondary institutions have grown substantially over the last decade, At the same time, both federal and provincial governments have substantially increased funding for research and drawn more full-time faculty out of the classrooms and into labs and libraries. Government operating funding has not kept pace with need, increases in tuition fees have been strictly controlled, and since the recession of 2008-2009 in particular, both institutions and their faculty are increasingly being asked to do more with less. In addition to a growing reliance on part-time faculty, many full-time faculty members are introducing innovative approaches to teaching large classes, integrating technology, and engaging students through experiential learning and other methods.

Based largely on the interview results, it is clear that nearly every postsecondary institution now has a teaching and learning and/or educational development centre of some sort. The presentation will explore their role, and the impact of SoTL research and scholarship and other forms of professional development in enhancing faculty teaching. It will also examine current trends in the utilization of course/instructor evaluations and teaching awards to recognize and encourage excellence in teaching and student learning.

9:30 AM | **Room 2102A** | **Leadership, academic development and SoTL**

D04.3 FROM INDIVIDUAL TO COLLEGIAL – THE LOCAL IMPACT OF PROJECT-BASED TEACHER TRAINING PROGRAMMES

Individual Paper (30 minutes)

Maria Larsson (1), Katarina Mårtensson (2)
(1) Centre for Educational Development, Lund University (LUND, Sweden); (2) Centre for Educational Development, Lund University (LUND, Sweden)

In this study we investigate in what way grass-root-scholarly projects conducted within teaching and learning programmes have an impact on different institutional microcultures.

In the first phase of the study (Larsson & Mårtensson, 2012), 130 academics from four different faculties in a research-intensive university responded to a web-based survey. The survey asked questions regarding the implementation of the project they had presented in a teaching training programme. The results clearly indicated that a majority of the projects had been successfully implemented in the local collegial teaching context. Colleagues and leaders were considered to be central to successful implementation; sometimes they also played a crucial role when implementation failed.

In the current, second phase of the study we address the local level leaders; directors of studies, programme leaders and the like. Semi-structured interviews will explore their experiences of supporting the implementation of teachers' individual projects, and possibly how they can be used to develop teaching and learning more generally in the local collegial teaching culture.

Effects from teacher training programmes have been investigated previously (Gibbs & Coffey, 2004; Prosser et al, 2006), but according to Trigwell (2012) the value of such programmes from an organizational point of view is under-researched. Although it is difficult to compare effects between programmes and contexts, one common conclusion from previous investigations is that the result largely depends on the local context in which the academic teacher works. If the knowledge gained from such programmes is valued in the collegial context, the effect and the appreciation seem higher. Other studies have confirmed a strong relationship between local teaching and learning cultures, leadership, teaching approaches and the development of teaching and learning (Jawitz, 2009; Knight & Trowler, 2000; Ramsden et al, 2007, Roxå & Mårtensson, 2011/2013).

The interviews were conducted during spring 2014 and will be analysed during summer 2014. The presentation will discuss the results in terms of the role of colleagues and leadership when integrating scholarly teaching projects into tteaching and learning practice. Moreover, we will discuss the role of teacher training programmes in promoting the development of an institutional culture.

8:30 AM | **Room 2102B** | **Assessment, accountability, and SoTL**

D05.1 USING PRE- AND POST-ASSESSMENT TO MEASURE THEORETICAL AND PRACTICAL UNDERSTANDING IN JOURNALISM AND MASS COMMUNICATIONS

Individual Paper (30 minutes)

Sheila Whitley (1)
(1) NC A&T State Unviersity (Greensboro, United States)

Every professor faces the challenges of not only teaching course content, but also determining if students understand the content and apply it properly. This is especially an important issue if discipline is based in theory and practical application.

Journalism and Mass Communication is a discipline that requires a strong understanding and grasp of theoretical concepts with a curriculum grounded in liberal arts along with practical application of the theoretical. Journalism students must learn not only how to investigate and find the real news story, but must also write or electronically report the news for a mass audience. Mass communication students must also understand the theoretical concepts and produce radio, television, and Internet content appealing to a mass audience.

This study focused on assessing growth of theoretical and practical concepts in two classes. One class was for electronic or multimedia journalism students while the other class focused on mass media students. Students in both classes were given a pre-assessment at the beginning of the semester to measure their understanding of certain theoretical and practical applications. The post-assessment measured growth of knowledge and understanding of the same material at end of the semester. The students were encouraged to take the assessments seriously, but without fear of punitive grade effect.

The study began in spring 2014, so data collection and analysis are still in their early stages. Fall 2014 will be the first semester addressing in class the deficit of knowledge between the previous semester's pre- and post-assessments. Although the study remains in the early stages of data collection, the data collected affords tremendous insights and hence an opportunity to explore how we might better refine the study.

This paper explores the value of using pre- and post-assessments to measure growth in student theoretical and practical understanding of concepts over a semester. Each semester, the data is evaluated to determine the weak areas where no or

little growth was evident. This provides a baseline of potential weak areas so the professor can address the weaknesses. As this is a continuing project, data collection is incomplete. There is evolving evidence from the initial data that this approach is having success.

9:00 AM | Room 2102B | Assessment, accountability, and SoTL

D05.2 NURTURING WRITING AND CRITICAL THINKING SKILLS WITH CALIBRATED PEER REVIEW (CPR) IN A LARGE LECTURE ENVIRONMENTAL SCIENCE COURSE

Individual Paper (30 minutes)

Jae-Eun Russell (1), Samuel Van Horne (1), Adam Ward (1), Elmer A. Bettis (1) Maija Sipola (1), Mariana Colombo (1), John Gikonyo (1)
(1) University of Iowa (Iowa City, United States)

In this presentation we will discuss our research about the implementation of Calibrated Peer Review (CPR) in a large introductory science course. CPR is a web-based tool for submission and peer assessment of student essays. It consists of 4 steps: essay submission, calibration, review, and self-assessment. During the semester, students were asked to complete two writing assignments and peer assessment using CPR, and required to explain their answers. We investigated the following research questions. 1) Is peer assessment using CPR reliable and valid? 2) How are students' writing and critical thinking skills fostered using CPR in a large science course? 3) What are students' perceptions of peer assessment?

Peer assessment is often cited as an active learning activity to improve students' higher order thinking skills because it involves cognitive processes that encourage deep learning (Knight, 2011), and its reliability and validity have been supported by multiple studies (e.g., Falchikov & Goldfinch, 2000). However, instructors of large lecture courses in higher education are reluctant to implement peer assessment because of the perceived difficulty of facilitating peer assessment in a large course.

We used multiple research methods to answer the research questions. We examined the inter-rater reliability of a sample of 40 essays that were rated by students and a graduate TA. An online survey was conducted to examine students' learning experiences with CPR. Among 150 students, 132 students participated in the research study and 111 students responded to the survey. We also examined students' explanation of their ratings to learn about how they had incorporated the rubric into their evaluation of peers' essays.

The first assignment completion rate was 97%; 2% of students who submitted their essays did not complete calibrations and 6% of students did not complete reviews and self-assessment. The average TA rating was not significantly different from the peer review ratings by CPR. ($M = 7.7$, $SD = 1.4$ vs. $M = 7.4$, $SD = 1.3$) and the TA rating was significantly correlated with the peer review ratings ($r = .643$, $p < .001$).

Students' learning experiences with CPR were relatively positive. Over 60% of students indicated that CPR assignment helped learning related course topics better and improved writing skills. Over 70% of students indicated that it helped their learning to critique their own and others' writings. Most of all, 74% of students agreed that CPR provided the chance to view their own draft with new insights or awareness of how to improve future writings. However, there were students who thought that CPR did not help their learning. This needs further investigation.

Indications of a critical thinking process were observed in students' explanations. However, this needs more analysis before any concrete conclusions can be drawn. The overall results suggest that innovative instructional technology makes adoption of writing assignments and peer assessment possible in a large lecture course. We will discuss the key factors that promote implementation of CPR to promote students' engagement in writing in a large lecture course.

9:30 AM | Room 2102B | Assessment, accountability, and SoTL

D05.3 FORMATIVE ASSESSMENT IN ELEMENTARY MATHEMATICS: SYNCHRONIZING LEARNING AND TEACHING TO MAKE LEARNING VISIBLE

Individual Paper (30 minutes)

Catharina Middleton (1)
(1) East Carolina University (Durham, United States)

Mathematics reform efforts in the United States over the last several decades have pointed to a need to focus increasingly on important mathematics and the ways students think about and apply mathematical understandings. An increasing emphasis has been placed on students' understanding of the mathematics set forth in standards documents such as the Principles and Standards for School Mathematics (National Council of Teachers of Mathematics, 2000) and, most recently, the Common Core State Standards for Mathematics (National Governors Association for Best Practices & Council of Chief State School Officers, 2010). Widespread adoption of the Common Core State Standards for Mathematics (CCSSM) has established a common set of grade-specific standards that all students are expected to achieve with understanding. This requires that teachers assess students' progress toward understanding the mathematics set forth in these standards. Although the standards are well defined within the CCSSM, methods of identifying and meeting the needs of students are not defined, and therefore it is left for individual teachers to identify ways to do so.

With significant evidence supporting it (Black & Wiliam, 1998a, 1998b; Popham, 2008), implementing research-based formative assessment practices in a meaningful way holds the greatest potential to identify and address students' needs, narrowing achievement gaps while improving the quality of instruction for all students. Quite a bit has been written about the benefits of formative assessment and some of the factors that determine its effectiveness (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Cizek, 2010; Wiliam & Thompson, 2007). What this research has not pointed out, however, is the lived experience of teachers working individually and collectively to implement a formative assessment and intervention process. With that in mind, this research sought to understand the experiences of these teachers and the impact of their efforts to implement such a process district-wide.

This paper describes how a group of third grade teachers implemented a formative assessment and intervention process and the impact on student learning in mathematics. In spite of the challenges faced, many teachers like those represented here successfully use formative assessment to understand how and what their students are thinking about important mathematics in order to better address their needs through purposeful instructional decision-making. Understanding how these teachers have been successful, what factors supported or inhibited that success, and the impact on student learning is an important step toward facilitating successful implementation of formative assessment elsewhere and, in doing so, addressing the needs of many students that have long been unidentified or ignored.

Recent education policy has focused almost entirely on summative assessments that provide single-context views of what students know as demonstrated through narrowly focused, multiple-choice assessments. If we are to collectively improve the mathematical experience of all students so they are prepared to engage with increasingly advanced mathematics, our collective focus on assessment must be broadened to include formative assessment approaches that synchronize the teaching and learning processes which help make learning visible.

8:30 AM | Room 2104A | SoTL and the changing landscape of higher education

D06.1 HIGHER EDUCATION IN THE 21ST CENTURY - MOVING BEYOND PEDAGOGY

Individual Paper (30 minutes)

Shawna McCoy (1)
(1) Sheffield Hallam University - England (Sheffield, United Kingdom)

As universities across the United Kingdom adapt and adjust to the marketisation of higher education, accessing the student voice and understanding what students want from their higher education experience has become a complex business. Specifically within England, the raising of student tuition fees, the importance of the National Student (satisfaction) Survey (NSS), the emphasis on employability and the Destination of Leavers in Higher Education Survey (DLHE), and the recent introduction of Key Information Sets (KIS) data, has placed challenging demands on universities. Universities are attempting to balance the need for quality assurance processes and procedures with sound pedagogically developed programmes and courses, leaving academics squeezed between managerial demands and student expectations.

Specifically, student engagement surveys have provided both a measurement of quality and a gauge for pedagogy. Although such surveys are popular within the United States, Australia and New Zealand, English higher education has only recently shown interest in exploring these developments at a national level. Currently, England is reviewing the use of the National Student Survey and the potential for inclusion of questions relating to engagement. Within Sheffield Hallam University, the Sheffield Hallam Student Engagement Survey (SHSES) was introduced in 2009 to focus on how students engage with their learning experiences. The survey was discontinued by 2011, but following successful funding in 2013 an adaptation of the SHSES was reintroduced within the Faculty of Development and Society (to all first year students completing a three year honours degree). Initial findings from the survey confirmed the student focus on assessment-related learning, limited extra or co-curriculum activity, and lack of staff-student collaboration. Understanding whether student perception is driving forward change or is a reflection of the changing landscape of educational environments raises questions regarding how best to manage student expectations of their university experience.

As educators continue to search for new ways to create learned communities, inspire student inquiry, cultivate active citizenship and continue the production of knowledge and information, identifying best practice within learning and teaching has become a key priority. The key challenge is doing this within an environment which needs to get 'value for money' or 'more for less'.

This paper will examine the recent changes within English higher education and consider the impact and emphasis on survey data to inform teaching and learning. To create an environment where learning is explored, nurtured and developed, policy and practice must simultaneously meet the needs of educators and the wants of their students.

9:00 AM | Room 2104A | SoTL and the changing landscape of higher education

D06.2 FROM THE LECTURE HALL TO SCALE-UP: RESEARCHING AND CHANGING POST-SECONDARY TEACHING AND LEARNING SPACES

Individual Paper (30 minutes)

David Hinger (1), Victoria Holec (1), Bernie Wirzba (1)
(1) University of Lethbridge (Lethbridge, Canada)

Virtual Worlds and online learning environments promised to revolutionize education and transform learning into the 21st century. Authors such as Prensky (2010) suggest that Digital native students will enter Post-Secondary institutions prepared with technological skills and digital citizenship demanding a new form of teaching and learning. The advent of MOOCs comes with the

promise of replacing brick and mortar schools with open and accessible courses from the best educators on the planet. This is the hype of educational media coverage for the last ten years, yet we continue to build classrooms both virtual and physical that resemble the industrial model of education.

In July 2011, the University of Lethbridge embarked on a multi-year Learning Environment Evaluation (LEE) research project to investigate the effectiveness of teaching and learning spaces on our campus. In addition to collecting data on existing classrooms spaces, the research team has had the opportunity to renovate and update classrooms to actively investigate how changes in the physical learning space affect teaching and learning.

In this interactive conversation we hope to spark a heated debate about the current state of physical learning spaces .We will also share the challenges of researching traditional teaching spaces and creating new Active Learning and SCALE-UP classrooms within a post-secondary university environment. Together we hope to share and discuss with the audience how physical and virtual teaching spaces impact student learning.

9:30 AM | **Room 2104A** | **SoTL and the changing landscape of higher education**

D06.3 THE GLOBALIZATION OF HIGHER EDUCATION

Individual Paper (30 minutes)

Antonette Barilla (1)
(1) Elon University, School of Law (Greensboro, United States)

This piece explores the question of whether the globalization of higher education necessitates change in the best teaching practices for graduate education.

The question builds upon SOTL scholarship and the foundations for evaluating and assessing effective teaching at the graduate level. The presentation explores a new challenge of graduate level education – the increasingly global classroom and the effect of diverse language backgrounds on student understanding.

Education journals and leading news magazines alike note the dramatic change in graduate populations. Increasing mobility and capital make it possible for individuals to widen the breadth of their studies and to add a cultural aspect to their learning by studying in a foreign country. Employers value both the cultural and technical knowledge to be gained by obtaining a degree abroad and classrooms are increasingly reflective of this trend. Educators are finding their students, though proficient in the common language of study, have diverse native-language backgrounds. This population shift necessitates a critical transition in the way we teach. Teaching practices that may have been effective for students with the same language background are not as effective with classrooms of students with varying language and cultural experiences. Law schools, business programs, medical schools, and other graduate level institutions devoted to student success must be prepared to adopt teaching methodologies that take into account the challenges posed by classrooms of diverse, non-native speakers. Educators must address the three main challenge areas – socio-cultural parameters, culture-based learning preferences, and diverse writing constructions – in order to engage students and successfully facilitate the development of knowledge and understanding.

In pursuit of the most effective teaching practices for multi native-language classrooms, I have considered analytical data from educators and students in classrooms around the world and have reviewed my findings in light of recent scholarship and targeted studies including the Harvard Berkman Center's and Carnegie Foundation's report on new skills and new learning in the legal education setting, the Longview Foundation for World Affairs, International Understanding's report on Teacher Education for the Global Age, and others.

I propose that a variety of teaching techniques, traditionally untapped at the graduate level, be employed including the identification of learner characteristics, the use of explicit language concepts and strategic instruction, employment of classroom routine and patterning models, extensive use of team based learning groups, conferencing, and feedback, and differentiated instructional strategies, giving students multiple options for taking in information, making sense of ideas, and effectively expressing what they learn. Programs that integrate this approach exhibit the ability to not only address core knowledge and skills but also to develop language and literacy skills of a culturally and linguistically diverse group of students who also have a wide difference in their experiential and educational backgrounds.

8:30 AM | Room 2104B | Inquiry into student learning

D07.1 DOES THE ASSIGNMENT OF STUDENT-GENERATED READING QUESTIONS IMPROVE STUDENT LEARNING OUTCOMES?

Individual Paper (30 minutes)

Laurie Strangman (1)
(1) University of Wisconsin-La Crosse (La Crosse, United States)

Outside of quizzes which are often perceived by students as punitive in nature, how can we get our students to complete assigned readings, and when they do, does it improve learning outcomes? This SOTL project investigated the impact of assigning student-generated reading questions on student learning outcomes. Students in two sections of an introductory economics course were randomly assigned to an experimental or control group. Both groups were given the same weekly reading assignments; however, only the experimental group was asked to submit two questions related to each reading. These questions could either be about something the student didn't understand or about something they were curious and would like to know more about. Initial results indicate the assignment of student-generated reading questions increases the proportion of students who complete assigned readings as well as exam scores and overall course grades. The impact of the assigned reading questions on student engagement was also explored.

9:00 AM | Room 2104B | Inquiry into student learning

D07.2 USING PROBLEM-BASED LEARNING ACTIVITIES IN LARGE SCIENCE UNDERGRADUATE CLASSROOMS TO MODEL POST-UNIVERSITY WORKPLACE ENVIRONMENTS

Individual Paper (30 minutes)

Andis Klegeris (1), Heather Hurren (1), Manpreet Bahniwal (1)
(1) UBC Okanagan Campus (Kelowna, Canada)

University science graduates, after entering the job market, will be required to independently navigate through large amounts of literature looking for reliable sources of information, prioritize their tasks and hypotheses, problem solve, work effectively in a team environment, network, and evaluate job performance of their peers. Even though the above skills are valued by both students and their future employers, most standard university curricula are focused on delivering the course content, giving very few opportunities for students to develop such skills that will be valued after they enter the modern job market. We will describe a tutor-less method of conducting problem-based learning exercises in large undergraduate classes that was developed to model the above aspects of post-university real-world workplace experiences of students (Klegeris, Bahniwal and Hurren, 2013). This method has been successfully used in two biochemistry courses on the University of British Columbia Okanagan campus and a pharmacology course at the University of Latvia. The conference themes of inquiry into student learning and inquiry into teaching practices will be addressed.

Problem-based learning is a mode of instruction that reaches beyond the traditional classroom and involves students connecting with both content and their peers to engage in constructive learning (Jonassen, 2011). The best described methodologies of problem-based learning involve small groups of up to 10 students working in separate classrooms (Strobel and van Barneveld, 2009). This process is typically facilitated by tutors assigned to individual groups. As expected, such a mode of instruction can be costly for large groups of students, and therefore, realistically, prohibitive in most of today's classrooms. Our method was developed for use in classrooms of up to 100 students. It does not require additional tutors since all classroom activities are supervised/coordinated by a single instructor.

Our research conducted over the last three years, shows that this mode of instruction leads to statistically significant increases in student satisfaction and engagement. Students also demonstrated statistically significant improvement in their generic problem-solving skills, which was not observed in five control classes where course content was delivered mainly through classical didactic lecturing.

Problem-solving abilities of university graduates are becoming an increasingly more desirable trait because the workplace is changing too quickly to just rely on learning of routine methods and knowledge available at any given time (Jefferson, 2001, Taylor et al., 2010). Instead, employees as well as employers need to adapt to changing conditions, modern technologies and new information in a timely manner using their problem-solving skills. Problem-based learning helps students prepare for this challenge. During our presentation, we will outline the tutor-less problem-based learning method that we have developed and describe our research comparing six undergraduate courses in terms of the dynamics of problem-solving abilities in students.

We are hoping to hear from participants on their experiences with similar research and answer any questions regarding our methods and findings.

9:30 AM | **Room 2104B** | **SoTL and the changing landscape of higher education**

D07.3 USING DESIGN BASED RESEARCH TO DEVELOP TOOLS TO HELP INSTRUCTIONAL DESIGNERS WITH CULTURAL ADAPTATION

Individual Paper (30 minutes)

Isabelle Savard (1), Jacqueline Bourdeau (2), Gilbert Paquette (2)
(1) Université Laval (Québec, Canada); (2) LICEF, TÉLUQ (Montréal, Canada)

We have developed a method and an advisor system to help instructional designers take cultural variables into consideration during the instructional design process. To do so, we identified cultural variables and modeled knowledge regarding these variables via a formal ontology on the basis of which we created a "Cultural Diversity" knowledge base, which brings together knowledge about five cultures. Our advisor system, through an executable assistance process for cultural adaptation, uses this knowledge to advise the instructional designer, who then proceeds to adapt a pedagogical scenario to a culture other than his or her own.

The research methodology that we used for the development of the advisor system prototype is a combination of design-based research (DBR) and the Unified Process (Larman, 2004).

Design-based research (DBR) is a systematic yet flexible methodology with the goal of improving educational practices through iterative analyses, design, development and implementation in natural contexts in order to establish theoretical principles and proposals (Wang and Hannafin, 2005). According to Reeves (2000), the goal of this type of developmental research is to solve existing and real problems while constructing design principles that could inform future decision making. Three principal characteristics of DBR stand out, i.e., its dual purpose, which consists in understanding the phenomena studied and adjusting the design

(interventionist), its flexibility, which makes it possible to modify the protocol and the design in the process of being tested, and its openness, on the basis of which a DBR protocol may combine quantitative and qualitative methods and techniques.

Following this iterative process, our research began with semi-structured interviews and doctoral internship research at the University of Mauritius, where we conducted an in-depth analysis of the practical problems resulting from a lack of methods and instructional design author tools to help instructional designers take cultural variables into account. The interviews confirmed that it is necessary to take these into account when planning training and that learning resources often need to be culturally adapted when reused in a new culture. We then developed the cultural adaptation method, the knowledge base and the advisor system over five iterations of the DBR, while continually assessing the relationship between our research and practice in the field. This is the approach we adopted when we prepared a web questionnaire that instructional designers from different countries answered. The questionnaire comprises four main sections. The first relates to the context in which the instructional design is practiced. The sections that follow include a series of questions about local educational practices. Questions about the various educational resources and the teaching and learning environments then complete the questionnaire. A literature review, conceptualization process and questionnaire response analysis enabled us to identify seventeen variables that we grouped into three major categories: Values, Common Practices and Human Interactions. On the basis of these variables, we consolidated information about instructional design practices in France, Belgium, Gabon, Mauritius and Quebec. This is now the information base that the advisor system uses.

8:30 AM | **Room 2105** | **Disciplinary approaches to teaching, learning and SoTL**

D08 ENHANCING STUDENT LEARNING IN FOUNDATIONAL COURSES IN MULTIPLE STEM DISCIPLINES IN A LARGE PUBLIC UNIVERSITY

Workshop (90 minutes)

Howard Jackson (1), Estel Sprague (2)
(1) University of Cincinnati (Cincinnati, United States); (2) Department of Chemistry, University of Cincinnati (Cincinnati, United States)

Enhancing student learning is the central thrust of all SoTL efforts. Enhancing student learning, however, requires supporting both the creativity and passion of the faculty member and igniting the creativity and passion of the student. We present preliminary results of an NSF-supported (DUE-1022563) multi-disciplinary effort to enhance learning in foundational STEM courses. A central theme, supported by evidenced-based research across the STEM disciplines, is that active leaning engages students in ways that enhance student learning. A secondary theme is that sustained use of active learning techniques by faculty needs a supportive local culture. We have assembled a collection of faculty across the STEM disciplines of Biology, Chemistry, Geology, Mathematics, and Physics and implemented efforts to combine just-in-time teaching, peer instruction techniques, and group activities across the foundational courses in each of these disciplines. We have also initiated learning communities that are crafted to serve the unique needs of first generation STEM majors. We present and discuss results that show an increase in student performance accompanied by a distinctive decrease in the DWF rate in the large foundational Biology, Chemistry and Physics courses, an early indication that the first generation communities are beneficial, and create a modest increase in additional faculty participation.

Efforts to create a supportive culture for faculty to include research-based instructional strategies into their classrooms was provided by the collection of faculty engaged in this project, but also by tangible department head efforts. The department heads provided public acknowledgement of the efforts, but also, in one case, the initiation of a periodic departmental lunch meeting focused entirely on disciplinary pedagogical issues. Efforts to recruit additional faculty to these efforts were only modestly successful and point to several needs which we will explicate.

The use of just in time teaching and peer instruction will be described and examples of use of these in several courses will be presented. During the workshop, participants will be placed into teams of three and create a significant problem to be used in a large foundational class using a particular class response system. Importantly, the response system allows a rich variety of student responses beyond the usual multiple choice questions. Participants will utilize the response system (made available to the workshop participants) to address the significant problem identified by providing a series of appropriate scaffolding questions that model an expert's strategy in approaching and solving the problem. We will then facilitate a discussion among the participants on the process and the significance of working in teams to illustrate how the process can be applied in various courses and settings.

At the conclusion of the session participants will:

- Be familiar with just in time teaching, peer instruction, and the use of group work;
- Understand the results of these approaches in student learning gains and student retention;
- Understand the potential benefits of a specialized Learning Community;
- Understand the potential for multi-disciplinary efforts to improve teaching and enhance student learning across the STEM disciplines.

8:30 AM | Room 206A | Inquiry into student learning

D09.1 *Individual Paper (30 minutes)*

A TALE OF TWO STUDIES: DIVERGENT APPROACHES TO ASSESSING STUDENT SUCCESS IN WRITING

Holly Bauer (1), Madeleine Picciotto (2)
(1)) Univ. of California (San Diego, United States); (2) Univ. of California, San Diego (San Diego, United States)

New research on the effectiveness of different methods of writing instruction for underprepared and multilingual students has led many colleges and universities to rethink their approaches to the teaching of Basic Writing. Recent demographic shifts in the student body – including a dramatic influx of international students over the past five years – have further complicated the landscape. On our campus, there seems to be wide agreement that our current approach to serving underprepared students and English language learners is not working. However, there is disagreement about why current programs are not succeeding, and what we should do about this. In an attempt to ground future initiatives on a solid understanding of student learning, various efforts are now underway at our institution to study the impact of current instructional programs on students' success with academic writing.

We have been deeply involved with one such effort for the past two years: an ongoing study of a summer writing course for incoming international students that introduces them to the conventions of academic discourse at American universities. In order to reach a holistic understanding of the writing course's impact on student learning, a wide range of qualitative and quantitative data is being gathered and analyzed: for example, pre- and post- assessments of students' argumentative writing, students' written reflections on their own learning and writing processes, instructor evaluations of students' learning outcomes, and student scores on the university's writing placement exam. This study is informed by "context rich" models of writing assessment that are valued by many composition professionals (Huot 1996).

Recently, we have been asked to participate in a very different study: a randomized controlled trial that seeks to assess the effectiveness of current Basic Writing course offerings. This study, developed by social science researchers, differs radically in scope, methods, and impact from the study investigating the summer writing course. It places students in two groups – one receiving a particular form of preparatory writing instruction, and the other being randomized out of this requirement and thus receiving no preparatory classroom instruction at all – and then tracks the two groups' subsequent performance in first-year

writing courses. The aim of this study is to provide quantitative data about student learning that can serve to inform structural and curricular decisions regarding writing instruction on our campus.

Our presentation will discuss the two studies, comparing and evaluating them in order to better appreciate the benefits and costs associated with divergent approaches to the scholarship of teaching and learning.

9:00 AM | Room 206A | Inquiry into student learning

D09.2 **USING CONCEPT MAPPING TO MASTER NEW TERMINOLOGY IN AN INTRODUCTORY COURSE IN LINGUISTICS**

Individual Paper (30 minutes)

Joleen Hanson (1)
(1) University of Wisconsin – Stout (Menomonie, United States)

In introductory college courses, students must often learn numerous new terms and then demonstrate their knowledge of the new, discipline-specific vocabulary on exams. This research project investigated whether using concept mapping as a study tool helped students to master new terminology in an introductory course in linguistics.

The impact of concept mapping on student learning has been investigated at the K-12 level, post-secondary level (Hay, D., Kinchin, I. & Lygo-Baker, S., 2008), and in professional and adult education. Two review articles concluded that concept-mapping has a positive effect on student achievement (Horton et al., 1993) and on knowledge retention (Nesbit & Adesope, 2006.) Berry & Chew (2008) found that concept mapping improved student exam performance. Hilbert & Renkl (2008) observed the greatest learning gains among students with higher spatial abilities and among those who paid the most attention to labeling their concept maps. Rendas, Fonseca, & Pinto (2006) observed a positive result in student self-reports about the perceived benefit of concept-mapping, even though they did not find a correlation between performance on multiple-choice tests and the efficacy of concept maps.

In this project, students (n=23) created concept maps before and after three specific units of study and in preparation for the final exam. The quality of student concept maps was compared with student scores on unit tests and the final exam. In addition, students wrote guided reflections about their concept maps after each unit and at the end of the semester. Data was also collected about student learning preferences and prior experience with concept mapping.

The majority of students (71%) reported that concept mapping helped them to learn and remember new terminology. However, no measurable relationship was observed between the quality of the end-of-semester concept maps and student performance on the final exam. On-going data analysis is investigating potential relationships between concept map quality and student performance on the unit tests in order to find out whether learning gains might be observed in focused units of study that were completed earlier in the semester (before the pressure of final exams). In addition, the content of student reflections throughout the semester are still being analyzed along with the results of a language knowledge survey that students completed at the beginning and end of the semester. This additional data analysis may help to explain the disparity between the benefit students perceived from concept mapping and their performance on the final exam.

9:30 AM | Room 206A | Inquiry into teaching practices

D09.3 **Innovative Pedagogies and the Learning Sciences: Opportunities and Challenges in Developing Interdisciplinary Teaching and Learning Practices**

Individual Paper (30 minutes)

Vivek Venkatesh (1)

(1) Federation for the Humanities and Social Sciences

This presentation will outline details of an interdisciplinary, multi-method program of research at Concordia University in Montreal, Canada, that explores the pedagogical potential and sustained transfer of innovative teaching and learning practices in higher education. Combining theoretical and methodological frameworks from the disciplines of management information systems, educational technology, social psychology, humanities, research-creation and engineering education, our team of researchers is developing the platform for the creation of an international research network exploring cutting-edge research on the scholarship of teaching and learning. Our cross-faculty research team, comprising of Drs. Vivek Venkatesh (Education), Masha Salazkina (Film and Moving Image Studies), Ali Dolatabadi (Mechanical and Industrial Engineering), Anne-Marie Croteau (Management), Anne Beaudry (Management Information Systems) and Sandra Gabriele (Communication Studies), is original with a unique focus on interdisciplinary research that documents, evaluates and transfers pedagogical practices in the context of higher education. Our proposed program is innovative as we will work across five interconnected axes of research, namely: a) to synthesize existing research on pedagogy in a variety of disciplines and across higher education domains; b) to produce new knowledge on the teaching and learning outcomes obtained through effective application of novel pedagogical techniques across disciplines; c) to develop instructional strategies that exemplify interdisciplinary pedagogical practices; d) to create models describing university stakeholders' attitudinal and motivational reactions to the introduction and use of novel pedagogicalinitiatives; and e) to transfer the results of our research work through a variety of academic and professional venues, thereby studying the products and the processes of the phenomenon of "knowledge exchange". This presentation will describe methodologies, theoretical principles and preliminary results from four interrelated pilot studies including: an evaluation of flipped classrooms in undergraduate settings, the development of a clearinghouse on best instructional practices through a systematic review, an evaluation of an online distributed open collaborative course, as well as the creation of a predictive statistical model of perceptions of effectiveness of integration of technologies in university teaching.

8:30 AM | Room 206B | Inquiry into student learning

D10.1

Individual Paper (30 minutes)

EVALUATING THE IMPACT OF CURRICULAR INNOVATION ON STUDENT LEARNING OUTCOMES AND INTEGRATIVE CLINICAL PRACTICE: ONE NURSING PROGRAM'S EXPERIENCE

Janet Landeen (1), Lynn Martin (1), Charlotte Noesgaard (1), Kirsten Culver (1), Nancy Matthew-Maich (2), Donna Carr (3), Larissa Beney-Gadsby (1)

(1) McMaster University (Hamilton, Canada); (2) Mohawk College (Hamilton, Canada); (3) Conestoga College (Kitchener, Canada)

Background & Purpose: The goals of higher education programs and professional programs in particular include facilitating deep learning so that graduates embrace their professions, truly knowing, acting, and being (Barnett, 2009). The collaborative, multi-site McMaster Mohawk Conestoga Bachelor of Science in Nursing Program has recently undergone a significant curriculum renewal, with the first cohort of students graduating from the Kaleidoscope Curriculum in 2013. This curriculum renewal was undertaken to enable graduates to become beginning nurses who embody this deep learning while keeping the well-being of their future patients firmly in view. While the close examination of the curriculum has refocused attention on excellence in the inquiry of teaching and learning, we have yet to establish whether the tremendous energy involved in this curriculum renewal has yielded the desired effects on student learning and their future nursing practice. It is therefore important to evaluate whether the learning outcomes students achieve are any different from learning outcomes associated with previous pedagogical approaches. The focus of this study was to systematically explore differences in learning outcomes focusing on two of the educational innovations: (a) person-based learning within a problem-based approach (PBL/PBL), and (b) the purposeful integration of pathophysiology, evidence informed decision making, and clinical reasoning and judgement across the four years of clinical and PBL/PBL courses. Using this study as an example, our presentation will highlight the strategies used to explore differences in deep learning and behaviour, which are rarely evaluated yet essential outcomes in higher education in general, and professional programs in particular. Strategies to minimize biases in conducting this type of programmatic evaluative research will be described in detail.

Methodology: Using an interpretive descriptive qualitative design (Thorne 2008), experienced, clinical faculty participated in either focus groups or individual interviews about their perceptions of student performance in their final-year clinical courses. These faculty supervised students in final year courses both before and after curricular renewal. The investigators were blinded to the identity of all participants to minimize bias.

Results: While interviews are currently ongoing (n=12), results of this study will be shared at the conference. It is anticipated that 24-30 faculty will have participated in the study across three sites. Preliminary results indicate that the interpretive descriptive qualitative methodology is providing rich detailed information on the impact of the curricular innovations.

Conclusion: The presentation will illustrate how inquiry into student learning and teaching practices can be used to understand educational outcomes at a deeper level. This research has implications for designing future studies measuring the impact of curricular innovation on student outcomes, including their actual performance in clinical situations. As well, it has implications for better understanding the impact of the particular innovations of the Kaleidoscope Curriculum.

References:

Barnett, R. 2009. Knowing and becoming in the higher education curriculum. Studies in Higher Education, 34(4): 429-440,doi.org/10.1080/03075070902771978

Thorne, S.E. 2008. Interpretive description. Walnut Creek, CA: Left Coast Press

9:00 AM | Room 206B | Inquiry into student learning

D10.2 FLEXIBLE LEARNING INNOVATIONS AND OUTCOMES WITHIN AN UNDERGRADUATE NURSING CURRICULUM

Individual Paper (30 minutes)

Maura MacPhee (1), Bernie Garrett (2), Cathryn Jackson (3), Marc Legacy (4)
(1) University of British Columbia (Vancouver, Canada); (2) Associate Professor Nursing (Vancouver, Canada); (3) Senior Instructor Nursing (Vancouver, Canada); (4) Doctoral student, Education (Vancouver, Canada)

This presentation will explore how a flexible learning (FL) curriculum redesign strategy can be used to enhance student learning in healthcare education programs. One western Canadian university recently pledged millions of dollars to redesign student teaching and learning across its campus. The nursing program received funding for a 2-year period to redesign its undergraduate curriculum, including clinical practice courses and related theory courses. Flexible learning refers to strategies that increase the flexibility of curriculum delivery by offering more choices for students and faculty. Flexibility can be increased, for instance, via the mode of delivery (e.g., web-based, low to high fidelity simulation, case-based), the locations of delivery (e.g., virtual versus in-class) and the integration of technology to enable innovation and creativity in teaching and learning methods (e.g. augmented reality and simulation). The School of Nursing approach includes using a full range of learning theories, philosophies and evidence-based methods to provide students with opportunities to access information and expertise outside of scheduled class time and to take a more active role in their learning process. A goal of the project has been to 'flip' a minimum of 12 hours of traditional classroom time to other, flexible modes of curriculum delivery for each undergraduate course. To assist with the redesign process, a full-time Teaching and Learning Fellow (doctoral student in education) was hired to oversee the project, support faculty and formatively/summatively evaluate student outcomes. This fellow is a member of a campus-wide SoTL community of practice to spread innovation among disciplines and increase the uptake of FL. We will describe the evaluation strategy and provide evaluative evidence of the impact of FL curriculum redesign during the first year of this project.

9:30 AM | Room 206B | Disciplinary approaches to teaching, learning and SoTL

D10.3 EXTRA CURRICULAR SOTL: A STUDY OF STUDENT LEARNING OUTCOMES ON STAGE

Individual Paper (30 minutes)

Kathleen Perkins (1)
(1) Columbia College Chicago (Chicago, United States)

Assessing learning skills in activities outside the classroom (such as play productions, dance concerts or music recitals) is rarely explicitly done, but performing arts departments are more than ever under pressure to demonstrate that they occur, can be evaluated, and can even be tied to the credit/tuition fulcrum so crucial in the financing of today's higher education. This paper will present an experiment in crafting a SOTL model to meet these demands during the rehearsal and production process of a production of George Bernard Shaw's "Heartbreak House" mounted by the theatre department of a large urban college of the performing arts. The production was one of six "Main Stage" (i.e. fully budgeted and produced) productions in the season, amidst an additional 40+ faculty and student directed productions all of which are extra curricular and for which students competitively audition. The department considers these activities necessary for the application of skills learned in studio and classroom courses but they are not included in considerations of credit/tuition costs and are funded by an additional budget. This study is an attempt to demonstrate not only how explicit learning outcomes can be set for such productions but also how data can be collected and analyzed, as for any other classroom situation in the whirlwind of a production schedule.

The learning outcomes articulated for this production included: 1. ensemble playing skills, 2. use of language (phrasing, rhythm, emphasis etc.) and dialect, and 3. mastery of comic timing and characterization. In addition, the study sought to evaluate the

students' cognitive understandings of the ideas expressed in the play and how they connect them with their present world. Data sources included student questionnaires at the beginning and middle of the process, detailed notes from the vocal/dialect coach, a production diary kept by the director, critical response from theatre professionals attending the performances and a video-taped focus group discussion with the cast following the closing of the production at the end of March. This data is presently being analyzed via close reading and grounded theory methodologies. The results will be shared in the presentation as well as a discussion of the issues involved in the planning, execution and replication of the model. Conference threads touched on by this presentation include inquiry into student learning, assessment of student learning, disciplinary approaches to SOTL and new/ diverse contexts for SOTL.

8:30 AM | Room 207 | Inquiry into teaching practices

D11 MAKING THE GREY MATTER: BRAIN-COMPATIBLE TEACHING AND LEARNING IN THE HIGHER EDUCATION CLASSROOM

Workshop (90 minutes)

Susan Hughes (1), Vicky Eiben (1)
(1) Viterbo University (La Crosse, United States)

Since the Year of the Brain was declared by President George W. Bush in 1989, there has been a dramatic increase in the application of neuroscience research to education. Much of the research and use of brain-based teaching strategies has been in PK-12 education. However, in higher education classrooms, many instructors continue to use lecture as the primary instructional strategy (Freeman & Walsh, 2013.) Faculty at the University of South Carolina found that, "our experience implementing brain-based strategies in our courses, and the student evaluation data makes for an argument that teaching with the 'brain' in mind is a win-win situation and may increase academic performance, sharpen thought processes, and improve the attitudes toward learning of college students" (p. 116). More than 25 years have passed since the Year of the Brain. More recently, at the Decade of the Mind Symposium in Berlin, Germany (2009), participants met to discuss the impact of neuroscience on teaching and learning. One of the outcomes of this symposium was the need to inform and educate instructors about the practices and classroom conditions that are necessary to engage our students in ways that enhance their higher level thinking and creativity and that allow them to learn to the fullest.

Many now believe that neuro-education (the term used to refer to the application of neuroscience to teaching and learning) has significant merit in changing educational practices of the past and present (Fischer & Immordino-Yang, 2008). In this 90 minute workshop, Dr. Vicky Eiben and Dr. Susie Hughes will engage participants in research-based, brain-compatible teaching strategies for higher education. Participants will learn about brain-based teaching strategies for use in a wide variety of content areas by engaging in experiential examples of those strategies. Both presenters have many years of classroom experience utilizing brain-compatible teaching methods. Both previously taught in the PK-12 arena prior to teaching at Viterbo University in Wisconsin, USA. Goals for the presentation include: (a) presenting a brief background on brain-based teaching, (b) modeling the use of a variety of brain-compatible strategies as a way to engage the participants in the experience of learning in an environment that values brain-compatibility, and (c) sharing a wealth of resources for developing brain-compatible classroom teaching strategies in higher education. Learning outcomes for the participants include a) understanding the benefits of brain-based teaching in higher education, (b) applying a variety of brain-compatible strategies, and (c) synthesizing the information, activities, and resources to create a plan to incorporate brain-compatible strategies in their content specific area of instruction.

Fischer, K. W., & Immordino-Yang, M. H. (2008). The fundamental importance of the brain and learning for education. In the Jossey-Bass reader on the brain and learning. San Francisco: Jossey-Bass.
Freeman, G. & Walsh, P. (2013). You can lead students to the classroom, and you can make them think: Ten brain-based strategies for college teaching and learning success. Journal on Excellence in College Teaching. 24(3), 99-120.

8:30 AM | Room 308A | New and diverse contexts for SoTL

D12.1 ENHANCING GLOBAL LEARNING THROUGH THE SCHOLARSHIP OF TEACHING AND LEARNING

Individual Paper (30 minutes)

Brian Smentkowski (1)
(1) Appalachian State University (Boone, United States)

This manuscript demonstrates how a scholarship of teaching and learning program can be designed to successfully address and, more importantly, generate evidence of global learning gains across the curriculum. It accomplishes three related goals: (1) it articulates the process and key ingredients of establishing an organized SoTL Program; (2) it extends that process into the realm of theme-based inquiry (such as would be found in a university's strategic plan, quality enhancement plan, or institutional mission), and (3) it shares methods of "doing SoTL" not only across divergent disciplines, but with specific foci in order to accomplish institutional goals.

The foundation of this work stems from a unique opportunity to develop a SoTL program and SoTL approach to producing genuine evidence of learning with regard to a university's QEP: Global Learning. All too often, institutional data are generated that provide evidence of teaching -- number of designated classes, number of students, frequency with which select student learning outcomes are identified of a class -- but not necessarily or directly of learning. In order to fill this void, a 4 year Global Teaching and Learning Scholars Program was developed by the author to stimulate, support, and produce SoTL-based evidence of global learning gains. Based upon a competitive call for proposals, 11 projects were selected for participation in a year-long cohort dedicated to developing and examining the impact of instructional interventions and innovations designed to accomplish specific global learning goals. Representing fields of study as diverse as Dance and Educational Technology, the goal is to demonstrate that global learning is not tethered exclusively to "given" departments or areas of inquiry, but that global perspectives and experiences are woven into the rich tapestry of the curriculum. The value of SoTL is that it enables diverse groups of people and programs to adapt or adopt a methodology to systematically analyze the impact of teaching innovations on global learning. These data, in turn, provide the most meaningful indicators of learning and, importantly, share the methods of enhancing learning within a class, within a curriculum, across the curriculum, and at the university level. In short, this program empowers those with the greatest skill, experience, and opportunity -- the faculty -- to creatively imagine and implement teaching innovations designed to enhance and document global learning.

9:00 AM | Room 308A | New and diverse contexts for SoTL

D12.2 CROSSING BOUNDARIES: THE DESIGN OF AN INTERDISCIPLINARY TRAINING PROGRAM

Individual Paper (30 minutes)

Klodiana Kolomitro (1)
(1) Queen's University (Kingston, Canada)

Abundant evidence has shown the benefits of promoting collaboration and lateral thinking by integrating concepts and frameworks of practice from diverse and seemingly unrelated fields (Smith & McCann, 2001; Wellmon, et. al., 2009). This presentation acknowledges the complex learning needs of students and explores them through the lens of interdisciplinary collaboration. We have developed a unique Interdisciplinary Training Program designed to promote and facilitate interdisciplinary learning by providing experiential and entrepreneurial opportunities. The goal of this training program is to recruit, train, and retain the best and brightest young talents. The program has been designed to develop highly qualified personnel with disciplinary, interdisciplinary and transdisciplinary skills, experiences, and attitudes necessary to provide creative solutions to complex and multi-faced issues. Our systematized experiential curriculum offers enriched learning opportunities whereby knowledge is created and translated

into measurable and usable knowledge products. Although, some shared core competencies have been identified through these needs assessment activities and evidence-based practices in teaching and learning, experiential learning is the hallmark of this training program. Essential in experiential learning are the phases of experiencing, reflection, and applying (Kolb, 1984), which make experiential activities, among the most powerful teaching and learning tools available (McCarthy & McCarthy, 2006).

The program emphasizes the acquisition and application of knowledge and skills across all of its components. Students work in teams of four to identify and develop an online collaborative project. Online collaborative projects facilitate interprofessional collaboration through multi-sectoral and multidisciplinary learning by enabling interactions. Students also participate in at least one, and up to two, external placements in a sector and/or discipline in which they have not been previously engaged. Under the direction of their supervisors and mentors, students complete at least two academic products involving knowledge mobilization efforts. Mentorship is another component of the training program where students meet with interdisciplinary mentors, patients and their families and support system (PFSS), and peers. After each meeting, they write a reflection on what they discovered through dialogue with their mentors, and how this discussion will influence their future studies and practice. Students collaborate online through a state-of-the-art Learning Management System that provides online modules and opportunities to interact with colleagues, disciplinary and interdisciplinary data, and diagnostic tools. We currently have 16 individuals in 10 different disciplines participating in our training program. The program has been a successful initiative and students value the scholarly inquiries conducted in a multidisciplinary context. By sharing highlights of this training program, we intend to engage participants in thinking of new and diverse interdisciplinary approaches to teaching and learning.

References:

Kolb D. (1984). Experiential learning: experience as the source of learning and development. Englewood Cliffs, New Jersey: Prentice Hall.

McCarthy, P. R., & McCarthy, H. M. (2006). When case studies are not enough: Integrating experiential learning into business curricula. Journal of Education for Business, 81, 201-204.

Wellmon, R., Gilin, B., Knauss, L., Linn, M. (2009). The benefits of an interdisciplinary collaborative learning experience: The student perspective on outcomes. International Journal of Interdisciplinary Social Sciences, 4 (8), 15-27.

9:30 AM | Room 308A | SoTL and institutional cultures

D12.3 SCIENTISTS MEET PEDAGOGY IN EDUCATIONAL TEACHER TRAINING: EDUCATIONAL DEVELOPERS EXPERIENCES AND PERSPECTIVES

Individual Paper (30 minutes)

Anders Ahlberg (1), Maria Weurlander (2), Klara Bolander Laksov (2), Linda Barman (2)
(1) Lund University (Lund, Sweden); (2) Karolinska Institutet (Stockholm, Sweden)

It is not unusual that educational developers express frustration about academics difficulties in approaching educational theory and concepts. But is this really a problem, and wherein lies the difficulties? We surveyed Swedish educational developers' perceptions of troublesome knowledge that academics experience in academic teacher training, along with their explanatory theories of such difficulties (Meyer & Land 2005, Perkins, 2007). Ca 30% of the Swedish course leaders responded to open-ended questions in a web questionnaire. Data was analysed by means of qualitative content analysis where data was coded and grouped into categories.

The troublesome knowledge encompassed (a) teacher training course contents including pedagogical concepts, (b) awareness and understanding of disciplinary contexts and (c) professionalism of being an academic teacher. Some educational developers

did not experience that their course participants suffered from any conceptual difficulties at all. The responding educational developers offered a range of explanations to the observed troublesome knowledge, mainly ranging from differences in scientific background between course leader and participants, and previous pedagogical knowledge to issues concerning academic identity and status. These explanations (personal theories of difficulties) primarily refer troublesome knowledge to aspects in the academic teachers' scientific community and to the ambiguous university teacher profession. In our session we will further elaborate on these theories of difficulties and their implications. One consequence of our findings is that academic teacher training explicitly needs to consider course participants' analyses of educational aspects in their own academic cultures and professions.

References:

Meyer, J. H. F. and R. Land (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. Higher Education 49(3): 373-388.

Perkins, D. (2007) Theories of difficulty, In: Entwistle, N & Tomlinson, P. (Eds) (2007) British Journal of Educational Psychology, Monograph Series II, No 4: Student learning and university teaching, British Psychological Society, pp 31-48.

8:30 AM | **Room 308B** | **Disciplinary approaches to teaching, learning and SoTL**

D13.1 UNDERGRADUATE COLLABORATIVE WRITING IN STEM: AN AUTHENTIC PROFESSIONAL PRACTICE

Individual Paper (30 minutes)

Erica Waters (1), Whitney Schlegel (1)
(1) Indiana University Bloomington (Bloomington, United States)

National Projects, such as the AAC&U LEAP (2007) initiative have served to broadly guide institutional change in undergraduate education by introducing a common understanding of learning outcomes. Change initiatives within the sciences, such as AAAS Vision and Change (2011) have helped to inspire course and curricular change within undergraduate life science education. The AAMC and HHMI Report, Scientific Foundations for Future Physicians (2009) directly addressed a need for change in the pre-professional curriculum and introduced the need for competency driven teaching practices and student learning. These change initiatives have drawn from what we know about how students learn, and have in common a call for an integrated approach to student learning, fostering disciplinary habits of mind and ways of knowing and professional identity through authentic experiences, nurtured over time, that embrace complexity and uncertainty.

Collaborative writing is inherent to the science profession; however, it is found infrequently within undergraduate science courses and curricula. When it is found it is often not scaffolded or supported explicitly by the pedagogy of the course, leaving students with misunderstandings about the process and purpose. Bruffe (1984) describes collaborative writing as a public conversation that is shaped by participation in a community. As students participate in the process they begin to grasp "how knowledge is established and maintained in the 'normal discourse' of communities of knowledgeable peers" (p. 646).

Here we investigate the extent to which collaborative writing enhances student understanding of physiology as reflected by exam performance in the course. We further characterize the collaborative writing process within student teams and the impact of this process, as well as individual student roles within the team on individual exam performance. Peer-determined competency scores for communication, problem-solving, resourcefulness, knowledge and professionalism are used in establishing a framework for understanding the relationships between the collaborative writing process and team and individual performance. This study is situated within a senior-level course for biology majors and employs a team-based and case-based pedagogy within a lecture/discussion and laboratory learning environment. Data used in the study includes four patient case reports, four case-based

objective exams with individual and team components, five peer evaluations and an end of course individual self-evaluation and comprehensive final exam.

A positive correlation between scores on collaboratively written based case reports and individual exam scores was observed. Over the course of the semester, these scores increased as a function of one another. Further examination of core components and individual assessments (including communication competency and individual perception of collaborative writing) will facilitate a more comprehensive analysis of written communication and exam success in the classroom.

9:00 AM | Room 308B | Disciplinary approaches to teaching, learning and SoTL

D13.2 FOSTERING CREATIVITY AND INNOVATION IN LEARNING AND TEACHING: THE USE OF CREATIVE WRITING TECHNIQUES IN HEALTH PROFESSIONAL EDUCATION

Individual Paper (30 minutes)

Peter Draper (1), Andrea Hilton (1)
(1) University of Hull (Hull, United Kingdom)

This paper explores features of creative and innovative teaching in higher education. It examines the 'big picture' by discussing disciplinary differences in innovation in one University, but also describes a specific innovation in which creative writing techniques are used to sensitize health professionals to the impact of language on the wellbeing of older people.

The paper draws on two studies. The aim of the first study was to understand the contribution of leadership to innovation in learning and teaching at the University of Hull, UK. We conducted a series of focus group and individual interviews to explore the opinions and practices of innovating teachers from a range of disciplines, and we also interviewed formal leaders about their opinions concerning innovation in learning and teaching. A rich picture emerged which situates innovation in complex disciplinary contexts and requires innovators to negotiate conflicting personal, departmental, institutional and disciplinary priorities.

The second study illustrates these general points by presenting a specific case study. The aim of 'Taking care with words' was to enhance nurses' understanding and skill in the use of language when listening and speaking to older people. A poet-in-residence was appointed to work with student nurses, mentors and older people as together we explored the power of language and its impact on the well-being of older people, and creatively examined the use of language in professional relationships. The appointment of a poet-in-residence is a novel approach in nursing education. The rationale for the appointment is that poets are particularly sensitive to the nuanced meanings of words and can enable us to develop skills in the creative and insightful use of language with older people.

The project built on previous work by the lead applicant, drawing on research into nurses' use of 'terms of endearment' with older people (Brown and Draper 2003, Draper 2005), and the poetics of nursing practice (Draper 2011). The project also contributes to the user and carer strategy of the faculty which is led by Sandra Burley, and draws on Jane Wray's work on social inclusion (Wray et al 2008, 2011). The faculty has recently undertaken a number of projects using the arts to promote teaching and learning, and this project continues that approach.

The paper concludes with a comment on the 'discipline specific' nature of many innovations in teaching and learning, linking this with the notion of 'signature pedagogies' (Shulman 2005).

The first study was funded by the Leadership Foundation for Higher Education

The second study was funded through the University of Hull's Innovations in Student Learning (ISL) scheme.

D13.3 COLLABORATING ACROSS BOUNDARIES: DEVELOPING A MODEL FOR AN INTEGRATED INTERPROFESSIONAL CURRICULUM

Individual Paper (30 minutes)

Maree O'Keefe (1)
(1) The University of Adelaide (Adelaide, Australia)

Rationale

The ability to learn and work collaboratively is one of the most common generic graduate attributes. Although important across higher education, there is a particular need for healthcare disciplines to embrace interdisciplinary/collaborative learning due to far reaching changes to current and emerging community healthcare needs. These include a strong focus on models of healthcare delivery that are built around interprofessional practice.

Although widely supported in principle, engagement with interprofessional education (IPE) in Australian healthcare curricula is typically achieved through activities peripheral to, rather than integrated with, the core curriculum. Fully embracing IPE represents a deep shift in thinking for many academic staff. There is a need to act beyond traditional boundaries and disciplinary silos to embrace a more pluralistic understanding of healthcare and health education. The aim of this project was to develop a model for an integrated IPE curriculum.

Methods

The project focused on dentistry, medicine and nursing. Information was collected through key informant interviews, staff and student workshops and consultation with national experts. Fourteen deans, program directors, and leading academics at one institution were interviewed using a semi structured format regarding perceptions of IPE, benefits and risks of incorporating it into their own discipline's core curriculum, and staff professional development requirements. With participant consent, interviews were audio-recorded, transcribed and anonymised. A series of staff and student workshops were then held to develop common understandings of IPE, foster collaborative linkages and encourage innovation. Consultation with national experts provided critical guidance and feedback. An initial thematic analysis was conducted on the interview transcripts. Further analysis drew on activity theory and expansive learning.

Outcomes

Activity theory and expansive learning conceives successful change as arising from a sequential transformation of understanding among key individuals as to the purpose (object) of their work. Key themes emerging from interviews were organised in line with the stages of the expansive learning cycle. Using these stages it was possible to capture the different 'starting points' among academics in their understandings of IPE, the current need for IPE and the tensions at play. This information was then used to shape workshop activities to enable exploration of new solutions and innovative thinking. Through the workshops and subsequent consultations, a set of guiding principles was agreed upon and a model proposed. In addition, different levels of staff knowledge, skills and attitudes in relation to IPE were identified so that they could be specifically addressed through professional development activities.

Reflective critique

Although situated in medicine, dentistry and nursing, the project outcomes have broad relevance to interdisciplinary teaching. Use of activity theory and expansive learning provided a strong theoretical basis and assisted organisation, synthesis and understanding of a wide range of perspectives. Reference to the later stages of the expansive learning cycle supported further planning around refining and implementing the model.

Audience engagement

Audience members will be invited to interact with the proposed model and to share their own stories of institutional change in relation to IPE or interdisciplinary collaboration. A critical incident technique will be used to support this activity.

8:30 AM | Room 309A | Inquiry into student learning

D14.1 GUARANTEED TO BE TRANSFORMATIVE?: INVESTIGATING THE IMPACT OF SHORT-TERM STUDY ABROAD EXPERIENCES

Individual Paper (30 minutes)

Bob Cowin (1), Alison Thomas (2), Siobhan Ashe (2)
(1) University of British Columbia (Vancouver, Canada); (2) Douglas College (New Westminster, Canada)

According to a report published by the Canadian Bureau for International Education, the hallmark of study abroad programs is the transformational quality of the experiences they provide to students (Bond et al, 2009). Yet, as many have noted, in spite of ample anecdotal evidence in support of this claim, research evidence remains inconsistent (Vande Berg et al, 2012), and a growing chorus of voices suggests that we should not assume that all study abroad is guaranteed to be transformative in its impact (e.g. Horn, 2012; Namaste, 2012).

One obvious reason for this apparent inconsistency may be attributable to the difference between enthusiastic student self-reports and more formal and rigorous indicators of transformative learning (Paige and Vande Berg, 2012) However, another factor which further complicates the question of how study abroad influences student learning has to do with the sheer variety of study abroad experiences available, with respect to their primary focus, their destination and their duration. This makes it apparent that the 'study abroad' experience is remarkably heterogeneous and therefore draws attention to the question of whether all forms of study abroad have the same capacity to generate transformative learning.

In the case of our own institution there are several quite different study abroad opportunities available to students enrolled in different programs, highlighting the potential variability of the learning experiences involved. This prompted us to undertake research to investigate some particular differences, focusing in the first instance on the experiences of students participating in short-term study abroad opportunities ('field schools') that are offered in the Associate of Arts program.

The features of these particular summer 'field schools' that make them different from many are their content/focus (three academic courses in the humanities and social sciences taught to a 'learning community' of 15-25 students); program duration (a total of 7 weeks, half of this spent at the partner institution abroad), and the nature of the overseas destinations (to date, mainly European). As is often the case, faculty members involved in leading these 'field schools' overseas had previously witnessed their beneficial impact on individual students, but we wanted to be able to examine student experiences more systematically via research. We therefore decided to conduct a series of surveys to explore how the various aspects of this study abroad program might be contributing to its overall impact on students, and to what extent this resulted in 'transformative learning' (Mezirow, 2000).

In our presentation we will report on the main findings from this three-year pilot study, focusing in particular on evidence of the impact of several specific dimensions of this study abroad experience: experiential learning, participating in a learning community, total immersion in intensive learning and exposure to different cultures. In linking our own findings to previous research on each of these topics we will invite our audience to engage with us in discussing their implications for the design of future study abroad programs. We will conclude by identifying the issues that we intend to examine further in the next phase of our research.

9:00 AM | Room 309A | Inquiry into student learning

D14.2 TURKEY AS CROSSROADS: SHORT- AND LONG-TERM IMPACTS OF A SHORT STUDY ABROAD COURSE FOR FIRST-YEAR HONORS FELLOWS

Individual Paper (30 minutes)

Michael Carignan (1), Maureen Vandermaas-Peeler (1)
(1) Elon University (Elon, United States)

Institutions of higher learning are increasingly focused on preparing students for a global world, and study abroad programs are one important means of broadening students' experiences (Wang, Peyvandi & Moghaddam, 2009). There are a number of documented benefits of participating in study abroad programs, including increased concern for international affairs, interest in the history of countries other than one's own, and ability to understand the complexities of national identity (Clarke et al., 2009; Kim & Goldstein, 2005). Recently, Honors Program administrators and faculty have begun to explore the benefits of program-based study abroad opportunities to advance the general goals of study abroad among Honors students (Mulvaney & Klein, 2013). Our study is a multi-faceted evaluation of a short-term study abroad program for select groups of first-year college students in an Honors Program at a small, liberal arts university. This presentation covers a significant expansion of the on-going study of learning outcomes, and the short- and long-term impacts of a first-year study abroad experience for Honors Fellows at our university.

Co-presenter 1 will discuss results from a broad survey administered at the beginning and the end of the Honors Fellows' first year in college. Each fall, surveys including questions related to participation in a community of scholars at our university, previous experiences and expectations regarding international study (Kim & Goldstein, 2005), and a scale of global-mindedness or how one sees oneself as connected to a larger world community (Clarke et al., 2009) are administered. For the last two years, approximately 14 students traveled to Turkey during a January-term course while the rest of the cohort took courses on campus. At the end of the academic year, all first-year honors fellows were administered the surveys again. Preliminary findings demonstrated that students participating in the first-year study abroad program decreased in globalcentrism (a subscale of global-mindedness), but few other differences emerged. Further analyses are in progress, and results will be presented in the context of the program, course and university goals for global engagement and scholarly inquiry. Additionally, a survey for the first cohort will assess the impact of the Turkey course on students more than a year after their return.

Co-presenter 2, who was the course leader for both years within this study, has evaluated an end-of-course reflection assignment that asks students to consider the effectiveness of the oft-used paradigm of East vs. West to describe the many things they saw and studied in Turkey. He will discuss results from an evaluation of that assignment, revealing that students demonstrated a range of levels of "intercultural competence," (Vande Berg, Paige, and Lou, 2012), a range which speaks to the strengths of some of our intervention strategies while also calling for more advanced preparation for this sort of learning and perhaps a more sharply focused writing prompt.

8:30 AM | Room 309B | Disciplinary approaches to teaching, learning and SoTL

D15.1 THE DOCTOR OF MUSICAL ARTS DEGREE AS A SITE FOR THE SCHOLARSHIP OF TEACHING AND LEARNING IN MUSIC

Individual Paper (30 minutes)

Susan Conkling (1)
(1) Boston University (Waltham, United States)

Until 1951, there was no practice-oriented doctoral degree in the field of music. Although many instrumentalists and vocalists had distinguished performing careers and were recognized as excellent pedagogues, they often were unable to gain promotion and tenure at academic institutions. A joint committee of the National Association of Schools of Music and the Music Teachers National Association began studying the issue of a professional degree as early as 1936, but their efforts did not come to fruition for more than a decade (Imig, 1977).

Currently, the NASM Handbook (2013) describes the Doctor of Musical Arts (DMA) as representing the "highest level of professional practice, emphasizing the creation or performance of musical works and transmission of knowledge about musical works, or pedagogy" (p. 136). The conception of this degree means that proficiency in music performance is expected to be coupled with proficiency in music teaching, consistent with Boyer's argument that "those who teach must, above all, be well informed, and steeped in the knowledge of their fields" and "build bridges between their understanding and the student's learning" (p. 23). The Handbook further emphasizes, "inquiry and investigation, and often research and scholarship, are components of performance practice" (p. 136). Typically, the DMA student completes some sort of capstone project, which can be an analysis of a key work in the repertoire. However, given the close association between performance and teaching that characterizes the degree, and given many DMA students' passion for teaching, they are increasingly turning towards investigation of music teaching and learning.

A broad overview of such dissertations suggests that DMA students are concerned with pedagogies for Western classical music, as well as for jazz, pop, and music theater. They are interested in creating new technologies and methods designed to improve student learning, as well as in developing case studies of expert pedagogues. In this paper, I argue that, as a body of literature, these studies offer insight into scholarship of teaching and learning in music. A detailed content analysis shows emerging professionals' visions of great teaching and meaningful learning. Through their scholarship, these DMA students have identified threshold concepts and bottlenecks for the study of individual instruments, and for various aspects of musicianship including sight-singing, improvisation, composition, and conducting.

But there appears to be no systematic effort across institutions, or even within a single institution, for DMA students to collaborate and build on the findings of others. It appears, then, that there may be few mechanisms by which DMA students can be recognized for their good SOTL work, or spot opportunities to sustain that work as they enter professorial appointments in higher education. Consequently, by way of this content analysis of DMA dissertations, I propose several strands of SOTL in music that might be engaged, supported, and continued.

Boyer, E. 1990. Scholarship reconsidered: Priorities of the professoriate. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Imig, W. L. 1977. The development of the degree "Doctor of Musical Arts" in the USA. ISME Yearbook 4:116–19.

9:00 AM | Room 309B | Inquiry into teaching practices

D15.2 EXAMINING LEARNING ANALYTICS: WHO BENEFITS MOST FROM OUR TEACHING INNOVATIONS?

Individual Paper (30 minutes)

Jovan Groen (1), Nancy Vézina (1)
(1) University of Ottawa (Ottawa, Canada)

As educators in the pursuit of enhancing student learning we undergo the planning, assessment and modification of our teaching – in essence, we become scholars of teaching and learning. We innovate and experiment by reformatting our courses, modifying our instructional approaches, providing students with a greater variety of options and developing resources to better support their learning experience. In the spirit of scholarship, we follow our practices with an assessment of their effectiveness by examining their impact from numerous angles, most commonly using process, performance and affective measures (Raffoul & Kustra, 2012). As one would expect, we aim for a favourable impact. Yet, even when this occurs, which students benefit most from our instructional enhancements and innovations? Is it possible that a sub-set of students be impacted negatively, even when the broad majority are affected positively? Could we use learning analytics (use of support tools) to better understand student behaviour and predict student levels of success?

In line with Owston, Vajoczki, & Wideman (2011), who examined the use of technology in the classroom, data is emerging from a similar ongoing study on the use of technological support tools at the University of Ottawa that indicates that lower achieving students may benefit most from support resources/tools put at their disposal. Preliminary results point to a strong relationship between student use of resources and grades. Conversely, it was revealed that higher achieving students equipped with better learning strategies were less inclined to use the resources. In addition to analytic data regarding student use of resources/ tools, grades, and a study process questionnaire (n=1067) (Biggs, 2001), qualitative data including student focus groups and instructor interviews were collected to help explain trends that emerged we examined the relationship between student analytics, grades and study habits. Relationships among these variables may shed light on ways of predicting student success which may ultimately serve as a tool to improve retention.

Focusing on the themes of "Inquiry into teaching practices and student learning," this session is structured as a presentation of study results and discussion of their implications on teaching and learning in higher education. By the end of this session participants will be able to:

- Describe and discuss the relationships between student study habits and grades in the context of innovative instructional practices;
  and
- Evaluate the impact of teaching innovations on sub-groups of students.

The session will be facilitated in English; however, questions and discussion in French are encouraged. All documents and materials will be provided in both English and French.

References:

Biggs, J., Kember, D., & Leung, D.Y.P. (2001). The revised two-factor study process questionnaire; R-SPQ-2F. British Journal of Educational Psychology, 71, 133-149.

Owston, R., Vajoczki, D. & Wideman, H. (2011). Lecture capture in large classes: What is the impact on the teaching and learning environment? A paper presented at the Annual Meeting of the American Educational Research Association (AERA), April 8 -12, 2011, New Orleans, 1-25.

Raffoul, J. & Kustra, E. (2012). How to Feed Your Friends Seduce Your Editors: Writing and Reviewing for SoTL. Retrieved from: http://scholar.uwindsor.ca/ctlpres/1/

9:30 AM | Room 309B | Inquiry into teaching practices

D15.3 "I COME OUT OF CLASS ON FIRE": HOW SENIOR FACULTY KEEP STUDENTS AWAKE AND LEARNING ALIVE

Individual Paper (30 minutes)

Mary Jean Ronan Herzog (1), Laura Cruz (1)
(1) Western Carolina University (Cullowhee, United States)

Researchers have long recognized that instructors face distinctive challenges at different career stages. While much work has been done on developing best practices around early career faculty, the SoTL literature only pays scant attention to senior faculty (Sorcinelli, 1999; Zeig and Baldwin, 2013). The most common teaching challenges cited by senior faculty are those of vitality, including coping with burnout, waning interest, and growing disengagement with their fields. This interactive presentation uses the results of an institution-wide study to engage participants in the question: what are the strategies and processes that senior faculty use to maintain and/or regain creativity and passion in their teaching?

The research is based on a mixed-methods study. The first part, a survey sent to all senior faculty at a medium-sized regional comprehensive university, looked for common strategies related to teaching practices and demographic factors (i.e. race, gender, discipline, status/role) that could affect vitality (Gappa, Austin, & Trice, 2007; Shin, 2011). After completing the survey, respondents were invited to participate in an interview about their own specific strategies and perspectives. The researchers analyzed transcriptions of the interviews to point to common themes and identify potential strategies (Kvale & Brinkman. 2008; Nash, 2004; Silverman & Marvesti, 2008).

Revitalization strategies for senior faculty are significant beyond simply the faculty at this stage — the impact is cross-generational and even international. While the western paradigm often marginalizes the role of older citizens, other cultures place value on the accumulated wisdom of elder generations. The results of this study suggest that keeping senior faculty engaged can bring the benefits of that accumulated wisdom to others and can increase the stock of knowledge available to the university as a whole — and that stock continues to rise. With the continued decline in public funding for higher education (e.g., in the US and Canada), the demographic profile of many universities has shifted to higher percentages of senior faculty relative to new faculty. In addition to strategies and processes, senior faculty can contribute frameworks for sustainable teaching practice, a dimension often missing for mid-career faculty.

In this session, participants will be given the opportunity to complete a brief version of the survey and engage in thematic analysis of their results in relation to the context of our study. They will leave with a compilation of best practices and successful strategies for maintaining or regaining creativity and passion in their teaching, but also with the inspiration to engage their own senior faculty in meaningful ways as an integral part of the culture of teaching and learning on their campuses.

10:30 AM | Room 2000A | Theories and practices of SoTL

E01 CROSSING THRESHOLDS ACROSS THE CURRICULUM

Panel (90 minutes)

Sherry Linkon (1), Margy MacMillan (2), Janice Miller-Young (2), Jessie Moore (3)
(1) Georgetown University (Washington, DC, United States); (2) Mount Royal University (Calgary, AB, Canada); (3) Elon University (Elon, NC, United States)

Most of the work on Threshold Concepts (TC) has been done within disciplines, marking critical points of learning required to progress in understanding disciplinary knowledge and processes. The framework is also useful in thinking about teaching concepts that cross disciplinary boundaries. Recent discussions that transcend fields of study, whether on interdisciplinary learning or questions like how concepts about writing transfer across the curriculum suggest that some TCs may apply across disciplines. Scholars from different disciplines will offer specific examples of possible transdisciplinary TCs and open a discussion to further understand those concepts, both for students and among ourselves.

This session will present four perspectives, introduced by a discussion of the value of articulating TCs of learning and knowledge. Research on intellectual development and resources on "learning to learn" suggest several possible transdisciplinary thresholds, including metacognition, the concept of understanding as the ability to apply knowledge, and ideas about the nature and processes for developing disciplinary knowledge. What can we gain by viewing these ideas not simply as insights that students should be expected to develop over time but as concepts to be taught?

Information literacy, how students determine and fulfill information needs, incorporates a number of transdisciplinary thresholds. A recent initiative to recast international standards for information literacy into a TC-based framework has identified core aspects of knowledge about information students need to master to conduct research for academic purposes and lifelong learning. Many of these TCs require deeper integration with learning beyond the traditional "library class" and dovetail with other transdisciplinary TCs.

In STEM (science, technology, engineering, mathematics) disciplines, several TCs are worth exploring in a transdisciplinary framework. Spatial visualization ability has been extensively studied in engineering and chemistry, but a better understanding of the location and interaction of things in three dimensions is important for understanding many global issues ranging from climate change, to cultural heritage. Another example, understanding the nature of the scientific method, requires the crossing of many thresholds which have transdisciplinary application around evidence, argument, analysis, and interpretation.

Finally, writing transfer can also be understood as a transdisciplinary TC. Transfer theory is "troublesome" for academic staff/faculty because it requires thinking about learning beyond the scope of a single course and beyond disciplinary boundaries. Yet a meta-analysis of published writing transfer literature and more recent studies from the Elon Research Seminar on Critical Transitions: Writing and the Question of Transfer, demonstrate that writing transfer also functions as a transdisciplinary TC for students. Students initially do not expect to be able to apply writing knowledge gained in one course to their writing in concurrent or subsequent contexts. To help learners improve as writers, academic staff/faculty must be cognizant of both the disciplinary TC writing studies and the identification of writing transfer itself as a TC. Identifying writing transfer as a TC pushes against understandings of TCs as disciplinarily-bound – as do the other examples this panel explores.

We will end with an open discussion on how the interplay of trandisciplinary and disciplinary TCs affects learning.

10:30 AM | Room 2000B | Leadership, academic development and SoTL

E02 ISSOTL'S ADVOCACY AND OUTREACH MISSION: ISSUES AND ACTION PLANS

Panel (90 minutes)

Jennifer Robinson (1), Kelly Hewson (2), Diana Gregory (3), Mary Huber (4)
(1)) Indiana University (Bloomington, United States); (2) Mount Royal University (Calgary, Canada); (3) Kennesaw State University (Kennesaw, United States); (4) Carnegie Foundation (Stanford, United States)

Recently, academics have been both admonished to enter public debates and urged to stay clear of them in forums such as the New York Times, The Chronicle of Higher Education, and the halls of disciplinary conferences. Meanwhile, political, technological, and economic influences continue to press on the processes of higher education around the world. This session will review the progress of ISSOTL's newly formed Advocacy and Outreach Committee and invite discussion about future work. Loosely organized after the 2012 McMaster conference, an international ad-hoc committee hosted a roundtable at the 2013 Raleigh conference to generate a list of opportunities and concerns. Now a standing committee of the ISSOTL Board — with a statement of mission, responsibilities, reporting duties, and membership details — the committee invites all ISSOTL members to help further refine the role of this new committee and its priorities. We particularly encourage your creative participation in identifying root issues: those obstacles that prevent forward motion; those issues that, with creative management, will magnify the impact of our scholarship; and priority concerns about which we can all be clear and pursue through strategic actions. In what areas would you like to see ISSOTL make a difference? How would you prioritize them, and, ideally, how would you set about influencing them? What leverage points can you identify that enable faculty, staff, and student voices of SOTL to better inform important debates? What could ISSOTL do to help?

For your convenience, the mission of the committee is here:

ISSOTL promotes faculty, staff, and student voices, informed by research on learning in classrooms and related contexts, in discussions of pedagogy, curricula, and success in higher education. The ISSOTL Board and the Advocacy and Outreach Committee will directly engage in such advocacy and will support advocacy by ISSOTL members and partner organizations. ISSOTL encourages its members to make their voices heard in colleges and universities, disciplinary and professional associations, and other relevant organizations and public bodies, as well as through the media.

The Advocacy and Outreach Committee fosters discussion within ISSOTL – as an organization but also among members – about the relevance of SOTL for policy debates within and outside of the academy, engaging in such discussions through the organization's website, listserv, special interest groups, and conferences. It also provides guidelines and models to help ISSOTL members share research-based insights on teaching and learning with audiences within and outside of the academy, including the media and policy makers.

At the meeting of the Board of Directors at the annual face-to-face meeting, the committee presents a written report about its activities, issues to which ISSOTL can contribute constructively, and opportunities to do so. It also makes suggestions to the Conference and Convenings Committee about signature features of the annual conference that can promote networking and collaboration for advocacy and outreach.

The Board of Directors appoints a chair for this committee. The committee has a minimum of five members, including one each from the Board and Communications Committee.

10:30 AM | Room 2101 | New and diverse contexts for SoTL

E03 THE DRAMA OF INSTRUCTOR-STUDENT ENGAGEMENT: CREATING QUESTIONS FOR INQUIRY

Workshop (90 minutes)

Kit Simmons (1), Nicola Simmons (2)
(1) Brock University (St. Catharines, Canada); (2) Brock University (St. Catharines, Canada)

Transmission-based mass learning may take us away from the opportunity for empathetic and engaged learning. One aim of this workshop is to attempt to regain insight into a less performative and more communicative teaching style; the second is to create SoTL questions to study impact on engagement for students and the instructor. While theatre may be called performance art, an engaged audience is understood to be a product of the actors' engagement with the material, their co-actors, and their audience (Fancy, 2007) on a level that transcends a declarative performance style.

In this workshop, we focus on a "relational perspective" (Trigwell, Prosser, & Waterhouse, 1999, p. 409) to examine the classroom interactions between instructor and students. Drawing on exercises and principles from drama theory (Murray, 2010), we will explore increased engagement through instructor-student interactions. Our thesis: that the instructor's authentic 'activity' or engagement is what will move passive students to become active learners.

For example, Trigwell, Prosser, and Waterhouse (1999) showed that students choose their approach to learning (deep or surface) according to the instructor's approach to teaching; students thus vary their learning approaches across courses. The authors note "the results complete a chain of relations from teacher thinking to the outcomes of student learning" (p. 57). Transmission teaching is more likely, the authors find, to result in surface learning approaches, while "conceptual change/student-focused" teaching is more likely to encourage students to take more deeply engaged approaches to learning.

Specifically, we will apply three principles from dramatic arts theory (Murray, 2010) to support you in exploring SoTL questions about increased instructor engagement in teaching, leading to transformed student engagement. We draw on the notions of lightness, or movement and intent rather than emotion and content; le jeu, or playfulness, intellectual and otherwise; and complicité, or the unseen but critical connections between and amongst the instructor and class participants. Lightness is hindered by tensions in the body and mind; play helps us move beyond these tensions. Complicité takes those impulses and translates them into moments of connection. The resulting dynamic has the potential to transform the classroom and its teaching-learning interactions.

Following a short theory overview, we will engage in large group activities to invite participants to experience and explore lightness, le jeu, and complicité, (one example is 'quiet energy ball'), small group discussions about personal metaphors for engaged teaching and learning, and a large group discussion to summarize perspectives on potential research questions. We hope that the workshop will help you to gain greater insight into your limitless capacity to grow in your engagement with your students, in relation to the material you teach, and within yourself.

Fancy, A. (2007). Teaching and learning: From actor to spectator. Concord, ON: Mindsource Technologies Permacharts.

Murray, S. (2010). Jacques Lecoq, Monika Pagneux and Philippe Gaulier: Training for play, lightness and disobedience. In Hodge, A. (Ed.), Actor training (pp. 215-236). Abingdon, England: Routledge.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. Higher Education, 37(1), 57-70.

10:30 AM | Room 2102A | New and diverse contexts for SoTL

E04 THE NEXT FRONTIER? THE CHANGING NATURE OF SOTL PUBLISHING

Panel (90 minutes)

Laura Cruz (1), Nancy Chick (2), Gary Poole (3), Lorraine Gilpin (4), Kimberly Olivares (5), Robin Morgan (5), Gregg Wentzell (6), Scott Simkins (7), Ken Meadows (8)
(1) Western Carolina University (Cullowhee, United States); (2) Vanderbilt University (Nashville , United States); (3) University of British Columbia (Vancouver , Canada); (4) Georgia Southern University (Statesboro, United States); (5) Indiana University (Bloomington , United States); (6) Miami University (Oxford , United States); (7) North Carolina A&T (Greensboro , United States); (8) Western University (London , Canada)

This panel discussion will explore changes and challenges in next-generation SoTL publishing. The panel will consist of editors of prominent SoTL journals, from veterans to newcomers. As the conference CFP states, the perception is that "research has recently moved from general to subject or domain specific inquiries and now focuses more on situated perspectives." This reflects a larger shift in the marketplace for SoTL and SoTL-related inquiry, a shift that will be explored by the panel.

When SoTL publishing first began, the marketplace was not unlike the 'Wild West' from U.S. history. Because the field was new, no one had a strong sense of the demand and audience for non-discipline specific SoTL research. This ambiguity proved to be a disincentive for many commercial publishers, and only those initiatives that were tied to established organizations or events were able to partner to produce printed journals and texts. For most editors, authors, and publishers, the early years of SoTL were characterized by multiple startup journals and related publication or dissemination initiatives. This was a period of proliferation and experimentation.

As SoTL has matured as a discipline, this has led to concomitant challenges to publishers. The market for interdisciplinary SoTL has become more defined and the roles of respective journals clarified. Rather than choosing proliferation and experimentation, a smaller number of publishers and editors are today employing creative strategies to maintain and even increase the passion for publishing among SoTL researchers. General SoTL journals have had to rethink how to focus their identities, to attract and manage authors and reviewers, document impact and other quality measures, and enhance the visibility of the research. The panelists will discuss strategic decisions taken by their respective publications and plans for not just serving the discipline, but shaping it in the future.

As Hutchings and Huber maintain, institutionalization carries with it the danger of the enervation of creativity and passion. At first glance, it might appear that the market for SoTL has become reified and, indeed, confirms this hypothesis. On the other hand, these challenges have pushed editors and publishers to explore more creative models for the production, dissemination, consumption, and assessment of SoTL. There may be fewer players in the general SoTL market, but there are others who are inspiring both the discipline and specific topics, methods, and perspectives in greater depth than before; the panel will explore this balance. In many ways, the second- generation SoTL publishers are working on the next frontier, finding innovative ways to foster a culture of higher education that recognizes and rewards creative and iterative practices in teaching and learning.

10:30 AM | Room 2102B | Assessment, accountability, and SoTL

E05.1 DEMONSTRATING OUR IMPACT: THE RESULTS OF A PROGRAM EVALUATION FOR A CURRICULUM DEVELOPMENT TEAM

Individual Paper (30 minutes)

Craig Moore (1), Nancy Turner (1), Susan Bens (2), John Dickinson (3), Carolyn Hoessler (2), Sheryl Mills Mills (2), J. Stephen Wormith (4)

(1) University of Saskatchewan (Saskatoon, Canada); (2) University of Saskatchewan, Program and Curriculum Development Specialist, Gwenna Moss Centre for Teaching Effectiveness (Saskatoon, Canada); (3) University of Saskatchewan, Research and Program Evaluation Specialist, Gwenna Moss Centre for Teaching Effectiveness (Saskatoon, Canada); (4) University of Saskatchewan, Faculty, Department of Psychology (Saskatoon, Canada)

The Curriculum Innovation Team (CIT) at the University of Saskatchewan's Gwenna Moss Centre for Teaching Effectiveness (GMCTE) uses a distinct model for curriculum development (Mills & Bens, 2012) that offers one approach to enhancing the passion and creativity of faculty by engaging them in program renovation, innovation, and organizational change, encouraging high impact practices (Kuh, 2008) and helping them meet institutional and accreditation expectations. The ongoing evolution of curriculum development requires evaluations that ask questions about how academic developers are progressing and making a difference (Debowski, 2011), especially as institutions continue to be held accountable for their use of public funds for teaching and learning activities (Tremblay, Lalancette & Roseveare, 2012).

To evaluate this team's work, a program evaluator from outside the CIT developed an evaluation process and program logic model (PLM), based on a template from the University of Wisconsin (n.d.), to visualize the work of the team and allow for a better understanding of how the team's activities and intended outcomes are conceptualized. Next, an on-line survey invitation was sent to all faculty and staff with which members of the CIT had interacted who were categorized as having experienced low contact, high contact, and ongoing contact to allow for statistical analysis based on the team's level of contact. Interviews were later conducted with a volunteer from each contact group to provide context to the information gathered through the survey and allow for triangulation of the data (Patton, 1999). Through data collection and analysis, the evaluation identified the team's areas of strength and areas for growth.

In this session, we will share the framework created for evaluating curriculum development support, the process of implementing this framework, and what strengths and improvements are indicated by the results, with critical discussion about assessing other educational development teams. There will also be opportunity for questions and discussing how other institutions approach evaluation of their curriculum and educational development teams.

References

Debowski, S. (2011). Locating academic development: The first step in evaluation. In L. Stefani (Ed.), Evaluating the effectiveness of academic development: Principles and practice (pp. 17-29). New York: Routledge.

Kuh, G. D. (2008). Excerpt from "High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter". Association of American Colleges and Universities.

Mills, S., & Bens, S. (2012). There is too much on the curriculum plate! Using the A5 model to streamline, align and redesign. Paper presented at the Society for Teaching and Learning in Higher Education Conference, Montreal STLHE, Montreal.

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. Health services research, 34(5), 1189-1208.

Tremblay, K., Lalancette, D., & Roseveare, D. (2012). Assessment of higher education learning outcomes (Feasibility study report, volume 1). Retrieved from Organisation for Economic Co-operation and Development website: http://www.oecd.org/edu/skills-beyond-school/AHELOFS-ReportVolume1.pdf

University of Wisconsin. (n.d.) Program development and evaluation. Retrieved from http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html

11:00 PM | Room 2102B | Assessment, accountability, and SoTL

E05.2 CREATING SPACE FOR CREATIVITY AND PASSION IN EDUCATIONAL EVALUATION

Individual Paper (30 minutes)

Mona Fjellström (1)
(1) Umeå University (Umeå, Sweden)

The aim of this paper is to contribute to the discussion on how evaluation can support higher education development. I will describe and discuss the findings from a longitudinal case study designed in relation to the distinctive features of higher education development evaluation and educational change (D'Andrea & Gosling, 2005; Elliott & Kushner, 2007). Key concepts are: evaluation as a context sensitive process with the purpose of understanding and assessing the value of education, participation and deliberation.

The goal rational evaluation concept influenced by a governing rationale is gaining ground at all levels of higher education, alienating teachers from the evaluative processes and consequently from the development of higher education (Mashood, 2011). The quality discourse and national assessment schemes have also come to colour the HE institutions' local work regarding evaluation of courses and programmes. Time effective, standardized, and summative, preferably net-based, evaluation tools are used, often designed to satisfy different governing boards need for information or definitions of quality instead of the knowledge need of those responsible for educational development (Bamber & Anderson, 2011).

The case study explores a participative stakeholder evaluation that was employed as a strategy to support the development of an undergraduate medical programme at a Swedish university. Empirical data were gathered through interviews with ten stakeholders and logbook notes from the evaluation and development process. The qualitative analysis is focused on the participants' experience of participation, how the evaluation strategy enabled participation in developmental work and the benefits of participation.

By highlighting the complexity of educational work and the expectations of the stakeholders, the evaluation strategy studied contributed to the creation of a qualified and nuanced development process. It also illuminated an evaluation process that is more associated with learning than with quality enhancement. The practice-near and language-sensitive process supported the creation of a community of practice promoting dialogue, critical enquiry, educational conversations and enlightenment.

The analysis suggests that the complex context of higher education calls for more varied evaluation strategies characterized by holistic perspectives, enlightenment and local ownership. Evaluations that provide answers to crucial questions are a prerequisite for change in higher education. Giving teachers responsibility for the process should develop both their ability to conduct educational evaluations, to work with educational development and ultimately facilitate definitions of educational quality specific to education.

References

Bamber, V. & Anderson, S. (2011) Evaluating learning and teaching: institutional needs and individual practices. International Journal for Academic Development 17(1), 5-18.

D'Andrea, V. & Gosling, D. (2005) Improving teaching and learning: A whole institution approach. Maidenhead: The Society for Research into Higher Education and Open University Press

Elliot, J. & Kushner, S. (2007) The need for a manifesto for educational programme evaluation. Cambridge Journal of Education 37(3), 321-336.

Mahsood, S. (2011) Ten years of external quality audit in Australia: evaluating its effectiveness and success. Assessment & Evaluation in Higher Education 37(6), 761-772.

11:30 AM | Room 2102B | Assessment, accountability, and SoTL

E05.3 ASSESSMENT METHODS FOR EXPERIENTIAL LEARNING

Individual Paper (30 minutes)

Jay Wilson (1), Tom Yates (1), Kendra Purton (1)
(1) University of Saskatchewan (Saskatoon, Canada)

Experiential learning is taking hold as a method of transforming the educational experiences of both students and faculty. More than simply teaching creatively, experiential learning is characterized by a growing selection of choices to engage students in learning experiences that are more true to the world outside of the confines of the university. Lectures and other forms of classroom-based teaching are giving way to field-based learning, service learning, and hands-on instruction. Students are given opportunities to test their theoretical and working knowledge in contexts that are more authentic than what has traditionally been provided in post-secondary institutions. Faculty and instructors can use the opportunities provided by experiential learning to engage students more deeply and actively in their learning. Students benefit academically and professionally from exposure to "real world" situations where they are able to create more complete understandings of content and process. They are able to make connections with mentors and guides outside of their teachers, thus making the experience very rich.

Along with the innovation in course delivery and teaching, there must also be a parallel shift in assessment methods. Traditional ways of evaluating students such as essay writing, formal exams, and research papers may not be effective in evaluating a students performance with the new teaching approaches of experiential learning. Journaling, group presentations, and evaluation by off-campus professionals are methods that may provide a better fit with the delivery methods of experiential learning. The need exists to inventory the assessment methods currently in use to determine which are most effective in terms of student assessment and student experience, and how they best fit with different experiential teaching methodologies.

This presentation examines the forms of experiential learning assessment in use at the University of Saskatchewan. As part of a President's SSHRC funded project, faculty were engaged to share the extent to which they are currently involved in experiential learning and how they are assessing the innovative ways they are delivering their courses. The purpose of the study was to generate an understanding of the extent experiential assessment methods have infiltrated experiential teaching and identify the commonly used methods of experiential assessment. It is intended that this knowledge facilitate the development of institutional efforts to scale up experiential assessment, in keeping with the greater University goal to expand experiential learning on campus.

To understand how faculty at the U of S are currently involved in experiential learning, they were invited to complete an online survey about their teaching and assessment methods. This session will share the analysis and results of the experiential learning survey.

10:30 AM | Room 2104A | SoTL and the changing landscape of higher education

E06.1 INNOVATING TEACHING AND LEARNING IN THE MODERN LANGUAGES CURRICULUM. MANAGING TENSIONS AND OPPORTUNITIES: A UK PERSPECTIVE

Individual Paper (30 minutes)

Filippo Nereo (1)
(1) Higher Education Academy (York, United Kingdom)

An irony seems to beset higher education. One might expect universities to display a high degree of agility in their response to challenge and change. After all, the pursuit of knowledge is the raison-d'être, or at least the object of serious commitment, of all higher education institutions, irrespective of mission groups. However, innovation is a contentious and deeply problematic one for an institution that tends to thrive on tradition and conservatism, often perceived as proxies for quality in teaching.

The notion of 'management' typically implies a top-down hierarchical structure, with state actors, policymakers and central planners the main agents of innovation and focus of scholarly inquiry (see, for example, Kelly & Hess's (2013: 23) suggestion that 'real innovation' comes from the top). However, this paper takes a different angle on management, considering – in the main – the notion of 'bottom-up' management, and explores the idea that module designers and convenors can successfully innovate and manage this process in their organisation in spite of the obstacles that exist. Points are exemplified with reference to the management of an enquiry-based learning approach to the modern languages curriculum at a Russell Group (research-intensive) institution in the United Kingdom.

The purpose of this paper is thus twofold. First, it explores this tension between the notion of innovation and the practice of teaching modern languages in the rapidly changing UK higher education context (AULC/UCML, 2014; BIS, 2011; Coleman, 2014). In so doing, it is suggested that rival ideologies and competing notions of the purpose of higher education are the principal drivers of the tension that exists. Second, this paper explores management issues that these tensions give rise to, probes the idea that there is something distinctive to managing innovation in higher education, and suggests two approaches to managing teaching innovation in higher education, labelled here as the 'instrumentalist' and the 'collegial'. It is suggested that effective management of innovation requires a balance of both approaches.

AULC/UCML. (2014). UCML-AULC survey of Institution-Wide Language Provision in universities in the UK (2013-2014). Association of University Language Centres/University Council of Modern Languages. Retrieved from http://www.aulc.org

BIS. (2011). Students at the Heart of the System (White Paper). Department for Business, Innovation & Skills.

Coleman, J. A. (2014). French Studies in the United Kingdom: How Did We Get Here and Where Are We Going? French Studies Bulletin, xxxv (1), 1–6.

Kelly, A., & Hess, F. (2013). Beyond retrofitting: innovation in higher education. Hudson Institute.

11:00 AM | **Room 2104A** | **SoTL and the changing landscape of higher education**

E06.2 REFLECTING ABOUT THE SCHOLARSHIP OF TEACHING AND LEARNING WHEN DESIGNING A PBL ONLINE COURSE ABOUT SOCIAL MEDIA

Individual Paper (30 minutes)

Ann-Louise Davidson (1), Nadia Naffi (1)
(1) Concordia Univeristy (Montreal, Canada); (2) Concordia University (Montreal, Canada)

This presentation will address the problem of designing interactive online courses in higher education. Despite many promises of richer and deeper learning experiences, in a typical online learning course, students go through well-defined sequences of instruction to complete learning activities and reach learning objectives (Ally, 2008). This is akin to Skinner's programmed learning (1961), which was an extension of the operant conditioning chamber. While the intention of developing a technology of human behavior was interesting, the learners rapidly became disengaged. Despite its limitations, this metaphor of learning lived a long life and was present throughout the history of distance education and directed the advent of eLearning. After several decades of existence of eLearning and online learning, the step-by-step approach to designing instruction and the ADDIE model are still being used by course designers and upon observing several online courses in various universities, whether they be stand-alone online courses, full online programs or MOOCs, we notice that the classical approach to teaching and learning still dominates the field. However, in corpus of online courses that exist, there are some very interesting solutions pioneered by research teams that wish to innovate.

Faced with a new course to design, our team tackled the challenge by using a problem-based learning (PBL) approach grounded in a socio-constructivist pedagogical approach. The course being discussed is an undergraduate course titled "Digital Communication Technologies", offered as part of a fully online program. The course design included three components: 1) synchronous weekly tutorials; 2) asynchronous weekly discussions through a learning management system and various social media tools and platforms; 3) problem-based learning videos uploaded on YouTube for each tutorial session. After teaching the course, the teachers reflected on the gap between the theory and practice of PBL, as operationalizing theoretical concepts into actions is not as easy as it may seem. We will present the course design, two narratives of the researcher-designer-developer-instructors along with student reactions to the course. The data will be presented as a reflective analysis of the instructors with regards to the values that underlie the scholarship of teaching and learning.

Topic of the presentation: This presentation is about the transformative experience that learners go through when they solve ill-defined authentic problems in an online higher education context. The students involved in such courses were distributed over a wide geographical setting and worked full-time.

Intended outcomes: Discuss the problematic of online course design. Assess the content of a PBL online course; Analyze the multiplicity of interactions in an online PBL course; Interpret the teachers' and students' reactions in an online PBL learning experience.

11:30 AM | **Room 2104A** | **SoTL and the changing landscape of higher education**

E06.3 ARE POSTSECONDARY INSTITUTIONS DOING TOO MUCH OR TOO LITTLE TO INTEGRATE EXPERIENTIAL LEARNING/WORK-INTEGRATED LEARNING?

Individual Paper (30 minutes)

Richard Wiggers (1)
(1) Higher Education Quality Council of Ontario (Toronto, Canada)

The Higher Education Quality Council of Ontario (HEQCO) just completed – in partnership with 14 Ontario colleges and universities – an extensive five-year study of Work-Integrated Learning (WIL). These studies included surveys of:

- faculty (2011, n=3,400)
- employers (2012, n=3,500)
- college and university students both as they were about to graduate (2012, n=10,000) and 18 months after graduation (2013, n=4,000).

The final report for the last of these studies, the student follow-up survey, will be published in the fall of 2014. The contents and findings of all of these studies - as well as other research studies undertaken by HEQCO over the past few years - also encompass nearly all types of WIL, ranging from apprenticeships at one end of the spectrum to service learning at the other, with a particular focus on internships and co-operative education.

As governments and the public clamour for more "experiential" learning opportunities for postsecondary students, and students and the media complain increasingly about unpaid and potentially unlawful placements and growing challenges for postsecondary graduates in finding jobs, colleges and universities need to ask themselves several important questions, In addition to reinforcing the definitions of both Work-Integrated Learning and Experiential Learning, other topics will include the following:

- How much WIL do our programs already offer to students, and are those WIL opportunities that already exist actually fulfilling their promise and intent?
- How much WIL can really be provided additional to that which already exists, especially given the challenges already being experienced in finding sufficient placements?

- Are there alternatives to WIL that could also educate students in terms of the workplace and how it relates to their postsecondary studies, including part-time and summer employment?

It is hoped that this presentation will provide an overview of the growing body of research related to WIL, and provide suggestions for realistic future directions at both colleges and universities. The discussions will also inform an upcoming @Issue paper that will be published later in the year by HEQCO, summarizing its research and thinking in this area.

10:30 AM | **Room 2104B** | **Inquiry into student learning**

E07.1 THE INFLUENCE OF SPACE ON STUDENT LEARNING: TRANSFORMING CLASSROOMS FOR ACTIVE AND COLLABORATIVE LEARNING

Individual Paper (30 minutes)

Andy Leger (1)
(1) Queen's University (Kingston, Canada)

There is large and growing body of evidence that shows active learning can have a positive impact upon students learning outcomes such as increased content knowledge, critical thinking and problem-solving abilities, and positive attitudes towards learning in comparison to traditional lecture-based delivery (Anderson et al, 2005); increased enthusiasm for learning in both students and instructors (Thaman et al. 2013); and the development of graduate capabilities such as critical and creative thinking, problem-solving, adaptability, communication and interpersonal skills (Kember & Leung 2005). There is also literature which shows that teaching spaces can have large impact on the ability to incorporate active learning teaching strategies (Chism and Bickford 2002; Oblinger 2006; Walker et al. 2011). In the winter of 2014 three recently renovated classrooms at Queen's University designed for active and collaborative learning were used for the first time. One of the primary goals of redesigning classroom space was to evaluate how teaching spaces can facilitate changes in approaches to teaching and transform student learning experiences. The purpose of this session is to learn about the design considerations, configurations, support and technology available in each of the three new active learning classrooms, to hear about our approach to assessing the influence of these rooms on teaching strategies used and student learning and finally the perceived impact of these rooms from the students' and instructors' perspective.

Through the first term of the use of these classrooms, data was collected from students in the form of a midterm questionnaire which focused upon students' initial impression of the space and their expectations for the type of teaching and learning that was going to occur within these spaces, and an end of term survey and focus group which focused on how the space influenced their levels of engagement, connections with their fellow students and their instructor, and their overall feelings about the space when compared to other classrooms of similar sizes. Instructors that chose to use this space for the first time were also asked about their expectations and intentions for the space prior to the term, their initial impressions after the start of the term, as well as an end of term survey similar to the one for the students and focus group.

Overwhelmingly the response from students and instructors was positive for all three rooms. In both groups it was clear that theses spaces meant for active and collaborative learning were inviting and welcoming and provided the necessary environment to foster and support teaching and learning strategies that were not didactic but group and activity orientated. Interestingly, as the configuration, size and technology used in the three rooms were different, the reasons for the success of each of the rooms focused upon different attributes, functionalities and possibilities.

This session will allow participants to hear about and ask questions regarding the design aspects of three new active learning classrooms, discuss the opportunities, advantages and challenges of these spaces and the teaching strategies that were used and the influence they had on student experience and student learning.

11:00 AM | Room 2104B | Inquiry into student learning

E07.2 ARE WE THERE YET? MAKING CREATIVE OUTCOMES EXPLICIT FOR FIRST YEAR STUDENTS IN THE BACHELOR OF LANDSCAPE ARCHITECTURE DESIGN STUDIO

Individual Paper (30 minutes)

Shirley Hall (1), Lise Burcher (1)
(1) University of Guelph (Guelph, Canada)

At the University of Guelph's Teaching and Learning Innovations Conference in May 2014, keynote Tom Angelo stated that as instructors we "live in our courses" but that our students "live in the curriculum". In order for our students to be connected and invested in their learning – passion must be present. How do we know if we have inspired creativity in our students – especially in design education, where it is almost assumed that the development of creativity will be one of the key outcomes of their higher education experience?

To create effective learning strategies for our students, the authors co-collaborated in a community of practice course redesign process - CrDI. The weeklong program offered by Open Education unpacks the learning process and guides faculty through detailed redesign of a course. Faculty share challenges they face in their teaching and develop new strategies through a structured process of inputs, teaching and learning resources, and discussion. The authors were able to explore a variety of creative and innovative instructional strategies and assessment approaches and to craft these to enhance student learning within the context of diminishing resources and increasing class sizes -- a particular challenge for a studio teaching/learning format that traditionally depends on low instructor-student ratios and active and collaborative learning to foster creativity.

The authors focused on the redesign of the First Year Bachelor of Landscape Architecture (BLA) Design Studio, implementing and assessing aspects of the outcomes from their participation in the CrDI. The co-instructors redesigned the course significantly to foster creativity but also to make the creative process more explicit for students and to assess the learner's ability to recognize the creative outcomes of their own thinking. Important changes were made including revising learning outcomes (LO's), scaffolding of LO's, introduction of active and collaborative learning strategies and the constructive alignment of LO's to student assessment. Key LOs in alignment with a creative focus were established, stating that students would be able to:

- employ design principles and theory by demonstrating application of theory to design scenarios
- build on foundation of design elements, principles & traditions & apply to design of 3D landscapes
- apply techniques of 3D modeling in a range of material applications to effectively communicate proposed designs
- develop foundational understanding of spatial literacy, conditions that contribute to quality & scale of space & the impact proposed interventions will have on the space.
- harness personal expression, creativity & integration of personal spatial experiences in the design process.

The authors will present and discuss examples of student reflections and the value of these in assessing creative learning outcomes identified in the course. Next steps include assessing alignment of course LOs with program level LOs. With a commitment to continuous improvement, the authors will build upon this initial study with further data collection by undertaking longitudinal measurement and assessment of the course redesign process across all four years of the undergraduate curriculum.

11:30 AM | Room 2104B | Inquiry into student learning

E07.3 EFFECTIVENESS OF A TRANSFORMATIVE LEARNING EXPERIENCE IN REDUCING UNIVERSITY STUDENTS' SYMPTOMS OF STRESS AND BURNOUT ALONG WITH IMPROVING HEALTH CONDITIONS

Individual Paper (30 minutes)

Teal McAteer (1), Jenniffer Joseph (2)
(1) McMaster University, DeGroote School of Business (Hamilton, Canada); (2) McMaster University, Student in Faculty of Health Sciences (Hamilton, Canada)

Students, specifically those in undergraduate and graduate studies, experience high levels of prolonged and excessive stress which eventually lead to a state of burnout, where they are no longer productive and experience 'vital exhaustion'. In fact, recent research has found that burnout and the related concept of "vital exhaustion" increases the risk for cardiovascular disease as much as such well-known risk factors as body mass index, smoking and lipid levels (American Psychological Association, 2006). A Transformative Learning Experience (TLE) which calls for changing individuals' frame of reference by critically reflecting on their assumptions and beliefs as well as consciously making and implementing plans that bring out new ways of defining their worlds, can allow those individuals to appropriately manage stress and recover from burnout (Mezirow, 1997). In particular, a TLE can help individuals to learn more proactive ways of handling internal and external stressors, as well as how they choose to experience stress.

This research involved a primary sample of 150 students enrolled in a second year University Masters in Business Administration Leadership course from four offerings of the course between 2009 and 2012. This research extended Mezirow's (1997) belief that a Transformative Learning Experience, while usually resulting from a disorienting dilemma which is triggered by a life crisis or major life transition, could also result from an accumulation of transformations in meaning schemes over a period of time. As such, this research paper describes how an instructor-staged "disorienting dilemma" was embedded within the thirteen week course whereby students prepared and submitted self-reflection journals pre- and post-TLE. The initial submission of the self-reflection journal and six-week action plan allowed the students to define what thoughts and behaviors they wished to change and how they would go about changing them. The post TLE self-reflective journals allowed students to process their transformative journeys.

Qualitative data analysis involving coding, theme and pattern recognition was conducted on the students' reflection journals. Specifically, grounded theorizing was used through open coding in which categories were allowed to emerge to best fit patterns of recurring themes, as well as axial coding in which conditions, interactions, consequences and linkages were defined among the emergent categorizations (Suske, 2009). The analysis identified a correlation between the use of transformative learning and the reduction of symptoms of stress and burnout, as well as the elimination of any health concerns stated in the pre-TLE journal submission. A longitudinal study is proposed for future research to follow up with those who have undergone the TLE, thus verifying the continued and broadened use of a TLE-based course for stress management purposes.

10:30 AM | Room 2105 | Leadership, academic development and SoTL

E08 THE ROLE OF LEADERSHIP IN EMBEDDING SOTL INTO INSTITUTIONAL CULTURE

Workshop (90 minutes)

LaVonne Cornell Swanson (1), Katarina Mårtensson (2)
(1) Office of Professional and Instructional Development (Madison, United States); (2) Centre for Educational Development (Lund, Sweden)

Since ISSoTL 2009, the Special Interest Group on the Scholarship of Leading has responded to Keith Trigwell's (University of Sydney) call for developing what he referred to as a 5th Scholarship – of Leading (Teaching and Learning). Since then the scholarship on academic leadership and academic development has been more visible in ISSoTL conference proceedings and has led to the development of the fledgling ISSoTL Interest Group on the Scholarship of Leading. Still, SoTL often continues to be considered fundamentally as individual academics' endeavour within the classroom. Although progress continues to be slow, there is a growing body of literature on SoTL also as an institutional enterprise. Publications address topics such as Academic Leadership Through a Cultural Lens (Roxå and Mårtensson, 2009), The Scholarship of Teaching and Learning, Professional Growth and Faculty Development (Hutchings, Huber and Ciccone, 2011) and The Power of Social Networks: A Model for Weaving the Scholarship of Teaching and Learning into Institutional Culture, (Williams, Verwood, Beery, Dalton, McKinnon, Strickland, Pace and Poole, 2013), to name a few.

However the need for rigorous and evidence based work on the scholarship of leading remains evident. This workshop is designed to build a creative learning community of scholars to further develop our research agenda in the scholarship of leading, and to engage in activities designed to explore questions such as: How can we assess the impact of strategies aimed at integrating SoTL into institutional cultures?, What are the roles of leaders in these efforts?, What impact does SoTL have on leadership development?, What does the scholarship of teaching and learning bring to academic development? and What does academic development bring to the scholarship of teaching and learning?

In the workshop, we will provide some examples of ongoing and already-published research. We will invite participants to come forward with suggestions and examples in order to help develop international research questions surrounding the Scholarship of Leading. The workshop will build on participants' interest and knowledge to form collaborative research groups that can pursue the questions outlined above and further questions generated during the workshop. A further goal of the workshop is to collaboratively design methods and implementation strategies to help the research groups so formed to follow through with their study groups so as to build upon the call for this developing body of knowledge. We will encourage presentation of results at ISSoTL 2015 in Australia.

Workshop facilitators:

La Vonne Cornell-Swanson and Katarina Mårtensson were, together with Keith Trigwell and Torgny Roxå, the initiators of the ISSOTL Special Interest Group on the Scholarship of Leading. La Vonne is director at the Office of Professional and Instructional Development, Madison, Wisconsin, with a responsibility among other things to help institutions across the state to implement SoTL. Katarina is an academic developer at Lund University, Sweden, where she supports and researches the role of leadership in SoTL. Both have vast experience in facilitating interactive and scholarly workshops, locally, and internationally.

10:30 AM | **Room 206A** | **Inquiry into student learning**

E09.1 SPARKING CREATIVITY AND PASSION FOR LEARNING THROUGH THE CULTIVATION OF "SOULFUL SPACES" IN THE HIGHER ED. CLASSROOM

Individual Paper (30 minutes)

Jasjit Sangha (1)
(1) Chang School, Ryerson University (Toronto, Canada)

Discussions on the importance of creativity and passion in the classroom are gaining attention in SoTL as researchers are delving into how we can best prepare learners for the demands of an increasingly complex and globalized society (Hughes & Mighty, 2010; Entwistle, 2009, 2010). By nurturing creativity, educators can help students develop characteristics that will contribute to their success in this new social structure through strengthening their resiliency and capacity for innovation as well as sparking a

passion for life-long learning and a deeper understanding of their self.

The challenge for educators is how to create a learning environment in which creativity can flourish. Is it a classroom in which students are willing to engage in deep learning by pushing themselves beyond their comfort zones and feel comfortable taking risks? A classroom in which they can engage in deep reflection, participate in meaningful relational learning with their peers and their instructor? A space where learners will embrace self-directed learning that allows them to pursue their passions? In other words, as educators, how can we create a learning environment where this kind of transformative learning can take place?

This paper will seek to answer these questions by drawing from research and learning theories developed by educators such as John Dirkx (1997, 2011), John P. Miller (2000, 2014), Elizabeth Tisdell (2003), Parker Palmer (1993, 2007) and Rachel Kessler (2000). Their work indicates that students are more likely to engage in learning that fosters their creativity, passion and a deeper understanding of the self, in learning environments that are holistic "soulful spaces" and value authenticity, trust, respect, meaningful instructor – student interactions, peer learning and inclusion (Groen, 2004).

The work of these scholars will be complemented by my own research exploring the learning experiences of graduate students in a higher ed. course (for which I was the instructor) that emphasized embodied learning and creativity. In my work I seek to understand two key questions: (1) What are the specific elements in a learning environment that encourage students to engage in deep learning? (2) How do the students themselves perceive this deeper learning experience? As part of my presentation I will present data from student interviews.

The goal I seek to achieve through the presentation of this paper is to contribute to a more thorough understanding of creativity and passion by exploring how learning environments and teaching practices directly contribute to deep learning for students. The session will also offer ideas and strategies that may influence the work of other educators.

As educators, we should strive to implement teaching practices that contribute to nurturing creativity and a passion for learning so students are able to develop multiple aspects of themselves through their educational experience, discover more about themselves as learners, and most importantly, acquire the skills needed to actively participate in society, in the workplace, in their communities, in their relationships with others and with themselves.

I will actively engage the audience in this presentation by asking them reflective questions, presenting a short activity and encouraging a dynamic discussion on the ideas presented.

11:00 AM | **Room 206A** | **Inquiry into student learning**

E09.2 CREATIVITY FOR THE NON-ARTS MAJOR A GROUNDED THEORY STUDY OF STUDENT LEARNING

Individual Paper (30 minutes)

Suzanne Burgoyne (1), William Palmer (1), Kathryn Tetley (1)
(1) University of Missouri (Columbia, United States)

While early 21st century futurists such as David Houle (Entering the Shift Age, 2012), argue that humans need creativity to survive in this new era of constant change, visionary thinkers advocating entrepreneurship and innovation (e.g., John Kao) point to the failure of U.S. education to teach creativity. Numerous creativity theorists, such as Sir Ken Robinson in his 2006 TED talk, argue that all people are born creative but our educational system squashes the creativity right out of us (http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html). If a standardized test is the measure of excellence, students get no encouragement to think outside the box. Furthermore, while bemoaning the shrinking pool of creative talent, entrepreneurship visionaries often miss an important causal factor: lack of support for the arts, which nurture (if not downright teach) creativity.

As a Kellogg National Fellow (leadership training and interdisciplinary research, 1981-84) and a Carnegie Scholar (SoTL, 2000/2001), Suzanne Burgoyne has pursued a research interest in the use of theatre-based techniques as pedagogy for other disciplines, an approach called "applied theatre." In 2010-11, she took a faculty development leave to study how students' creativity might be revitalized. In spring semester 2013, she and doctoral student Will Palmer taught an honors college course in "Creativity for the Non-Arts Major." Afterwards, they and Kathryn Tetley (an honors student from the class) used a qualitative method, grounded theory, to analyze how engaging in course activities — and reflecting on those activities — may have helped students learn about and develop their own creative processes. Student journals reflecting on class exercises, assigned readings, and creative projects served as data.

Like other qualitative approaches, grounded theory is used to investigate subjective experience and thus generate theory about a complex phenomenon from the point of view of the participants. The method involves a rigorous process of coding and matrixing the "dimensions" (aspects of the phenomenon) found in the data, finding the relationships among dimensions, and building a theory.

The grounded theory paradigm poses the question: What processes are involved, under what conditions, with what consequences, for whom? In this case, "for whom" is eight honors college students who took the class. We wanted to know how students perceived their own process of learning creativity, hence the qualitative method.

We are still refining our analysis, but our emerging theory suggests that the students engaged in self-exploration, which included metacognition — thinking about how one thinks. Self-exploration and metacognition stimulated changes in perspective, in which students often discovered previously unrecognized obstacles to creativity. Two such obstacles were fear, which inhibited students from taking risks, and closed- (vs open-) mindedness. As a consequence of changes in perspective, the students set goals to overcome these obstacles — and some reported positive change.

We will report on how the study suggests that unlearning habitualized behavior and discovering fresh ways of thinking, perceiving, and learning helped students access their own creativity. We will also engage the audience by leading them in a few brief active learning exercises that stimulated student changes in perspective.

11:30 AM | **Room 206A** | **Inquiry into student learning**

E09.3 USING ART AS A CATALYST TO ENGAGE FACULTY IN CRITIQUING AND ENHANCING THEIR TEACHING AND THEIR STUDENTS' LEARNING

Individual Paper (30 minutes)

Marian McCarthy (1)
(1) University College Cork (Cork , Ireland)

This paper explores the blog postings of faculty, devised in response to their class visit to an exhibition at the Glucksman Gallery, University College Cork. Such museum or gallery visits are literally part of the course and seek to nurture the creativity and passion of faculty on a number of levels: through engagement with the Arts, through participation in a group appreciation and analysis of a work of art, as well as through taking a reflective stance on their own learning process and its implications for student learning and performance.

The visit is modelled on the Project Zero Classroom MUSE project (1998), which uses a series of Entry Points to Learning (Gardner 1998) to structure the looking and scaffold the discussion. Drawing on Gardner's Multiple Intelligences theory and Project Zero's Teaching for Understanding (Wiske, 1998) approaches, these methods define a number of ways of inviting engagement with a text or concept – in this case a visual text: there are Narrational, Aesthetic, Logical, Foundational, Experiential and Social entry points that can be used to appreciate and learn from the text.

The class of 53 faculty was divided into small groups of 5 or 6. This was also a way of creating a real context wherein faculty could get to know each other at the start of the course. The gallery space is a creative one, providing new ways of looking and learning and engaging. Faculty were then encouraged to walk around the gallery, to view the paintings /installations /photographs and then to negotiate which one they would choose to look at and to analyse in some depth. The class was given plenty of time to view, appreciate and discuss the work and to make field notes about what they saw and learned. They were then encouraged to give a detailed account of the process on the Blackboard site, as part of a group discussion forum after the session.

The blogs were constructed using the following questions:

- Discuss what you have learned about this work using two entry points to learning
- What did you learn from the discussion with your colleagues about your own learning and what are the implications for your students' learning?
- What surprised you about this experience?

The blog analysis will be centered on these questions and will seek to articulate and unpack faculty responses to the art works and to the learning process. The paper will also draw on the responses to comment on how these inform the conference theme and its constructs of creativity and passion. The findings will suggest that exposing faculty to new ways of engaging with and experiencing art unleashes creativity and passion. It will also contend that an aesthetic experience can, by the same token, lead to an artistic engagement, where, through writing, for example, faculty can come to know how they think, experience and create.

10:30 AM | **Room 206B** | **Inquiry into student learning**

E10.1 STUDENTS AS MENTORS: IMPLICATIONS OF A TEACHING ASSISTANT PROGRAM ON PRE-SERVICE TEACHERS

Individual Paper (30 minutes)

Michael Downton (1)
(1) St. John's University (Queens, United States)

Teacher education programs are tasked with a myriad of responsibilities to help improve the quality of future teachers. More specifically, pre-service teachers are required to engage in pre-determined amounts of field-experience (e.g., classroom observation) hours as part of their studies. Unfortunately, these observations alone may not be enough to engage future teachers in authentic practices. One way to better cultivate this approach is to promote an environment in which the students are a part of a pre-service teacher community. Using a legitimate peripheral participation framework, a teaching assistant (TA) program has been developed. This program allows undergraduate pre-service teachers to engage in activities that allow them to mentor other students, evaluate student work, and work together with other TA's to come up with practices that will improve student learning. Students, who have completed a foundations education course in human learning and development, volunteer their time to be mentors to newly enrolled students in these courses. The purpose of this study is three-fold. The first is to examine the impact of the mentor on the mentee. Specifically, how do students in the class utilize the mentors' knowledge and experience? Second, what is the impact on the mentors? That is, do they feel they have not only contributed to their mentees' understanding of the material, but further deepened their understanding of the material? Finally, in what ways can classroom activities be designed to encourage classroom discourse between mentors and mentees around the topics presented in class?

To accomplish this, three main sources of data are being collected. The first is researcher observations of the classroom. I am specifically looking for times when students engage in conversations that go beyond the general "facts" presented in the textbook, how the mentors guide and help current students, and the ways in which the students engage the mentor. The second data source consists of semi-structured interviews with the mentors. Example questions include "What did you learn through this experience?", "Do you think this helped you become a better teacher? Why or why not?" Other questions may emerge depending

on the answers given. Finally, online interactions between mentors and mentees are also data sources. A requirement for class assignments is that students must post their exchanges or reflections to the discussion forum. These posts are being collected.

This is a new program that was implemented at the beginning of the Spring 2014 semester; data are still being collected. Initial analysis of observation indicates that students do not utilize the mentors as much as it was anticipated they would. Also, TA's are unsure of their overall contribution to the students' knowledge. However, an unintended consequence of their participation as TA's is that they feel a sense of empathy towards the professor (e.g., frustration shown towards students that do not complete assignments). Finally, TA's contributions regarding future activities in the class are being evaluated.

11:00 AM | Room 206B | Inquiry into student learning

E10.2 SUPPORTING ACADEMIC SUCCESS THROUGH THE PROVISION OF MENTORING: RESULTS FROM UNIVERSITY OF FREE STATE QWAQWA CAMPUS

Individual Paper (30 minutes)

Ruth Wario (1)
(1) Department of Computer Science, University of the Free State, Qwaqwa Campus (Qwaqwa, South Africa)

Higher education institutions face challenges with regards to improving the pass rate and retention rate of students. Mentoring programs are among the many strategies used to improve students' retention and pass rates at higher education institutions. The mentoring programs are listed to be most effective and are increasingly used by many higher education institutions worldwide. The purpose of this study was to determine whether mentoring improved student retention, success and performance at the University of the Free State QwaQwa campus. Students' perception, improvement, performance and more importantly. whether mentoring programs had beneficial effects on overall learning and performance, were assessed. The research included 45 students enrolled in a second year human-computer interaction (HCI) class. An action research methodology was employed for this study, as it provides an opportunity to implement and evaluate various strategies, which could lead to adaptation and improvement of actions (teaching). The impact was assessed quantitatively and qualitatively. Performance changes in terms of pass rate were noted as well as possible changes in student progress and active involvement by means of feedback/reflection reports, questionnaires, and focus group interviews. The data collected were analyzed using the statistical package for the social sciences (SPSS) 17.0. Findings indicated that students had a positive attitude towards mentoring programs and a large majority enjoyed the program, which consequently enhanced their understanding and performance. Additionally, the mentoring program enhanced a good relationship between students and lecturer and as a result student confidence and motivation in their ability to face academic challenges was tremendously improved / increased.

11:30 AM | Room 206B | Inquiry into student learning

E10.3 UNLEASHING THE FULL POTENTIAL FOR STUDENT ENGAGEMENT THROUGH STUDENTS AS PARTNERS

Individual Paper (30 minutes)

Colin Bryson (1), Ruth Furlonger (2)
(1) Newcastle University, UK (Newcastle Upon Tyne, United Kingdom); (2) Student Engagement Officer, Combined Honours Centre (Newcastle Upon Tyne, United Kingdom)

In UK Higher Education, an emphasis on student engagement (SE) has been developed in recent years (rather lagging behind US and Australian models). Emerging from all SE initiatives is the concept and practice of students as partners. There are a number of forces driving this, which have rather different ends. There is a political imperative to empower students as customers. In complete contrast to commodification, is an emerging ethos with the goal to create inclusive learning communities with students

sharing responsibility for governance and educational practice in the academy (Wenstone, 2012). Partnership has virtues such as co-ownership and participative democracy which form an exemplar to wider society (Dewey, 1916; Freire, 1972). One desirable outcome of the latter approach is developing the type of strong engagement that is the pre-requisite of transformational learning and development (Bryson and Hand, 2007). A key part of unleashing the potential of students is nurturing their passion and creativity, and we contend that this type of approach offers the potential to do that.

Thus far there is little research and scholarship on partnership. Neary and Winn (2009) advocate a model of student as producer, and this related to student as co-inquirer (Healey and Jenkins ,2009; Levy and Petrulis, 2012); Bovill and Bulley (2011) have investigated co-design of the curriculum by students; and Dunne and Zandstra (2001) the model of students as 'change-agent'. Students in partnership roles have also produced their own studies and reflection on their roles (Little, 2011; Bryson, 2014).

Nearly all these opportunities are outside the curriculum. However all students share the curriculum and if partnership can be embedded into modules, this seems to offer a way for all students to benefit. We (students and staff) are putting partnership into the curriculum in modules at Newcastle University. All these modules had been co-designed by students but current students had lost any connection with that origin. These modules are all project and practice based, with the intention of allowing students to develop their own creative ideas and produce outputs that are authentic to their aspirations and interests. All these modules are now conducted in partnership mode, with the students co-determining assessment tasks, weighting and criteria inter alia.

Thus far evaluation is positive with many of the student participants appreciating their partnership role which had the effect of engaging them, thus aiding in their process of 'becoming' at university (Fromm, 1978). However addressing the diverse goals and perspectives of every individual student is problematic - possibly even disengaging a few students who expressed a sense of disempowerment and frustration (Mann, 2001). It would appear that an acclimatisation process is required; relationship and trust building, matching and adjusting expectations through discourse. Sharing and equalisation of power (especially when assessment is involved) and responsibility (when not all students desire more of that) is a fraught and challenging process. We shall share lessons learned thus far, together with an introduction to the wider work of RAISE, and facilitate a discussion of the issues.

10:30 AM | Room 207 | Inquiry into student learning

E11 SITUATING COURSE LEARNING GOALS IN A CURRICULUM: A GUIDE TO THE EVIDENCE

Workshop (90 minutes)

Dan Bernstein (1), Andrea Greenhoot (1)
(1) University of Kansas (Lawrence, United States)

Significance. This workshop will illustrate how curriculum mapping can be used as a guide for gathering evidence about students' learning or progress through a program or curriculum. Curriculum mapping asks faculty to consider how their courses contribute to their program's student learning goals. It also involves identifying student-learning outcomes in lower-division courses that are critical for student success within the curriculum and in downstream courses, and mapping the sequences of courses that can help students build to higher levels of learning across a program. This workshop addresses the conference themes of inquiry into student learning and assessment, accountability, and SOTL.

Goals and Outcomes. In this session, the facilitators will guide participants in identifying which concepts and skills from their own courses are most important or essential for students to be successful in courses downstream, and which concepts and skills they would like students to bring into their courses. The goal is for participants to identify (a) the most important learning outcomes of their courses, (b) the place of their course in their program's curriculum, and (c) where to look for evidence to find out whether students are achieving essential learning outcomes. Participants will also reflect on how their teaching and course design would be different if such evidence was regularly collected and available.

Facilitators' Relevant Experience. Both facilitators have considerable experience leading workshops for their faculty colleagues on their own and other campuses on a range of teaching and learning issues, including learning outcomes and curriculum mapping. They have also worked with multiple programs and departments on their own and other campuses on the development of curriculum maps and the implications for teaching individual courses.

Plans for Participant Engagement. The facilitators will use a combination of case studies and example curriculum maps to generate conversation about the role of curriculum mapping in identifying essential course learning outcomes and to narrow the search for evidence of student achievement of those outcomes. Most of the workshop time will consist of semi-structured breakout discussions of these issues.

10:30 AM | **Room 308A** | **New and diverse contexts for SoTL**

E12.1 SUSTAINABILITY, LEARNING ENHANCEMENT, AND INNOVATION AND CREATIVITY IN THE CURRICULUM: THE FACULTY DEVELOPER PERSPECTIVE

Individual Paper (30 minutes)

Patrick Baughan (1)
(1) City University London (London, United Kingdom)

During the last 10 years, there has been a considerable increase in research about sustainability in higher education. Whilst there are different views as to what sustainability in higher education means, Brinkhurst et al. (2011, p. 340) offer a helpful starting point: 'Sustainability efforts are defined broadly to include changes in campus operations, financial and administrative planning and policy, and academic curricula and research that facilitate positive environmental changes'. More specifically, various publications have documented examples of how sustainability has been embedded in curricula in universities in Europe and North America, in discipline-based ways (Barlett and Chase, 2013; Jones et al., 2010) and other studies suggest that many students feel that their courses should address sustainability in some form (Drayson et al., 2013).

However, there has been little investigation into faculty developer views about sustainability. Faculty developers (also referred to as educational developers and academic developers) tend to be staff working at the 'coalface' in terms of supporting educational schemes at their universities, and promoting good quality teaching, curriculum design, assessment and feedback. This paucity of research is problematic because if sustainability is to be included in more curricula, there may be implications for faculty developers who traditionally have a role in curriculum enhancement (Shay, 2012).

This paper reports on two studies in which eleven faculty developers based at seven (UK) universities were interviewed about their perspectives on, and experiences of, sustainability in the curriculum. They were invited to give their views on issues including: whether sustainability should be included in curricula; how it could be included or embedded; whether sustainability should form part of their role; and barriers to embedding sustainability. Interviews lasted for 45 minutes and data was transcribed and analysed by myself. Aspects of the project were informed by a theory of welfare economics, the 'theory of the second best' (Lipsey and Lancaster, 1956-7), which is useful as it demonstrates the value of considering broader strategies for maintaining progress in a particular area (in this case sustainability) when other policies or agendas can make this challenging.

The findings offer a fascinating mix of perspectives. Most faculty developers were supportive of the notion of sustainability in the curriculum, some viewing it to be extremely important, potentially becoming part of their own role. It was also suggested that, being such a broad-based area, the infusion of sustainability into curricula provides opportunities for using diverse teaching methods and more real-world case studies, forging new disciplinary links, and encouraging active and explorative learning. However, 'implementation barriers' were also identified.

It will be argued that sustainability provides new options for faculty developers and other staff to enrich their teaching and curricula in innovative and creative ways. Whilst sustainability incorporates a range of important issues, its diffuse and plural nature itself offers opportunities for curriculum enhancement, a new 'creative space' for learning and teaching, and a new context for SOTL.

The session will include an experiential activity and questions.

11:00 AM	Room 308A	New and diverse contexts for SoTL

E12.2 DEVELOPING A ROBUST DESIGN STRATEGY FOR CREATING AN EFFECTIVE EDUCATIONAL GAME; A COLLABORATION OF FACULTY, LEARNING DESIGNERS, AND GAME DEVELOPERS

Individual Paper (30 minutes)

Dedra Demaree (1), William Garr (1), Tanina Rostain (1), Mindy McWilliams (1), Julie Salah (1), Tyler Gaston (1), Stacey Church (1)
(1) Georgetown University (Washington, United States)

During the fall term of 2013, upper-level students at the Georgetown University Law Center had the option of playing a newly-developed game called "the evidence game." This game was developed as a SoTL project to demonstrate the use of a rigorous design process both to build an effective game and measure its efficacy. The professor hypothesized that a game environment would more realistically allow students to practice skills required to apply the rules governing the admissibility of evidence in an actual trial.

To overcome the pedagogical challenges of educational game design, researchers implemented an instructional design process in which learning objectives were mapped to game actions and research questions for a robust game design. The research methodology permitted triangulation of the data sources to assure that we could address the research questions we created based on the learning objectives identified. In developing the research design, we observed a tension between the desire to provide all students with a formative learning environment and the desire to collect clean data and chose in favor of the student learning experience. In particular, we decided against a controlled study, which would have been inconsistent with overall learning goals for the class.

Explorations from this study include:

- Correlations between game play and learning outcomes (including procedural and embodied knowledge)
- Perceived helpfulness (by students and instructor) of game for content learning
- Enjoyment and/or engagement when playing the game

Preliminary findings indicate that those who played the game responded favorably to it and agreed that the game engaged their attention and helped them apply their knowledge. Most students reported playing the game to study, prepare for the exam and/or increase their learning of the material. The majority of students who played the game did so multiple times, and were motivated to do so to improve their performance within the game, try to 'beat the game', or see if they improved their performance after studying the material. While students had many helpful suggestions for improving the game, 85% recommended that it be used for future courses.

The model we developed contributes to SoTL by partnering with faculty to systematically integrate instructional design with game design and research planning. This model was found to be very effective in producing a product that met its objectives on first implementation, and providing a formative learning experience for students involved. The project also adds to our understanding of the use of games in higher education.

The presenters (including the lead faculty member, instructional designer, and game developer) will introduce the game and discuss the design approach and the affordances and constraints of our methodology. In this presentation, participants will

have the opportunity to experience the game as a group. Participants will use provided templates to mock-up a design plan that incorporates instructional design, gaming design, and research planning. Participants will also be given the opportunity for group discussion on how the game format could be useful in a context that is applicable to their own contexts.

E12.3 "PENSERA": A FRENCH NETWORK SUPPORTING CONTINUING PROFESSIONAL DEVELOPMENT FOR EDUCATIONAL DEVELOPERS

Individual Paper (30 minutes)

Julien Douady (1), Christian Hoffmann (1)
(1) SUP - Université Joseph Fourier - Grenoble (ST MARTIN D'HERES, France)

Even if some "teaching support centers" have existed for several years in France, academic staff development in higher education is a fairly recent topic in our country. The Rhône-Alpes area (around Lyon and Grenoble) is characterized by remarkable dynamism in this field. In 2009, the pedagogical support centers of three higher education institutions joined up to create a network called PENSERA, for "Pédagogie de l'ENseignement Supérieur En Rhône-Alpes" (meaning Pedagogy of Higher Education in Rhône-Alpes).

The network's specific goals are:

- Promotion of continuing professional development and reflection for educational developers,
- Contribution to and participation in the emergence of new educational support structures in French higher education institutions, especially in the Rhône-Alpes area.

In the past 5 years, the network has built up an excellent reputation, both regionally (tripling the number of member institutions) and nationally (many institutions have sought the assistance of PENSERA for implementing new educational support structures). Today, the PENSERA network numbers 20 educational developers from 10 different institutions.

At the heart of the network's activities are its monthly meetings. Firstly, they ensure the continuing professional development of the educational developers involved, through discussions about shared problems, and, secondly, they lead to the production of powerful tools that can be used by each network member in training workshops and support activities for teachers in higher education. These meetings last one day and are self-run. Our proposed presentation deals primarily with the values that we share in our community and the principles that ensure the effective management of our work, as well as the ongoing processes of conflict resolution that enable the group to function successfully in the long term.

Examples include:

- Time is always allowed for handling "hot potatoes", which means that anyone facing a situation that is either urgent or uncomfortable can seek advice in a non-prescriptive form;
- An annual thread allows a theme to be considered in depth over time and from several points of view;
- Shared readings (i.e., frequent discussions of readings assigned to each member and done between 2 meetings);
- Time allowed for further initiatives, for those who want to become more involved;
- Regular analysis of the group's interactions, with a "meta-reflexive period" at the end of each activity;
- Rotation of responsibilities, as regards both leadership and organization.

In concluding, we explain how these approaches have helped to introduce a form of Scholarship of Educational Development (SoED) within the network. This constitutes a tool for bringing to the fore professional issues of concern to educational developers, including the different stresses arising from the exercise of their role. It also means that more personal views or styles can be allowed for, depending on the individual characteristics of each person and the institutional context in which they work.

10:30 AM | Room 308B | Disciplinary approaches to teaching, learning and SoTL

E13.1 DO WE INSPIRE PASSION AND TRANSFORMATION IN THE DISCIPLINE OF HISTORY?

Individual Paper (30 minutes)

Mary Jo Festle (1)
(1) Elon University (Elon, United States)

I propose to present findings on student thinking in and about the discipline of history and in particular whether we see evidence of "transformative learning."

Discussion about the teaching of undergraduate history has recently enjoyed greater attention and has benefited greatly from SOTL. Scholars from Indiana University's History Learning Project used a "decoding the disciplines" process to uncover many "bottlenecks" that students of history face while Sam Wineburg described the "unnatural" types of thinking that professors often take for granted. Lendol Calder exhorted historians to develop a "signature pedagogy" to help students refine skills in questioning, connecting, sourcing, making inferences, considering alternate perspectives, and recognizing the limits to one's knowledge.

Despite progress in teaching historical thinking and despite abundant evidence that high school students find history boring, historians have yet to take advantage of SOTL and learning theory about how to inculcate passion in students. My examination of first-day-of-class writings from 90 non-majors confirms others' findings that many (about half) come to the U.S. history introductory course having had a negative experience with history in high school. Further (and in contrast to what historians expect), they believe history is difficult because of the need to memorize so many facts.

Recent scholarship on "transformation" may help us consider how to engage students both cognitively and affectively. In Transforming Students (p. 21), Charity Johansson and Peter Felten assert the need for "productive challenges" that "sharply but respectfully challenge students' values and assumptions about themselves and the world they live in. Dissonance at the level of belief or value is what changes and clarifies identity." This observation suggests that listening to students tell us what has impacted their beliefs, values, and assumptions is a crucial step forward in figuring out how to design engaging and thinking-based courses.

As part of a transformative learning initiative, two colleagues and I designed five questions that we asked history majors in six sections of our senior research seminar to respond to at the end of the semester. Two questions asked how their thinking about history had changed over the course of three or four years in the major and what caused those changes; another was related to identity; and another asked what they found challenging about doing history. Most (but not all) of the students answered affirmatively to the fifth question, "Have you ever studied an idea or topic in history that made you think about who you are or rethink your values? If so, what?" Those who answered affirmatively often mentioned the sort of dissonance that scholars say is a typical step in the process of transformation; some reported now looking at the world in fundamentally different ways. The most common topics that spurred this thinking were related to racism, gender, religious traditions, ethnicity, and U.S. foreign policy. My preliminary findings suggest research directions that historians might usefully pursue, especially related to questions of identity and as David Perkins (Making Learning Whole, p. 60) puts it, how to choose topics for study that are "worth learning."

11:00 AM | Room 308B | Disciplinary approaches to teaching, learning and SoTL

E13.2 SOTL THROUGH THE LENSES OF THE ARTS AND HUMANITIES: LESSONS LEARNED FROM A CJSOTL SPECIAL ISSUE

Individual Paper (30 minutes)

Brad Wuetherick (1), Michael Potter (2)
(1) Dalhousie University (Halifax, Canada); (2) University of Windsor (Windsor, Canada)

A forthcoming special issue of the Canadian Journal of the Scholarship of Teaching and Learning (CJSOTL) is exploring what has become an interesting issue in the ongoing discussion of disciplinary approaches to SoTL. The call for papers stated:

"As the community of SoTL scholars has grown across Canada and around the world, however, there has been a growing sense that SoTL work has been dominated by the epistemologies, philosophies, and research methods of the social sciences, a view that has been supported by SoTL journal editors and resources dedicated to introducing faculty to SoTL" (Gurung and Schwartz, 2009; Jarvis and Creasey, 2009; McKinney and Chick, 2010; Chick, 2012). To quote Nancy Chick (2012) in a recent book on the current state of SoTL in the disciplines, "while many well-known SoTL leaders come from humanities backgrounds …, the on-the-ground work largely marginalizes the practices of their disciplines." So the question follows, "how does the apparent under-representation of (arts and) humanities-based disciplines affect expectations for SoTL, from norms for research design and methodology to the genre and style of its products?" (McKinney and Chick, 2010).

The special issue, inspired by the questions asked by McKinney and Chick (2010), generated significant interest from across Canada and around the world, and resulted in 14 submissions from scholars in Canada and the US primarily. This paper session, led by the two co-editors of the special issue, will explore reflections arising from the editorial process for this special issue. In particular, the co-editors will explore some of the challenges faced in the submission and review process (particularly with respect to ensuring appropriate and meaningful reviews were received for all submissions), as well as in the final publication process, for the special issue.

11:30 AM | Room 308B | Disciplinary approaches to teaching, learning and SoTL

E13.3 HOW I LEARNED TO STOP WORRYING AND LOVE ART HISTORY

Individual Paper (30 minutes)

Sarah Diebel (1)
(1) University of Wisconsin-Stout (Menomonie, United States)

"I hated art history!" Art historians brace themselves for this frequent response when revealing their profession to strangers. In fact, from regular jabs on National Public Radio's Car Talk to President Barack Obama's recent quip lauding skilled trades over art history, the subject gets a bad rap. Art history has become the poster child for what is often targeted as the "useless liberal arts degree." The weight of this cultural ridicule can affect even students in studio art and design programs that require a substantial dose of art history courses. Although such courses are essential in forming a foundation of skills and critical ability that will enhance creativity, many studio art and design majors remain disconnected from the experience and never make the connection between the required art history curriculum and their own hands-on work. This is especially the case on the campus of a polytechnic university that promotes applied learning above all, and that offers few degrees in traditional liberal arts disciplines.

While the broader cultural attitude that devalues the liberal arts remains daunting, targeting an audience of art and design students with a consistent message of relevance is a starting point. Apathy can be transformed into passion; inventiveness and creativity in teaching breed the same attitude in learners. This paper will explore a number of innovative practices and approaches

in teaching and promoting art history among students pursuing degrees in various art and design disciplines (including studio art, graphic design, industrial design, interior design, entertainment design, game design and animation). These approaches are designed to inspire and nurture a more impassioned experience, and to raise awareness of the integrated nature of art history in the total curriculum in a department that does not offer a major in art history. The success of some of these approaches has contributed to the formation this year of an art history minor that attracts an ever-increasing cohort of students.

10:30 AM | Room 309A | Inquiry into student learning

E14.1 FORMING/INSTILLING/CREATING: HOW STUDENT CREATIVITY IN ORAL PRESENTATIONS FOSTERS ENGAGEMENT, METACOGNITION AND DEEPER LEARNING

Individual Paper (30 minutes)

Irena Radisevic (1), Catherine Chiappetta-Swanson (1)
(1) McMaster University (Hamilton, Canada)

An important objective of the first year inquiry-based course at McMaster University, Inquiry in the Social Sciences, focuses on engaging students in various stages and formats of research expression i.e. weekly reflection pieces, annotated bibliography, and a research paper. As a final assignment in the inquiry-based learning cycle (Justice et al., 2006) students give an oral presentation. In this final step, a goal of inquiry, students deliver clear and effective communication of their research findings. An overwhelming majority of students used traditional PowerPoint presentations and generated cut-and-paste content from their research papers. The result was a disengaged, unmotivated and passive presenter and audience.

Our question; how can we engage and motivate presenters and their audience to encourage critical thinking and meaningful learning? In 2011 we implemented a new presentation assignment founded on creative forms that drive creative thinking. Students were offered a choice of presentation format (i.e. song, poem, short story, interview, or video clip), and given the opportunity to incorporate their own creative skills, real-life events and knowledge with course content into the making of their presentations.

How did we introduce creativity? The assignment provides space for creative process in the inquiry cycle, fostering creative and critical thinking and metacognitive reflection in students. Creativity as an active component removed student emphasis on communicating solely research facts (Beghetto, 2010). This encouraged students to learn by thinking more broadly and creatively (Guilford, 1950) in communicating their findings.

How did we measure our success? We looked at five types of presentations (four poems, three videos, two short stories, one comic on Tumblr and one PowerPoint) and we applied three inquiry methods to evaluate these creative presentations:

Step 1 - Corpus- linguistic approach (Bondi, 2010) - To determine whether students used the relevant academic terminology in each presentation.

Step 2 - Conceptual Metaphor Theory (Lakoff & Johnson, 1980) –To discover how the students integrated their academic knowledge with their real life knowledge.

Step 3 - We performed thematic analysis of the open-ended questions of the survey students submitted after presentations.

This presentation will describe more in depth how our methods and findings highlight the need for creativity in communication, especially as we found these new oral presentations provided students with an opportunity to meaningfully engage with course content. We will also discuss how encouraging students to combine classroom knowledge and skills with those from the outside world allows students to bring their own perspective and insight into the subject matter, and fosters creative abilities and critical

thinking skills. Above all, we will highlight how creative presentations encouraged metacognitive skills (i.e. reflection) exposing a deeper level of learning (Houghton, 2004).

Audience Engagement: At the beginning of our presentation we will provide the audience with key vocabulary found in our presentation. At the end of our talk we will ask the audience to create a short poem, haiku, comic sketch or introductory sentence to a short story as a way to immerse the audience in the practice of creative communication.

11:00 AM	Room 309A	Inquiry into student learning

E14.2 HOW TO READ: TESTING A TOOLKIT FOR IMPROVING DEEP READING AND METACOGNITION

Individual Paper (30 minutes)

Alison Staudinger (1)
(1) University of Wisconsin-Green Bay (Green Bay, United States)

Reading Comprehension is often a blind spot for university instructors, who have developed their own unconscious mastery of deep reading and specialized knowledge of disciplinary norms. While there are many strategies for increasing the reading compliance of students, such as quizzes, presentations and blogs, we also need to improve the learning and metacognition that occurs when students read. Deep Reading is different than putting eyes to the page, and requires that students use strategies that activate their previous knowledge and increase retention. Three core problems emerge from existing research on reading: lack of reading strategies, lack of familiarity with disciplinary terms and norms, and the importance of targeted feedback so that students recognize good habits and build on them. Building on these insights, I build work on reading at these three tension points into my class, after evaluating the students' deep reading ability before and after the course. This paper will present the results of a semester long test of a set of three interventions in an upper level course in American Political Thought, as well as the pre- and post-test scores of the students, and then go on to discuss what the results might mean for how we conceptualize and promote deep reading in our courses.

10:30 AM	Room 309B	Theories and practices of SoTL

E15.1 A HOLISTIC APPROACH TO SCAFFOLDING PEDAGOGICAL EXCELLENCE

Individual Paper (30 minutes)

Stefan Pålsson (1), Maja Elmgren (2), Staffan Andersson (3), Arnold Pears (4)
(1) Dept. of Information Technology, Uppsala University (Uppsala, Sweden); (2) Department of Chemistry - Ångström Laboratory, Uppsala University (Uppsala, Sweden); (3) Department of Physics and Astronomy, Uppsala University (Uppsala, Sweden); (4) Department of Information Technology, Uppsala University (Uppsala, Sweden)

Promoting pedagogical excellence is a multifaceted challenge. While high level policy statements and strategic decisions are important components of the reform of higher education, engagement at many organizational levels; ranging from lecturers in the disciplines to educational leaders, academic boards and teaching and learning units, are needed to realize this vision.

Over the past decade, the Faculty of Science and Technology at Uppsala University has developed a systematic model for change. The ultimate goal is a community of scholarly practice, where students, teachers and educational leaders work as true partners to achieve an excellent learning environment. The Council for educational development, TUR, plays a fundamental role in the change strategy. TUR brings together senior staff and students to coordinate initiatives within the model. Each member embodies multiple missions, e.g. higher education research in the disciplines, educational leadership, educational development and education.

In this paper we have used a framework of Henderson et al. (2011) and all of Boyer's four categories of scholarship to analyze

and evaluate the model for change at the Faculty of Science and Technology at Uppsala University. The framework introduces the four categories, based on two attributes: a change strategy directed towards individuals or the environment on the one hand, and a prescribed or emergent outcome on the other.

Seminars, workshops and conferences are examples of activities with essentially defined outcomes aimed at individuals; they fall into Category one. Category two, also aimed at individuals, but with emergent outcomes, can be found in development courses empowering individual teachers to develop their own pedagogical philosophy and conceptions of learning. The creation of TUR, with its focus on environmental change and emergent outcomes, is an example of Category three. Category four, centred on an environmental focus and emergent outcomes, represents a challenge; a shared vision cannot be imposed. The basis for change in this direction rests instead on a wide spectrum of activities.

The Uppsala model has been recognized as highly successful, and fits naturally within the faculty and university, serving as a model for other development initiatives. By situating our practice in the framework presented by Henderson et al., we stress the fact that the most important factor for success is systematic endeavour within all strategic categories. Where Henderson et al. recommend closer cooperation between different change agents, we emphasize the importance of a holistic perspective based on empowering all the agents involved.

This reflects the fact that achieving change requires activity in all of Boyer's four categories of scholarship in the field of higher education. Change agents should take part in investigations and research in higher education, engage in interdisciplinary studies and transfers between subjects and areas of research, put educational theory into practice and "walk the talk", as well as adopting the same scientific bases and scholarly approach towards our own activities as we expect of any other colleague.

References

Henderson, C., Beach, A. and Finkelstein, N. (2011) Facilitating Change in Undergraduate STEM Instructional Practices: An Analytic Review of the Literature. Journal of Research in Science Teaching, 48 (8) 952-984.

11:00 AM | **Room 309B** | **Inquiry into teaching practices**

E15.2 RELATIONSHIP AMONG CHANGES IN FACULTY CONCEPTIONS, APPROACHES, AND PRACTICES OF TEACHING FROM PROFESSIONAL DEVELOPMENT: A CASE STUDY

Individual Paper (30 minutes)

Stanley Lo (1), Denise Drane (1), Rachael Baiduc (1), Su Swarat (2), Gregory Light (3)
(1) Northwestern University (Evanston, United States); (2) California State University, Fullerton (California, United States); (3) Northwestern University (Evanston, United States)

Learning and teaching in higher education have undergone a paradigm shift from faculty teaching to student learning (Barr 1995). However, changing teaching practices is not sufficient for improving student outcomes (Henderson 2011). Practices, defined as implementations of teaching, are informed by faculty's conceptions and approaches to teaching: how faculty understand teaching and their intentions for implementing their teaching (Pratt 1992, Trigwell 2003).

This paper examines the relationship among changes in faculty conceptions, approaches, and practices of teaching after professional development. Three distinct categories of changes in conceptions are observed. A case-study approach is employed to explore the variations among these categories and the implications for faculty development. Our research questions are: 1) How do changes in faculty conceptions and approaches to teaching translate into instructional practices? 2) What are the factors that may contribute to sustainable changes in instructional practices?

The relationship among conceptions, approaches, and practices of teaching can be complex. While approaches and practices often reflect conceptions, contextual constraints may make that difficult (Kember 2000). Conceptions of teaching fall into three categories: transmission, acquisition, and conceptual change (Prosser 1994). Similarly, approaches range from transmission-based to conceptual change (Trigwell 1994). Effective teaching practices are diverse but share common pedagogical principles such as learning through inquiry (Donovan 2005).

This paper employs a mixed-method approach, with interviews, surveys, and classroom observations, to triangulate the relationship among faculty conceptions, approaches, and practices of teaching. Conceptions are examined with a semi-structured interview protocol designed to explore participants' understanding of teaching (Light 2008). The Approaches to Teaching Inventory, a Likert-scale instrument, is used to measure approaches (Trigwell 2004). Instructional practices are analyzed by coding video recordings of classroom sessions with a protocol that tracks observable instructor and student activities in defined time intervals (Smith 2013). Interviews and classroom observations are coded by at least two raters, with inter-rater agreement at greater than 0.7 and 0.8 respectively. Three case studies were chosen because of their different patterns of changes in conceptions of teaching.

Two observations emerge from these case studies. First, conceptions of teaching inform instructional practices, whereas approaches can be disconnected. Our data show that the three instructors have similar approaches but different conceptions, and their instructional practices have observable differences informed by their conceptions. Second, sustainable changes in practices may be associated with changes in conceptions. One instructor, whose conception did not change, attempted new instructional practices but reverted to transmission-based practices in the second implementation of the course. The other two instructors, who developed acquisition-based and conceptual-change conceptions, sustained their new practices.

The case-study approach employed in this paper is limited because of the small sample of faculty participants being studied. Generalized conclusions cannot be drawn. Nonetheless, the paper raises interesting questions that could be followed up in larger studies within broader contexts.

Audience engagement is planned throughout this paper, including a reflective discussion of the outcomes from this paper and an open dialog on how the themes and variations of changes in conceptions, approaches, and practices may inform faculty development programs.

11:30 AM | **Room 309B** | **Inquiry into teaching practices**

E15.3 CREATIVITY BY DESIGN? AN EXAMINATION OF THE PRESENCE AND POSITIONING OF CREATIVITY WITHIN UNDERGRADUATE COURSE OUTLINES

Individual Paper (30 minutes)

Beth Marquis (1)
(1) McMaster University (Hamilton, Canada)

Like critical thinking, creativity is commonly held up as an outcome universities ought to foster in their students (McWilliam & Dawson, 2008; Walsh et al., 2013; Zacher & Johnson, 2014). Nonetheless, existing research suggests that creativity occupies a comparatively minor place in day-to-day considerations of university teaching and learning in spite of its growing presence in educational discourse more broadly (Kleiman, 2008; Jackson & Shaw, 2006). Moreover, studies have shown that it is only rarely incorporated into courses and curricula as an explicit, central and intentionally facilitated learning outcome (Jackson, 2008). These findings were corroborated in two previous studies by the authors, wherein academics from across disciplines reported that creativity was essential to their fields and that facilitating its growth in students was part of their responsibility as instructors, but only rarely suggested that the development of creativity was a named outcome for students in their courses and programs.

(Authors, 2012; Authors, in review). To the extent that named learning outcomes ought to guide and focus instruction and assessment, directing student and instructor attention alike to key knowledge, skills and values to be learned (Biggs, 2003), this discrepancy suggests that creativity is not currently facilitated optimally in many university courses and programs.

The present study sought to build on our previous work in this area (which involved a survey of a limited number of instructors) by conducting an in depth examination of course outlines at one Canadian institution. Using a modified version of an analytical tool developed by Jackson & Shaw (2006) to assess references to creativity in subject benchmark statements in the UK, we conducted a close analysis of undergraduate course outlines for the 2013-14 academic year across all departments and faculties at the institution under study. The intent was to determine how frequently creativity is named amongst learning objectives, either directly or indirectly in individual departments and faculties at the institution, as well as to gather available information about ways in which creativity is taught and assessed in these contexts. While there is certainly much that cannot be gleaned from course outlines alone, the present analysis, in combination with the existing survey data, provides an interesting and relatively thorough picture of the ways in which creativity is positioned formally within courses and programs across the institution.

This session will present and reflect on the results of this study, and will suggest attendees consider how to build on its picture of the place of creativity within and across programs at one institution, in order to enhance creative outcomes in their own contexts.

3:30 PM | Room 2000A | SoTL and the changing landscape of higher education

F01 INTEGRATIVE LEARNING: INTERNATIONAL THEORY AND PRACTICE

Panel (90 minutes)

Daniel Blackshields (1), James Cronin (2), Bettie Higgs (1), Marian McCarthy (1), Mary Huber (3)
(1) University College Cork (Cork, Ireland); (2) Lecturer; Institutional Teaching Fellow (Cork, Ireland); (3) Carnegie Foundation for the Advancement of Teaching (Palo Alto, United States)

In 1998 the American Association of Colleges and Universities (AAC&U) called on universities to change their practices to help students develop the capacity to be integrative thinkers. Ten years on from the seminal 'Mapping the Terrain' (Huber and Hutchings, 2004), the panel in this session have edited a collection of action research case-studies focused on exploring the praxes of intentional teaching for integrative learning in the context of a dynamic environment for universities in the 21st century.

That these case studies reflect an unceasing pursuit of student-centered learning is clear. They reveal a number of themes pertaining to deliberate and conscious teaching and intentional learning. In the spirit of creating free space for dialogue, the panel proposes a conversation based on the following themes and questions:

i. Making disciplinary processes explicit

All contributions clearly highlight how disciplinary ways of thinking and acting must be shown to derive explicitly from the foundations of the discipline studied.

What are the implications for institutional logics in higher education?

ii. Negotiating complexity

Contributors stress the importance of seeking to free up the learning experience and foster autonomous learners who are fully supportive of lifelong learning.

What implications does fostering student autonomy have for faculty?

iii. Transformation as a troublesome process

A theme threading through the contributions is the troublesome process of transformation. Contributors in this volume focused specifically on the troublesome nature of metacognition – learning how to learn itself as a troublesome concept.

What are the implications for curriculum design of an increased focus on metacognitive knowledge?

iv. Power of presence

Contributors evoke the need to scaffold and mentor an affective presence.

If emphasis should be put on the duty of educators to foster a 'care of the self', what form might this duty of care take and what are its implications?

v. Integrative teaching and learning as "political" acts

Throughout the contributions, teaching and learning is described as a political act emancipating students; reconstituting the role of the lecturer/tutor; developing a disposition for lifelong learning; negotiating the future complexity of work; promoting cultures of entrepreneurship. Tensions exist between individual critical practice and hegemonic institutional logics.

What are the implications for future curriculum design of such self-conscious "political" stances?

The panel invite participants to engage in this dialogue on integrative learning, and in so doing continue the kind of "going meta" (Huber & Hutchings, 2004) required of SoTL, in which we all frame and systematically investigate questions related to student learning, the conditions under which it occurs, what it looks like, how to deepen it -- and to do so with an eye not only to improving classroom practice but to advancing knowledge. By embedding such integrative habits of mind and heart in our teaching we will, together, through shared inquiry and interpersonal fellowship continue to map the dynamic terrain of teaching and learning in the 21st century.

3:30 PM | Room 2000B | Theories and practices of SoTL

F02 LEARNING COMMUNITIES AND FACULTY FORMATION

Panel (90 minutes)

Molly Sutphen (1), Suzanne Cadwell (1), Cochenour Laurie (1), Matt Osment (1), Bob Henshaw (1)
(1) Center for Faculty Excellence, UNC-Chapel Hill (Chapel Hill, United States)

The Center for Faculty Excellence (CFE) at UNC-Chapel Hill engages with faculty members not just as "teachers," "researchers," or "leaders," but as academics who work in a web of commitments to all three roles (May, 1996). From this holistic approach to faculty, the CFE sponsors Faculty Learning Communities (FLCs), designed to help faculty reorient their teaching, scholarship, or leadership. This paper will analyze teaching communities, in which faculty redesign their large enrollment courses and implement evidence-based pedagogies to fit their disciplinary styles and learning goals. Faculty from professional schools and the College of Arts and Sciences participate in one of two types of FLCs. In one, faculty from different disciplines discuss their progress on course redesign or pose more general questions about their teaching. In another type, faculty from the same department discuss teaching and learning in their discipline. Our research questions include: How does membership in the type of FLC influence its members' instructional creativity? How does the type of FLC influence topics of discussion? How does being part of a community influence participants' formation as researchers and leaders?

Panelists will draw on data collected from faculty surveys and interviews. All panelists will contribute to the four sections of the session: 1) A brief summary of lessons learned from the course redesigns, focusing on student learning and engagement; 2) A discussion of the concept of formation (Foster et al, 2006; Sutphen and De Lange, in press) and its use for understanding how faculty change as they learn in a community; 3) A comparison of the two FLCs in terms of development of specific skills, discussions about teaching, and faculty commitment to teaching; 4) Facilitation of an audience discussion on how to adapt FLCs with the goal of sustaining fundamental changes in instructional practices.

Foster, C. R., Dahill, L. E., Golemon, L. A., & Tolentino, B. W. (2006). Educating clergy: Teaching practices and the pastoral imagination. San Francisco: Jossey-Bass.

May, L. (1996). The socially responsive self : social theory and professional ethics. Chicago: University of Chicago Press.

Sutphen, M. & De Lange, T (in press). What is formation? A Conceptual discussion. Higher Education Research and Development.

3:30 PM | Room 2101 | Inquiry into teaching practices

F03 UNLOCKING YOUR CREATIVE POTENTIAL THROUGH ARTS-BASED LEARNING ACTIVITIES

Workshop (90 minutes)

Kim West (1), Roselynn Verwoord (2), Amelia Horsburgh (1)
(1) University of Saskatchewan (Saskatoon, Canada); (2) University of British Columbia (Vancouver, Canada)

There is widespread recognition that the arts have an important role to play in supporting teacher inquiry (Irwin & de Cosson, 2004; Springgay, Irwin, & Kind, 2008), enhancing social justice pedagogy (Greene, 1998; hooks, 1994), and creating opportunities for transforming perspectives (Barone & Eisner, 1997; Eisner, 2002). Highlighting arts' transformative potential, bell hooks' wrote: "the arts remain one of the powerful, if not the most powerful, realms of cultural resistance, a space for awakening folks to critical consciousness and new vision" (1990, p. 39). Maxine Greene (1998) also wrote of the importance of art in transforming education and suggested that "anyone who is authentically concerned about breaking through prevailing surfaces, about teaching others to 'read' their own worlds (and the world of others), art forms must be conceived of as ever present possibility, and a central part of curriculum, wherever it is devised" (cited in Reed & Johnson, 2000, p. 137).

In support of art as a vehicle for promoting understanding among individuals, Greene (1991) stated that "to perceive, to imagine new possibilities of being and action is to enlarge the scope of freedom for the individual; and, when people work to open new perspectives together, they may even discover ways of transforming their lived worlds" (p. 158). Miller (2006) suggests "an education that is relevant to our time cannot simply aim for transmission, but must support cultural reconstruction or transformation" (p. 63).

This interactive and hands-on workshop is intended for participants from any discipline who wish to discover and unlock their creative potential or who aim to facilitate this process in the classroom or other developmental contexts. In the workshop, participants will use montage, a variation of collage, to explore their perceptions of the qualities or traits of creative individuals. Montage has previously been used at the University of Saskatchewan to map visual elements related to one's teaching philosophy, principles, and practice in preparation for writing a teaching philosophy statement (Ennis, Sharipova, & West, 2012). Participants will also create a quilt "block" in the workshop about what creativity in the classroom means to them. This activity has been used previously with K-12 teachers and with faculty, staff, and students at the University of British Columbia to help them uncover what teaching for social justice and what teaching means, respectively, to them. It has also been used in scholarly research to help students represent their experiences with social inclusion and exclusion (Verwoord, 2011). After the activities, participants will debrief with each other to share ideas for adapting and applying arts-based learning. At the end of the workshop, participants will be asked to reflect upon the extent to which the activities helped them to unlock their own creative potential and to discuss possibilities for using arts-based learning to support a variety of learning goals.

References available at workshop or by contacting the authors.

3:30 PM | Room 2102A | Theories and practices of SoTL

F04.1 THE CONSTITUTION AND TRANSFORMATIVE POTENTIAL OF THE SCHOLARSHIP OF TEACHING AND LEARNING – A DOMAIN-CENTRED ANALYSIS

Individual Paper (30 minutes)

Thomas Olsson (1), Laurie Charles Woollacott (2), Shirley Booth (2), Teboho Biki Pitso (3), Maria Larsson (4), Ann Cameron (2), Elsie Anderberg (5), Tina Kindeberg (4), Ruksana Osman (2)
(1) Lund University, Faculty of Engineering (Lund, Sweden); (2) University of the Witwatersrand (Johannesburg, South Africa); (3) Vaal University of Technology (Vanderbijlpark, South Africa); (4) Lund University (Lund, Sweden); (5) Jönköping University (Jönköping, Sweden)

In a recently completed collaborative project between two Swedish and two South African universities we studied the constitution and transformative potential of the Scholarship of Teaching and Learning (SoTL). We will present an analytical set of domains for describing the constitution of SoTL, grounded in our debates concerning our own studies and the literature at large.

The domains we will present are the epistemic, the pedagogical, the social, the moral and ethical, the socio-political and societal, and the professional domains. The latter is one overarching constituent of faculty professionalism, at all career grades, the other major constituent being disciplinary and professional content knowledge. The remaining domains concern, respectively, the processes of knowledge production; its deliberate focus on the processes and practices of teaching and learning; the communities of practice and learning within the faculty within and across institutions; the moral mandate of higher education; and the potential for critiquing the status quo and the role of higher education as a driver of national well-being.

At the session we will invite participants to discuss our domain-centred analysis in relation to their own experiences. We will discuss and analyse the characteristics, the relevance and the implications of our domain-centred analysis of the constitution of SoTL. We will also relate our analysis to the Swedish research (Olsson and Roxå, 2013) about excellence in university teaching (assessing, rewarding, and documenting teaching excellence). Finally, observed biases in teachers´ portfolio writing will be discussed and connected to domain thinking.

4:00 PM | Room 2102A | Theories and practices of SoTL

F04.2 TROUBLESOME KNOWING, KNOWLEDGE AND ACADEMIC IDENTITY – JOURNEYS THROUGH SOTL

Individual Paper (30 minutes)

Karen Manarin (1), Earle Abrahamson (2)
(1) Mount Royal University (Calgary, Canada); (2) University of East London (London, United Kingdom)

While the scholarship of teaching and learning (SoTL) is an emerging field of inquiry in higher education and has received increased attention in the literature, there is much debate around the definition of SoTL and how topics in SoTL need to be investigated and evidenced. Research into SoTL has revealed that the questions we ask as researchers influence the shape and form of SoTL output. Fanghandel (2013) noted that it is not necessarily important what SoTL is but rather what it has become. That is, SoTL has become a vehicle for transition, inquiry, and growth, working between disciplines and sharing a common practice. However, the term SoTL may not be universally accepted or understood. Differences in definitions are often subsumed within an academic and professional identity in a content specific environment.

In this presentation we identify and explore challenges, interrelationships, and obstacles between academic identity, knowledge (both explicit and tacit), and troublesome knowing through a SoTL lens in order to assess how these constructs interact and/or interfere. We further examine the dynamics of these relationships, building on work around SoTL and threshold concepts developed with Simmons et al. (2013). We question whether SoTL in itself is a threshold concept that needs to be navigated to define one's identity and knowledge environment or if it is instead a species of troubling/troublesome knowledge that infuses a liminal space of multiple identities. Motivated by an interest in how academics choose to portray their identity, we draw on data from an on-line survey and semi-structured interviews, to consider how SoTL experiences shape, support, or hinder academic identity and knowing.

Forty-two higher education professionals in six countries described their understanding of SoTL and their academic identities. Eleven individuals delved deeper into questions about synergies and conflicts in the different parts of their academic identities. In this presentation, we consider the following questions: Does knowing in SoTL influence inquiry in discipline specific scholarship? At what point does knowing, or fear of knowing (troubled knowing), influence academic identity and transformation of self? Is

there value in owning multiple identities to reveal aspects of knowledge and knowing? When does knowing conflict with academic and personal growth? Through a systematic evaluation of these questions, we consider the complexities within the interrelationships. We categorize our findings according to the dynamic factors — personal, relational, and contextual — identified by Lieff et al. (2012); we argue for an additional factor, the domain of knowledge and troubled knowing of SoTL.

4:30 PM	Room 2102A	Theories and practices of SoTL

F04.3 UNPACKING STUDENT RELATIVISM

Individual Paper (30 minutes)

Gerald Erion (1)
(1) Medaille College (Buffalo, United States)

As Wilbert McKeachie writes in his influential and inspirational SoTL handbook, McKeachie's Teaching Tips, "students who believe that everything is relative" can frustrate learning at many different points in the undergraduate curriculum. With this observation, McKeachie echoes the developmental lessons of William G. Perry, Jr.'s work. Philosopher Stephen Satris has written on the subject as well, tagging this familiar phenomenon with the moniker of "student relativism." He and others contributing to philosophy's SoTL literature have developed a number of discipline-based approaches to analyzing and evaluating student relativism as it most typically emerges in their philosophy classrooms.

In a pair of earlier ISSOTL papers, we explored these philosophical approaches to student relativism. More recently, we have added an important interdisciplinary component in which we survey student opinions on relativism in our philosophy, anthropology, and other liberal arts core courses. Though the new approach is still in a pilot phase, we have found that these surveys can provide valuable insights into both the extent of and the commitment to student relativism amongst our undergraduates. We have also realized that survey results can support important in-class conversations about relativism.

In this presentation, we will build upon our earlier work with a session aimed at emphasizing and extending the project's interdisciplinary dimensions. We will begin with a basic synopsis of student relativism, then share recent results obtained from our pilot surveys. We will argue that these results present new support and new challenges for the traditional philosophical analysis of student relativism. Faculty members who understand the multifaceted nature of their students' relativism may then be in a better position to engage these ideas in their various learning activities. Moreover, these lessons extend far beyond philosophy and anthropology, and are thus applicable to student learning in many other humanities and science disciplines.

Erion, Gerald J. (2005). Engaging student relativism. Discourse: Teaching and Learning in Philosophical and Religious Studies, 5(1), 120-133.

McKeachie, Wilbert J. and Marilla Svinicki (2014). McKeachie's teaching tips: strategies, research, and theory for college and university teachers. Belmont, CA: Wadsworth.

Paden, Roger (1987). The student relativist as philosopher. Teaching Philosophy, 9(3), 193-205.

Perry, William G. Jr. (1970). Forms of intellectual and ethical development in the college years: a scheme. New York: Holt, Rinehart, and Winston.

Perry, William G. Jr. (1981). Cognitive and ethical growth: the making of meaning. In A. W. Chickering (Ed.), The modern American college (pp. 76-116). San Francisco: Jossey-Bass.

Rhem, James (2006). Responding to student relativism. The National Teaching and Learning Forum, 15(4). 1-4.

3:30 PM | Room 2102B | Inquiry into student learning

F05.1 TEACHING DEEP ECOLOGY AS PART OF A MANDATORY SCIENCE PROGRAM: FROM PHILOSOPHICAL ACTIVISM TO ETHICAL LEARNING

Individual Paper (30 minutes)

Louis-Etienne Pigeon (1)
(1) Université Laval (Québec, Canada)

Ethics classes are now mandatory in most scientific programs offered in Western universities. They mostly aim at providing students with a basic knowledge of ethical theories and contemporary ethical issues. Furthermore, these classes open up the range of knowledge to various fields of applied ethics, from bioethics to environmental ethics and professional ethics. Thus, teaching mandatory ethics classes to scientists involves providing them with contents from contemporary theories, sometimes in the line of mainstream thought, but sometimes from less known types of literature.

Deep ecology is a philosophical movement that originates in the 1970s, named by the Norwegian philosopher Arne Naess and still present as an ideological standpoint in the public sphere. Its particularity derives from the fact that it questions the basis of industrial culture as the source of the present environmental crisis. In terms of philosophy, it stands out as providing a broad critique of modern daily life based on ethical, epistemological and political arguments. Beyond theory, deep ecology also presents itself in the form of a praxis, making it difficult to formalize in a teaching context.

It is nevertheless possible to use deep ecology's complex structure to create rich and meaningful learning situations. Through open discussion activities, epistemological and ethical concerns can be adressed and mainstream positions challenged. If the praxis of deep ecology sometimes seems far from our daily way of life, and the sacrifices it involves unpopular, adressing issues such as the intrinsic value of nature and the problems of a consumer society reveals that these concerns are important to students. Discussing them openly also reveals that challenging mainstream ideas in the context of an ethics class is beneficial for students as it provides a chance to establish a clear conceptual distance from the daily world, a needed perspective in the context of ethical reflexion concerning social order.

4:00 PM | Room 2102B | Inquiry into student learning

F05.2 TESTING THE INDIRECT EFFECTS OF "EMBEDDED" COMMUNITY SERVICE LEARNERS (CSL) IN LARGE CLASSES

Individual Paper (30 minutes)

Kelly Anthony (1), Jenna Van Draanen (2)
(1) University of Waterloo (Waterloo, Canada); (2) University of California Los Angeles (Los Angeles, United States)

Community Service Learning (CSL) is a series of techniques, philosophies, and actions that together create an especially effective, applied, and engaging learning environment. It is characterized by student participation in an organized service activity that is connected to specific learning outcomes, meets identified community needs, and provides structured time for student reflection (Eyler et al, 2001). Above all, CSL promotes deep learning.

The value of community service learning (CSL) in higher education has been well supported in academic literature (Astin et al, 2000; Conway et al, 2009). One significant factor in a positive service-learning experience involves the instructor facilitating relevant and active class discussion (Carpenter, 2006). CSL has also been shown to generate student-to–student discussions outside the classroom (Astin et al, 2000). Active and collaborative teaching methods that include class discussion are desirable to students and significantly improve learning outcomes in large classes (Yoder & Hochevar, 2005). These results suggest that

even students who are not participating directly in CSL may see some benefit from a CSL framework. Large classes make particularly difficult environments to include CSL experiences for all students; they are simply too resource intensive for most instructors to even consider.

Though there is substantial literature demonstrating the value of CSL, there appears to be no evidence showing how to attain the benefits of CSL experiences in a large class where community service engagement for all students would be logistically difficult or impossible. This two year study supported by a small internal teaching and learning grant at the University of Waterloo was able to demonstrate significantly enhanced student experiences for students in a large second year undergraduate health class when a only small fraction of the class (5%) was directly engaged in CSL (the "embedded" CSL learners) and brought their relevant experiences and reflections into class on a regular basis. Methods included pre and post questionnaires (n=95) and a focus group with five students from the course. Students over two terms reported that the embedded CSL learners' regular input increased their understanding of class material, that they enjoyed this component of the class, and that they felt that the embedded CSL process worked well as a teaching and learning tool. Differences between the CSL learners and the rest of the class will be discussed, as will considerations of assessment, student selection, and logistical challenges and concerns for instructors interested in implementing similar models.

We propose that this model of student engagement using embedded CSL learners can bring the benefits of CSL to a large university classroom and can extend partial impacts of the CSL experience to the entire classroom without placing significant logistical demands on instructors.

4:30 PM | **Room 2102B** | **Inquiry into student learning**

F05.3 INTERNATIONAL SERVICE-LEARNING: A UNIQUELY EFFECTIVE FORM OF EXPERIENTIAL LEARNING?

Individual Paper (30 minutes)

Phillip Motley (1)
(1) Elon University (Elon, United States)

This paper will present findings from multiple years of investigating international service-learning in a 1-year professional master's degree program. Students enrolled in this program are required to participate in a January term international service-learning course that allows them to practice the disciplinary skills they are learning as a component of their mass communications degree. The experience also gives them the opportunity to work for a real world client partner in a developing country. The research to date suggests that there are some unique affordances of this particular type of experiential learning. The existing literature on international service-learning, while somewhat thin (Jones, Kamela and Peeks, 2011), supports the majority of the data gathered so far on the effects of international service-learning.

International service-learning has the potential to offer students the opportunity to learn disciplinary knowledge and, at the same time, the chance to learn about inter-cultural issues of language, community, human rights, citizenship, social responsibility, diversity and social justice (McEachron and Ghosh, 2011). International service-learning can also be effective at teaching students about disciplinary content in the context of a professional scenario. By allowing students to work with an authentic problem that involves a real client, task and environment, they are provided with the chance to perform a meaningful function for someone other than themselves or their instructor, one that is often essential to a specific community that exists beyond the academic community in which they are accustomed to working. (Author, 2013).

This presentation will focus on the particular qualities of international service-learning that make it a distinctive form of experiential learning including immersion, authenticity, cognitive dissonance and adaptation. Drawing on observed experiences and research

data from teaching my own international service learning courses, as well as those of several colleagues, and from existing literature on threshold concepts (Land, Meyer and Baillie, 2010), this presentation will suggest that international service-learning is particularly good at placing students in challenging scenarios where they must adapt their ways of thinking in order to be successful. In essence, is international service-learning a particularly good pedagogy that places students in situations where most or all of them are forced to encounter a threshold experience, one that if successfully crossed can enable them to move to a higher level of understanding of the content and knowledge in play?

References:

Author. (2013). Redacted for blind review.

Jones, K., Kamela, M. & Peeks, A. (2011). International service-learning: Ethics in cross-cultural partnerships. Partnerships: A Journal of Service-Learning & Civic Engagement, 2(1), 1-21.

Land, R., Meyer, J.F., & Baillie, C. (2010). Editors' preface: Threshold concepts and transformational learning. In Land, R., Meyer, J.F., & Baillie, C. (Eds.), Threshold concepts and transformational learning. (ix-xlii), Rotterdam: Sense.

McEachron, A. & Ghosh, G. (2011). Service-learning & civic engagement in India. Partnerships: A Journal of Service-Learning & Civic Engagement, 2(1), 1-16.

3:30 PM | Room 2104A | Student roles in and perspectives on SoTL

F06.1

Individual Paper (30 minutes)

PARTNERING WITH STUDENTS TO UNDERSTAND THEIR EXPERIENCES IN JOINT COLLEGE/ UNIVERSITY COLLABORATIVE EDUCATIONAL PROGRAMS: THE "DUAL IDENTITY PROJECT"

Janet Landeen (1), Nancy Matthew-Maich (2), Leslie Marshall (2), Lisa-Anne Hagerman (3), Maurine Parzen (2), Christine Riehl (4), Maria Pavkovic (5), Sheri Oliver (4), Bhavin Shukla (6), Jacob Cottreau (5), Zetian Zhang (5)
(1) McMaster University (Hamilton, Canada); (2) Mohawk College (Hamilton, Canada); (3) Conestoga College (Kitchener, Canada); (4) McMaster University & Conestoga College (Kitchener, Canada); (5) McMaster University & Mohawk College (Hamilton, Canada); (6) McMaster University (Hamilton, Canada)

In the past 10 to 15 years, the number of collaborative programs offered jointly by colleges and universities has increased exponentially within Canada. Program models vary from allocating transfer credit for individual or blocks of courses to fully integrated models with students and/or faculty moving between sites. While nursing collaborative programs are now the most common form for nursing education in Canada, other collaborations are also increasing in number (Kirby, 2008). At McMaster University, fully developed collaborations exist with Mohawk College and Conestoga College for a Bachelor of Science in Nursing (Faculty of Health Sciences), and with Mohawk College for a Bachelor of Technology (Faculty of Engineering), and a Bachelor of Medical Radiation Science (Faculty of Science). While there have been some indications of what makes successful college/ university partnerships (Zorzi et al, 2007), the literature has examined this issue from institutional and faculty perspectives. There has been very limited study of student perspectives on living inside collaborative programs.

The purpose of this study was to identify issues unique to students in a collaborative college/university program by exploring their perspectives and what it means to be a student with a dual identity. An interpretive descriptive qualitative research design was used to explore the student experience (Thorne, 2008). This method requires that all methodological decisions are rigorously planned and defended for each aspect of the study. Furthermore, ten paid undergraduate student researchers (SR's), recruited from the respective programs, partnered with and were mentored by faculty in all aspects of the study. This enriched the study design and results, as well as the experience for the individuals SR's.

Sixty eight students representing all programs participated in 10 focus groups, co-facilitated by the SR's. The study was enriched by pairing SR's from different programs in conducting the focus groups. Focus group transcription was done by a paid transcriptionist so that the SR experience was aimed at study design, participant recruitment, data collection, data analysis, and transmission of findings. After data collection was completed, a focus group of the SR's was conducted to explore 1) their perspectives on being in a collaborative program and 2) their perspectives on being research partners with students and faculty from different programs and faculties. Data analysis is currently being conducted and results of this study will be available at the conference.

The insights gained from the results of this study will guide changes to improve the programs and lives of future students. The unique experiences of cross-institutional and program student/faculty collaboration will be highlighted at the conference.

References

Kirby, D. (2008). Advancing articulation: Models of college-university collaboration in Canadian higher education. College Quarterly, 11(4): 1-7.

Thorne, S. (2008). Interpretive Description. Walnut Creek, CA, Left Coast Press.

Zorzi, R., Engman, A., Barry, J., Lauzon, C., MacCoy, D. & Yen, W. (2007). Implementation Evaluation of Ontario's Collaborative Nursing Programs. Final Report for CUCC (The College-University Consortium Council). Retrieved from www.cucc-ontario.ca February 7, 2013.

4:00 PM | Room 2104A | Student roles in and perspectives on SoTL

F06.2 RESPONDING TO STUDENT INTERESTS: HOW A FACULTY-STUDENT LEARNING COMMUNITY LEADS TO THE DEVELOPMENT OF AN INTERDISCIPLINARY COURSE

Individual Paper (30 minutes)

Eron Drake (1), Cathy Willermet (1), Anja Mueller (1), Stephen J. Juris (1), Pratik Chhetri (2), Samik Upadhaya (1)
(1) Central Michigan University (Mount Pleasant, United States); (2) Central Michigan University (Mount Pleasant, United States)

Faculty from three fields developed a learning community made up of faculty, academic staff, and students in response to a request from the Universities Allied for Essential Medicines (UAEM), a campus student organization, to develop an interdisciplinary course on water issues and social activism. This course, "Water as Life, Death, and Power", brought together topics from anthropology, biology and chemistry to explore water rights and access. This paper describes how the learning community was organized, outlines the process of developing a sense of community, and how participants explored interdisciplinary teaching and assessment strategies. Additionally, this paper serves as evidence of how a Faculty Learning Community (FLC) model can facilitate the systematic study of interdisciplinary teaching, learning, and assessment and the public sharing of work via student presentations and journal publications.

In 2011, Central Michigan University's (CMU's) teaching and learning center launched a new FLC initiative, based on considerable evidence that effective learning communities positively impact students and faculty (e.g., Cox, 2004; Kuh, Kinzie, Schuh, Whitt & Associates, 2005; Lenning & Ebbers, 1999). In response, a proposal from faculty to develop the student-requested interdisciplinary course was submitted and approved.

Since the vision of this course came from students, the FLC co-facilitators included them in course development by incorporating them into the FLC model. This resulted in a combination faculty and student learning community, the FLC/SLC. Two graduate students were particularly involved and eventually taught the seminar portion of the course. To enable students to participate

as equal partners in the course development and facilitation and ensure that their learning objective of student activism was maintained in a measurable format, Drake (an FLC member) provided workshops and consultations on teaching practices and instructional design.

To develop community within the FLC/SLC, all facilitators attended an orientation to FLCs based in part on recommendations by Ortquist-Ahrens and Torosyan (2008). To ensure that the FLC/SLC was a successful venture, FLC members were sensitive to varying experiences and institutional power. Therefore, although FLC members, when asked, provided suggestions for seminar content, final control over seminar topics and speakers was held by the SLC.

The challenge for this course was figuring out how faculty from three disciplines would integrate their teaching. Faculty members felt it necessary to model the integration of fields to students to support a synthesis of ideas. Therefore, they decided that all faculty would teach all classes. To prepare to teach in interdisciplinary ways, FLC/SLC members discussed collaborative techniques, interdisciplinary teaching strategies, and reviewed assessment resources (e.g., Newell, 1994; Mansilla, 2008; Mansilla, Duraisingh, Wolfe & Haynes, 2009). The discussions culminated in developing a key assignment: a collaborative project on a water-related issue with a social justice component and the subsequent design of a rubric to assess student interdisciplinary thinking. Students enrolled in the course developed projects related to a variety of water issues and presented real-world solutions at a university-wide student research showcase. At present, Water as Life, Death, and Power has been accepted into CMU's curriculum as an elective course in three departments.

4:30 PM | **Room 2104A** | **SoTL and the changing landscape of higher education**

F06.3 USING SOTL ON HIGH-IMPACT EDUCATIONAL PRACTICES TO CREATE THE ENGAGED CAMPUS

Individual Paper (30 minutes)

Carol Hostetter (1)
(1) Indiana University (Bloomington, United States)

The changing landscape of higher education of higher education in the US brings increasingly dire threats, such as rising costs, lack of financial resources, more courses taught by non-tenure-track faculty, and massive online education, to name a few. An analysis of the financial records for 1,700 US colleges and universities predicted that one-third of them were on a path toward financial ruin (Denneen and Dretler, 2012). How can place-based colleges stay viable and relevant? Can the evidence on high-impact educational practices help?

High-impact educational practices are not new to the academy. Practices such as service learning, first-year seminars, writing-intensive courses, collaborative assignments, and engaging undergraduates in research (Kuh, 2008; Association of American Colleges and Universities, 2014) have long been used by many faculty and institutions. While many faculty are already using these practices, they may be unaware of the research on them. Chen and colleagues (2009) studied what it is that makes high impact educational practices effective, developing these factors:

1. Students put considerable time and effort towards purposeful tasks
2. Students have extended interaction with faculty and peers on substantive matters
3. Students are more likely to experience diversity
4. Students receive frequent and meaningful feedback
5. Students have an increased opportunity to experience and work in different contexts
6. Students do activities in the "real world" that can be life changing
7. The practices have a strong connection to the curriculum (Chen et al., 2009)

Taken one at a time, high-impact educational practices can bring positive learning outcomes. Taking several together and integrating them can make a place-based university into an "engaged campus … where place matters" (Butin, 2012). Gee (2011) advocates for universities to organize themselves with the goal of actively engaging students through big questions. He envisions collections of "passionate affinity spaces," where communication and activity can intersect and have long-term, deep impact on students' learning and living. Educating students so they can nurture and sustain the public sphere is Gee's goal for higher education, and is a way to make higher education matter (Gee, 2011). As faculty, we can use the methods of the Scholarship of Teaching and Learning (SOTL) to systematically study intersecting high-impact educational practices and work towards the re-structuring of higher education today.

This paper discusses the impact of intersecting high-impact educational practices, their importance for the sustainability of place-based universities, and the utility of SOTL to provide evidence for lasting institutional change in our changing landscape of higher education. The barriers and supports for such work will also be critically reviewed. The audience will be engaged through questions posed for individual reflection and group discussion.

3:30 PM | Room 2104B | Inquiry into student learning

F07 SHORT WRITING TASKS AS CATALYSTS FOR CONCEPTUAL UNDERSTANDING

Panel (90 minutes)

Jane West (1), Karen Swanson (1), Sherah Carr (1), Deb Rosenstein (1)
(1) Mercer University (Atlanta, United States)

This panel brings together three SoTL studies of how graduate students' writing reveals and shapes their thinking about course concepts. The notion that writing facilitates thinking has long been accepted (Bazerman, et al., 2005; Britton, 1970; Emig, 1977; Langer and Applebee, 1987; Marzano, 2012). We planned these studies to investigate precisely how writing shapes our own students' thinking. We teach students in a variety of education programs ranging from initial certification to PhD. We all make frequent use of short writing assignments for varied purposes, with the assumption that this writing both shapes and reveals students' thinking. These independent but related studies were designed to investigate the connections between the writing tasks and students' conceptual growth, and to discover how that growth is revealed. Each of us collected and analyzed a series of short writing assignments to determine what we could learn about students' understanding of course concepts.

Each panel member designed several short writing assignments within her course. All of us employ a learning sequence that begins with independent reading and writing that requires students to think about course concepts and articulate their ideas prior to coming to class and engaging in discussion. We use those short papers in a variety of ways to shape class discussion, assess student learning, and design subsequent instruction. Methods for each study differ slightly, but each researcher has collected students' writing over the course of a semester and analyzed it qualitatively, examining the kinds of thinking that are evident, as well as evidence of conceptual growth over time. Each of us will share our own research, and then we will present common themes that cut across all the studies.

The three individual SoTL projects are as follows:
1. Writing as Preparation for Discussion of Texts: Findings focus on how students' misconceptions and naïve concepts are revealed in their writing in response to course texts and how those concepts shift over time. Implications for the formation of writing tasks/prompts, as well as the role of instructor feedback, will be offered.
2. Affective Dimensions of Writing about Theory: Findings indicate a direct connection between the development of conceptual understanding in writing that integrated theory, research and students' own research questions. Evidence of conceptual change was then paired with three Critical Incident Questionnaires (Brookfield, 1995) regarding the affective aspects of writing, which illuminated students' connections students between the theory and research they were reading and their own research questions.

3. Writing as Making Connections across Texts: Findings focus on the difference between students' writing about single texts as compared to writing about paired texts. The synthesis task appears to lead to a deeper internalization of the material for class discussions and greater rigor in students' thinking. In turn, increased clarity in the writing rubric and the use of exemplars increased the quality of students' thinking as reflected in their writing.

The session will include discussion and audience involvement in a short writing task.

3:30 P.M | **Room 2105** | **Disciplinary approaches to teaching, learning and SoTL**

F08 *Workshop (90 minutes)*

LAVAL DEVELOPMENTAL BENCHMARKS FOR FAMILY MEDICINE: A TOOL FOR TEACHING AND COMPETENCY ASSESSMENT

Miriam Lacasse (1), Frédéric Coché (1), Sylvie Tessier (1)
(1) Département de médecine familiale et de médecine d'urgence, Faculté de médecine, Université Laval (Quebec City, Canada)

Significance of the workshop topic:

The CanMEDS-Family Medicine (CanMEDS-FM) framework defines the expected terminal competencies for family medicine (FM) residency training in Canada, in preparation for independent practice. However, benchmarks throughout the two-year program are not yet defined nationally. Building on the Baystate Medical Center Tufts University School of Medicine (Springfield, MA, USA) competency-based assessment system and Queen's University (Kingston, Ontario, Canada) family medicine program template for entrustable professional activities, we have defined three-level competency development benchmarks (associated with close, distant or oversight supervision) for family medicine residency training. The Laval Developmental Benchmarks for Family Medicine were developed using the Delphi method, to identify clinical instructors' expectations as to the moment of acquisition of the three different levels of competencies during family medicine residency training. Content validity of the benchmarks obtained was assessed through a second Delphi round, and the inter-rater reliability, convergent validity and feasibility of use in clinical teaching settings were assessed through a cross-sectional descriptive study. The resulting version was presented to the family medicine residency program committee and residents' committee for content validity. The final version was then approved by the program's education committee.

Facilitators' relevant experience for this workshop:

Miriam Lacasse is a family physician and assistant professor in the Département de médecine familiale et de médecine d'urgence (Family and Emergency Medicine Department) at the Laval University Faculty of Medicine. During an academic fellowship at the University of Toronto, she wrote Educational Diagnosis and Management of Challenging Learning Situations in Medical Education, a faculty development textbook dealing with the topic of learners in difficulty. She is currently the director of evaluation for Laval University's Family Medicine residency program. Frédéric Coché worked on competency-based teaching and assessment as a scientific collaborator at the Service des Sciences de l'Éducation at Université Libre de Bruxelles and also as an educational advisor in primary, secondary and higher education. He is currently the planning & research officer for the Département de médecine familiale et de médecine d'urgence (Family and Emergency Medicine Department) of the Laval University Faculty of Medicine.

Learning goals and outcomes for this workshop:

After attending this workshop, participants will be in a position to: 1) discuss Laval's Developmental Benchmarks for the achievement of CanMEDS-Family Medicine competencies in the residency curriculum, 2) plan the development of benchmarks for their own programs and 3) share the program benchmarks they themselves use to guide learners and assess their competency development.

Teaching Methods:

The first part of the workshop will use a short didactic presentation to demonstrate the Laval Family Medicine Developmental Benchmarks for residency training. Participants will then be given case-based teamwork opportunities to try out these benchmarks in teaching (learning contracts, daily feedback on clinical supervision, learning portfolio) and evaluation (summative in-training evaluation reports) contexts. Lastly, a peer-assisted learning discussion will enable them to share their own program benchmarks.

3:30 PM | Room 206A | Inquiry into student learning

F09.1 PUTTING SHAKESPEARE ON TRIAL: FROM THE CLASSROOM TO THE COURTROOM

Individual Paper (30 minutes)

Jessica Riddell (1)
(1) Bishop's University (Sherbrooke, Canada)

One of the key values of transformative pedagogy is to extend learning outside the classroom. The interorientation of the classroom and the broader community fosters an enriched sense of curiosity and creativity in our students, faculty, staff, and alumni. In the Winter semester, I developed a collaborative project between my ENG223 Elizabethan Shakespeare class, the Bishop's University Debate Club, members of faculty, and the student body: I organized a mock trial where we prosecuted Shakespeare for fraud in the Canadian Criminal Court system. Inspired by the renewed debates about Shakespeare and authorship (cf. Anonymous, 2011; the MA in Shakespeare Authorship Studies at Brunel University, UK; the rise of the Shakespeare Authorship Coalition), my ENG223 class contributed to the trial as "legal researchers." Students were trained on research methodologies during two sessions in the library's interactive training lab. Groups compiled research, synthesized information, and presented "legal briefs" and an appendix of five items for further reading (e.g. scholarly articles, newspaper or magazine articles, cartoons, or links to videos). Projects were evaluated on the quality of research, the comprehensiveness of each group's findings, the clarity of writing, and creativity. The compiled information formed the basis of "known knowledge" that was distributed to the prosecution and defence teams as well as to the actors playing witnesses. Both trial teams built their arguments based on the established research produced by my team of ENG223 legal researchers. The Mock Trial encourages students to work on core competencies – oral and written communication, information fluency, problem solving, critical thinking, and creative and adaptive thinking – in an entertaining and creative milieu. We explored Shakespeare's historical milieu and his body of work through the lens of legal discourse. This conference paper outlines the several phases of the project and the learning outcomes measured - both quantitatively and qualitatively - for the students and participants.

4:00 PM | Room 206A | Inquiry into student learning

F09.2 FLIPPING THE CLASSROOM WITH WORKED EXAMPLES

Individual Paper (30 minutes)

Gregor Novak (1), Steven Novotny (2), Kimberly De La Harpe (2), Nathan Terry (2)
(1) United States Air Force Academy (USAF ACADEMY, United States); (2) United States Air Force Academy (USAF ACADEMY, United States)

In this paper we describe a pedagogical initiative designed to structure student pre-class preparation time to improve learning outcomes by making the classroom lesson more productive. The pedagogy is based on education research findings that having students analyze and self-explain worked out examples of the content of the upcoming lesson contributes to improved learning outcomes.

In a nutshell, here are the main points of this approach:

- New material is introduced via carefully crafted worked examples of problems.
- Students analyze the examples, answer questions about the examples, and prepare their own questions to ask and discuss in class.
- In class the underlying concepts are examined and the examples are discussed and extended with practice workouts
- After the lesson students complete matched homework assignments.

We tested this approach in pilot projects in 2009 – 2012 before applying for an NSF grant, which we obtained in 2013. We are now implementing the project in collaboration with three additional institutions with different student populations, IVY Tech Community College in Indianapolis, Denver Metropolitan University and Fort Lewis College in Durango, Colorado. At Fort Lewis College we are also collaborating with five high school teachers from Native American High Schools from the Four Corners Native American reservations, to test the impact of flipped classroom techniques on their student populations

In this talk we shall describe the theoretical underpinnings of the pedagogy, our implementation in introductory physics with four different demographics, and report on faculty and student acceptance. The worked-examples pedagogy has shown promise in small study groups but, as far as we know, ours is the first large scale implementation. We will report on lessons learned and discuss plans for further development. A separate presentation deals with an in-depth analysis of the homework strategies employed with this pedagogy.

References:

Sweller, J. (1994) Cognitive load theory, learning difficulty, and instructional design. Learning and Instruction, Volume 4, Issue 4, 1994, p. 295-312

Chi, M. T. H., & Bassok, M. (1989). Learning from examples via self-explanations. In L. B. Resnick (Ed.), Knowing, learning, and instruction: Essays in honor of Robert Glaser (pp. 251-282). Hillsdale NJ: Erlbaum.

(This project is supported in part by a National Science Foundation grant DUE1226090)

4:30 PM | **Room 206A** | **Inquiry into teaching practices**

F09.3 DEVELOPMENT OF AN UNDERGRADUATE COURSE USING TRANSFORMATIVE LEARNING THEORY AND CHICKERING'S MODEL OF IDENTITY DEVELOPMENT

Individual Paper (30 minutes)

Teal McAteer (1), Jenniffer Joseph (2)
(1) McMaster University, DeGroote School of Business (Hamilton, Canada); (2) McMaster Univerisity, Student in Faculty of Health Sciences (Hamilton, Canada)

Transformative Learning Theory (Mezirow, 1997) is both versatile and of high impact, making its application in the undergraduate curriculum both essential and convenient. The transformative learning theory and the experience its application brings coincides with Chickering's (1993) Model of Identity Development for the university student. The model views students as being in distinct phases of their life and development. It focuses on what tasks or issues confront students at a particular time in their university career. For example early on in university, they may wish to gain financial autonomy or independence from their parents. However, later on in their university career, discovering a purpose may predominate. Chickering describes seven 'vectors' along which this development occurs. In each of the seven vectors, students develop more complex ways of seeing themselves. He emphasizes that development is not simply a maturation process, but instead requires appropriate challenge and support from the environment. Development takes place through an interaction of an individual's internal state with the societal and institutional demands of

parents, universities, peers, and culture. As such, psychological development is highly influenced by the 'developmental potential' of a learning environment. Certain activities and situations by their very nature provide new information, demand different behavior and provoke introspection. These activities have the potential to promote and support the development of students. The seven vectors include: developing competence; managing emotions; moving through autonomy toward interdependence; developing mature interpersonal relationships; establishing identity; developing purpose; and developing integrity.

This research involved a primary sample of 150 students enrolled in a second year University Masters in Business Administration Leadership course from four offerings of the course between 2009 and 2012. Embedded within the course was a transformative learning experience (TLE) after which students were required to write self-reflection journals. Qualitative data analysis, involving coding, theme and pattern recognition, was conducted on the students' reflection journals from the transformative learning experience (TLE). Specifically, grounded theorizing was used through open coding in which categories were allowed to emerge to best fit patterns of recurring themes, as well as axial coding in which conditions, interactions, consequences and linkages were defined among the emergent categorizations (Suske, 2009). The analysis demonstrated that the TLE promotes each of the vectors and Chickering's theory on development. A course which targets undergraduate students undergoing this experience will result in individuals who are exceptionally self-aware, with high levels of emotional intelligence, and the ability to cope with stress and use it to work at an optimal level. Following completion of the analysis, lessons from this research were applied to the construction of a Bachelor of Health Sciences Inquiry course outline consisting of course objectives, content, assessment, and required resources and readings.

3:30 PM | **Room 206B** | **Inquiry into student learning**

F10.1 LEARNING IN TRANSITION: NAVIGATING THE TECHNOLOGY CONUNDRUM

Individual Paper (30 minutes)

Valerie Lopes (1)
(1) Seneca College (Toronto, Canada)

Students' relationship with technology is complex and that of faculty is even more so. One dilemma involves defining the most appropriate roles of and uses for educational technology in teaching and learning, in order to realize their true potential. Another even more fundamental question is related to "who are our learners and what does it mean to be "educated" in 2014?

Since 2004 the EDUCAUSE centre for Applied Research (ECAR) has been tracking college and university students' and their perceptions and use of technology. In 2013, 113,036 students in 13 countries responded to the survey and there were no significant differences in survey responses across institution types, regions and demographics. In 2013, for the first time, a consortium of Ontario Colleges participated in the study. (Findings of the ECAR 2013/2014 studies will be presented as part of this paper).

Over the last three years the Higher Education Quality Council of Ontario (HEQCO) has funded more than a dozen studies under the technology enhanced learning theme. Not surprisingly the findings of these studies are not very clear and seem, for the most part, to show no significant impact. The ECAR findings, meanwhile, clearly indicate that students and faculty have gained sophistication with technology, and each year there is a greater expectation from students for more seamless use of technology tools in the classroom. Face-to-face contact with professors is of utmost importance, even in fully online classes. In addition, students hold high expectations for anytime, anywhere, access to course materials and use of their digital devices, in particular phones and tablets, for connection and communication inside and outside class.

The ECAR study and the HEQCO research findings indicate a disconnect between the predictions by technology evangelists in the literature about the potential of these tools and their practical applications in the classroom. Undoubtedly technology tools

are to be valued for what they can contribute to teaching and learning, but their limitations must also be understood. Instead of researching the effectiveness of technology tools, we should be focusing our research on documenting promising practices and investigating ways to facilitate use of technology in more creative and meaningful ways, grounded in principles of universal design for learning.

Each technology-enabled, closed, open, flipped, hybrid, blended, flexible or online course needs separate and careful consideration based on the context, the content and desired learning outcomes. The lens through which we look at the technologies we adopt must be informed by learning theory and the scholarship of teaching and learning. Yet institutions continue to advance one-size-fits-all models and frameworks for courses and programs.

This paper discusses some of the benefits, challenges and myths of technology-enhanced learning from a pedagogical perspective. It focuses on the use of technology in the practice of teaching and the process of learning and invites us to consider the conditions that are necessary for new visions, new concepts and a new language of teaching and learning to emerge.

4:00 PM | Room 206B | Inquiry into student learning

F10.2 PROCESS AND PRODUCT: A PEDAGOGICAL PRAXIS II

Individual Paper (30 minutes)

Tony Tarantini (1)
(1) Sheridan College (Oakville, Canada)

In the 21st century, digital technology has changed the way in which we create animation, the way we do business in traditional production models, and the extent to which animation is used in other disciplines, industries and communities of practice. In an effort to address both student expectations and the expanding needs of the creative economy, educational institutions are eager to exploit technological advances to develop alternative modes of delivering their programs. As important as these new tools and approaches are, technology in and of itself does not result in superior teaching and learning or better animation products. If we neglect to develop the softer side of animation, we will be assisting in the development of animation products that are limited in vision and cold and dispassionate in delivery, an artistic artifact lacking heart. Sally Gradle discusses this last point in her paper A Spiritual Ecology: Finding the Heart of Art education — individual intelligence, artistic autonomy, the importance of community, and the collective effort, as they relate to multiple origins, multiple thinking.

Working in a field as dynamic as animation requires the combination of knowledge and skills related to the field and informed by technology. I would argue that more importantly, in order for someone to have a long-term successful animation career, these should be underpinned by essential interpersonal and collaborative skills. Basil Bernstein's ideas on the recontextualizing field and agents are used to discuss the challenges of teaching these essential skills that would allow young animators to contribute to animation projects in a vocational capacity.

In addition, the paper presents a pedagogical model — designed and developed by a team of faculty with industry expertise — that successfully integrates and promotes student learning of the cognitive and skills required to be an effective animator and the qualities and characteristics from the affective domain. It was designed for the Sheridan College Bachelor of Animation third year group film projects — a vital component of the program — and is used as a case study for this paper. Over an eight month period, teams of students are engaged in a collaborative effort to develop and manage an animated film process and product from concept to production. The model actively targets collective creativity and the development of communication and negotiating skills, emotional intelligence and the effective management of team dynamics. It elevates the process from aptitude development to professional growth and provides a vigorous arena where students engage with real world practices that promote real life success.

The paper contributes to the understanding and practice of SOTL by providing evidence of student learning based on accumulated knowledge, and demonstrated in self-directed, collaborative, production-based group projects. This presentation will include a short screening of a few animated group films produced in the last 3 years and provide an opportunity to discuss the framework used to create them.

4:30 PM | Room 206B | Inquiry into student learning

F10.3 EDUCATION TECHNOLOGY AND PSYCHO-MOTOR SKILL DEVELOPMENT: TEACHER THINKING VERSUS STUDENT THINKING

Individual Paper (30 minutes)

Loretta Howard (1), Dominic Giuliano (2), Jay Triano (2), Marion McGregor (2)
(1) Canadian Memorial Chiropractic College (CMCC) (Toronto , Canada); (2) CMCC (Toronto, Canada)

Purpose: This study evaluated the effectiveness of pedagogical practices aimed at enhancing the quality of student learning through the introduction and integration of novel educational technologies in a simulation-based learning environment at the Canadian Memorial Chiropractic College (CMCC). A mixed methods design was employed to assess the impact of the simulation laboratory experience on the conception of relative confidence and competence in manual treatment skills among teacher-clinicians and student-interns.

Methods: Both quantitative and qualitative research methods were employed to identify the conversation among learners and supervisors about manual treatment skills. A control group that had not experienced the simulation lab was compared to consecutive groups that completed the simulation learning experience. Perceptions of confidence and competence were quantified as visual analogue scores. Two 10 cm Visual Analogue Scales (VAS) were created to quantify the responder's perception of confidence and competence in performance of manual skills. Comparisons were made using two-way analysis of variance (ANOVA) to evaluate the effects of Force-Sensing Table Technology (FSTT) between interns and supervisors, by academic year and exposure to FSTT. The control group provided a secondary analysis of internship without the simulation experience. The second form of response was qualitative, where respondents made open-ended comments about their perceptions. Respondents' texts were transcribed and pooled across the respondents. The commentary by respondents and emerging themes of conversation about manual procedures and their skilled performance were assessed through Crawdad™ analysis (Corman, Kuhn, McPhee & Dooley, 2002).

Results: Ratings of confidence and competence in performance increased between initial and final clinic experience during the final year of training. Clinicians rated confidence and competence significantly lower than interns rated themselves. The simulation experience was associated with slightly lower ratings by interns of themselves. Conceptualization and attitudes toward confidence and competence in the themes of commentary were more skill focused for learners and supervisors who had the simulation experience. Interns without the simulation experience focused more on skill acquisition while their clinicians focused on clinical application.

Implications: There is a significant difference between acquisition and application of knowledge and psycho-motor skill in learning. Having greater insight into discrepancies between teacher and student thinking can inform educators' approaches to curriculum design in academic programming. The unique skill set required for the application of complex, bimanual tasks associated with manipulation is critical for safe and effective service to the public. The simulation laboratory experience is an effective way to enhance skill development prior to real clinical encounters. This project built on experimental work to identify and validate stages of learning and properties of manual treatments. CMCC has now shown that such approaches may be integrated successfully into teaching curricula. Future work must continue with these methods to extend the application, identify ways to enhance the teaching/learning of skilled performance and optimize the care provided to patients who can benefit from these services.

3:30 PM | Room 207 | Inquiry into teaching practices

F11 DISCOURSE ANALYSIS AS A CREATIVE LEARNING AND ASSESSMENT TOOL FOR BUSINESS UNDERGRADUATES

Workshop (90 minutes)

Tina Bass (1), Leanne de Main (1)
(1) Coventry University (Coventry, United Kingdom)

Coventry University adopted the United Nations' Principles for Responsible Management in 2007. More recently, the Business School has taken up the challenge to embed these important principles throughout their course offerings in order to provide the very best education for future business leaders. This presentation will focus upon one unit of teaching which has run as a final year undergraduate option for the last two years. 'Managing Business Responsibly' builds upon work extending back for more than a decade. Teaching runs over one semester and is undertaken by 200+ students. The module poses a series of critical challenges to students and in the first few weeks many find it uncomfortable as the theories drawn upon are not those generally found within a business course. Students are encouraged to consider both their individual values and how these may or may not be reflected at a corporate level: What kind of manager do they ultimately want to be? And how do they become so?

Students are invited to think of themselves as agents of change in the broadest sense and to carefully consider those aspects of their current or future organisations that they might be able to influence. The rational model of decision-making is held up for particular scrutiny and consideration is given to how it may effectively be supplemented by non-traditional methods. Social constructionist theory features heavily in the first few weeks. Conversation patterns, narrative, discourses, and storytelling are all explored as potential tools for business students who aspire to become responsible managers.

Discourse analysis in particular has proven to be extremely useful and flexible in encouraging students to critique the models and theories that they are taught. The module leader literally ripped several pages from a strategy textbook and presented it to the students as the basis for their first assessed piece of work. Reactions to this are quite often nervousness and uncertainty. For some of the students the act of challenging something from a textbook written by someone that they consider to be much cleverer than themselves is both disturbing and disorienting. The module team have to work extremely hard to manage the anxiety and persist in presenting discourse analysis as an invaluable critical thinking tool.

The authors would like to take this opportunity to share the rationale and theory underpinning this creative approach to business teaching as well as exploring some of the inherent difficulties. The workshop will be based upon an existing seminar and will demonstrate how discourse analysis can elevate critical thinking skills. The authors have decades of teaching experience within a business school context. In addition, Leanne has designed and taught general courses on pedgagogy for Higher Education academics and Tina's interest in language has seen her poetry published widely as well as her book of conversations being placed on the English and Drama syllabus at Loughborough University.

3:30 PM | Room 308A | New and diverse contexts for SoTL

F12.1 A STUDENT/FACULTY COLLABORATION CREATING A CASE-BASED WEB TEXT FOR COMMUNICATION EDUCATORS AND STUDENTS

Individual Paper (30 minutes)

Maria A. Moore (1)
(1) Illinois State University (Normal, United States)

Last year a collaborative learning community of faculty and graduate students embarked on an inquiry of applied ethics across converged media platforms. The team examined the broad issues of democracy, fairness, temptation, manipulation, power and truth within a case-based framework of today's convergence of traditional, new and social media. The collaboration grounded their project in the theoretical foundation of constructivism and applied a research method of collaborative inquiry. The resulting work-product became a vibrant and evolving website, with an intended world audience of Internet readers interested in the topic of ethics in converged media. This born-digital mode of academic scholarship is organically interactive, without the constraints of traditional print-based structures.

Through a Critical Studies in Mass Communication graduate seminar focusing on converged media ethics, one teacher and eighteen students became co-creators and co-learners on the topic. After introductory discussions to define and understand both collaborative learning and converged media, the team identified six topics to explore through this project-based learning experience. The collaborators selected the topics of democracy, fairness, temptation, manipulation, power and truth, and teams became experts on the topics.

The topic team created broad definitional and theoretical foundations for the topic and for presenting case studies for the topic. The topic teams were then responsible for creative evolution of the cases, definitions, and theories as presented in class, into web-text content for their website page, for which the team had complete editorial control and responsibility.

The full collaborative group also created a mission statement for the website and concluded with developing a recommended code of ethics for converged media practitioners. Each team also posted a critical reflective statement regarding their experience within this learning community and the collaborative inquiry into the topic of converged media ethics.

Digital Multimodal Scholarship: Academic writing has been remarkably resistant to technological change. While some journals have made the limited move to provide PDF copies of their print-based content through the Internet, this approach is blithely oblivious to the staggering potential of networked multimodal digital technology as a tool to express scholarship. Our team's collaboration explores a new mode of scholarly thinking and expression; taking advantage of technology, embracing nimble, digital, converged and creative forms for communication.

Multimodal digital publication presents tremendous opportunities for the communication scholar. Concepts are visualized more effectively. Participant voice can be more authentically represented. Demonstrations add to explanation. Music or animation underscore key concepts. Reader participation is no longer passive nor linear, as interaction with the multimodal content requires reader choice led by reader interest and inquiry rather than by sequential pagination. It is a method choice that honors the learning community's topic of inquiry (converged media ethics, using converged media for expression) and it reflects the native-to-digital expressions of a new generation of scholars.

4:00 PM | Room 308A | New and diverse contexts for SoTL

F12.2 *Individual Paper (30 minutes)*

STUDENT RESEARCH TEAMS (SERT): ENGAGING INSPIRING AND CO-CREATING LEARNING THROUGH AN ACTIVE-LEARNING PLATFORM OF STUDENT-LED, STAFF-MENTORED CO-CURRICULAR RESEARCH TEAMS

Anita Diaz (1), Natalia Tejedor (1), Lucy Allen (1), Hannah Morris (1), Tom Dando (1), Roger Herbert (1), Iain Green (1), Pippa Gillingham (1), Rick Stafford (1), Lian Hewitt (1), Richard Stillman (1)
(1) Bournemouth University (Bournemouth, United Kingdom)

Appreciation of the potential benefits of pedagogical approaches centred on active-learning for creating student engagement, employability skill gain and empowerment is widespread (Nygaard et al 2011; Derting & Ebert-May 2010; Michael 2006; Novak 2002). However, a growing body of evidence indicates that active-learning styles risk fostering surface rather than deep learning if (1) students are not provided with the security of gradually incrementing their active-learning through case studies and (2) students feel lecturers are not authentically engaged in the scientific enquiry process with them (Baeten et al, 2013, 2010; Struyven et al., 2012, 2006).

In this paper we present and evaluate a novel learning platform, the Student Research Team (SeRT) that addresses these two challenges by enabling students and staff to collaborate in diverse student-led, co-curricular research teams that gel through a shared nurturing of passion for creating new learning and understanding. Students engage at levels of active learning of their choice, incrementing from participant to manager roles while always fully part of the student-staff team co-creating the scientific enquiry process at the heart of each SeRT project. SeRT has been running for three years and we have evaluated the success of fifteen SeRT projects from the perspectives of both students and staff using a combination of individual surveys, focus groups and SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis using Nominal Group Technique. In this presentation we present our shared answers to the following questions:

1) How successful has SeRT been in terms of engaging creativity and a passion for learning in students and in developing their sense of employability skill-gain and empowerment?

2) What are the Strengths, Weaknesses, Opportunities and Threats of SeRTS as perceived by student-staff team members?

Results for question 1 show that students feel SeRT is far more successful on all fronts tested than transmission learning via lectures or other active learning approaches. For question 2 students and staff identified similar strengths and opportunities (centred around the invigorating fun of co-creating new knowledge, skills and experiences) but different weaknesses and threats (students reported time constraints as their greatest challenge while staff reported managing expectations of team members and collaborators and mentoring production of final outputs as key challenges). Based on these findings we reflect that SeRTS could, in future, be better more formally embedded as co-curricular learning opportunities. We also invite the audience to discuss their views on potential for future expansion of SeRTS and to continue this discussion after the session by providing their suggestions for novel SeRTS together with any initial SWOT analysis thoughts through a SurveyMonkey survey. Then after the conference we will share all these suggestions with all participants by email (in an anonymized form) so that we all gain initial new food for thought. We will invite those who wish to take these discussions further to join us in creating a community of practice that further explores ways in which the SeRT platform can co-nurture creativity and passion for learning within our student-staff shared university experience.

4:30 PM | Room 308A | New and diverse contexts for SoTL

F12.3 TEACHING COGNITIVE HUMANITIES: INTERDISCIPLINARY EXPLORATIONS OF PASSION AND AFFECT

Individual Paper (30 minutes)

Aimee Knupsky (1), M. Soledad Caballero (1)
(1) Allegheny College (Meadville, United States)

Thanks to a New Directions Initiatives (NDI) grant sponsored by the Great Lakes Colleges Association (GLCA), we were given the opportunity to explore a new direction in our teaching and research focusing on affect, "the passions," and emotion from a cognitive humanities perspective. The cognitive humanities blends cognitive psychology and literary methodologies to integrate disciplinary knowledge and processes in a holistic and creative manner. As one of the components of the NDI, we developed a new course, Cognitive Humanities: Interdisciplinary Explorations of Passion and Affect. The overarching goal of this class was to model a contemporary approach to an "old" ideal. Specifically, we wanted to revisit the feedback loop of collaboration across the humanities and sciences, common in the "second scientific revolution" of the late eighteenth century, and harness the creative nature of these collaborations in a liberal arts context. How can the humanities provide rich ground for exploration using empirical models? At the same time, how can scientific concepts contribute new insight to literary analysis? In addition, we wanted to challenge existing conceptions of interdisciplinary work by pushing beyond models of simply bridging disciplinary content to exploring how to build an understanding of a common topic in partnership and from the ground-up.

In our paper, we share our observations of the course, challenges with teaching from an interdisciplinary perspective, practices for assessment and analysis of course-specific learning outcomes, and future directions. Perhaps the biggest observation has been the need to prioritize process over content. While this is a common concern for researchers taking a SOTL approach, the interdisciplinary context of the course has highlighted the teaching and learning benefits of this practice. In addition, because the cognitive humanities is a new area for both of us, de-emphasizing expertise facilitated a focus on process by requiring flexibility, openness, and awareness of the iterative nature of teaching. We are going to share how this emphasis on process impacted the development of the course syllabus, assignments, use of technology (i.e., blogging), assessments, and learning outcomes. In addition to exploring these benefits, we will also discuss the challenges to taking a more complex approach to interdisciplinary teaching. For example, how do we create a culture of support and institutional recognition for courses that de-siloize disciplinary structures? How do we make interdisciplinary courses "count" in both a local way (e.g., institutional, department credit) and in a global way that values their pedagogical foundation and significance to higher education. We will summarize the themes that developed as students reworked and revisited their definitions of cognitive humanities across the semester. In addition, we will present a qualitative analysis of student end-of-the-semester essays that reflect their learning outcomes and process. Finally, we will share our future directions for the next iteration of the course, including the incorporation of experiential lab components (in both the natural sciences and humanities), inviting guest speakers, and broadening student representation in the class across all disciplines. In addition, we will introduce our plans to expand our project across the GLCA consortium.

3:30 PM | Room 308B | Student roles in and perspectives on SoTL

F13.1 RECONCILING LEARNING AND TEACHING STYLES IN A CHEMISTRY CLASS THROUGH COGENERATIVE DIALOGUES

Individual Paper (30 minutes)

Nelson Nunez Rodriguez (1)

(1) Hostos Community College of CUNY (Bronx, United States)

This study investigated the impact of integrating cogenerative dialogues on student learning habits and attitudes in a chemistry class for science majors at a community college in the USA. Specifically, I aimed to maximize learner voices, hear from them rather that assume what teaching strategies were more effective. Cogenerative dialogues are discussions that take place over shared experiences involving teaching and learning, and can involve students, instructors, researchers, and sometimes administrators. This project was implemented for three semesters at Hostos Community College of CUNY, New York starting in Spring 2011. Eight randomly selected students from a 24 student-class discussed class issues with the professor once a week. Nine 20 minute-conversations took place along the term after the class period. Only 2 or 3 aspects were included in each dialogue including class pace, why some topics are more difficult, language barriers, how specific teaching approaches were more or less effective, the role of mathematic background on chemistry content understanding, how different ways to solve problems depending on students' native country education could be used in the class, how different math levels students brought to the class could be reconciled, etc. These discussions helped the instructor to frame subsequent classes. The class also had an integrative assignment connecting typical foods from different countries with Chemistry topics such as mixtures, measurement, heat, and quantities in chemical reactions. This was integrated with ongoing dialogue outcomes and used to figure out content misunderstanding sources while validating students' cultural heritage as a springboard to building academic literacy. As a consequence of the dialogue and integrative assignment framework, a new textbook was adopted and oral presentations, the use of masteringchemistry.com and a forum to create exam questions by students were implemented. Office hours are currently used to address specific class problems and to dialogue with students about learning and teaching styles. This practice also helped the instructor to integrate online tutorials and quizzes from masteringchemistry.com in a more comprehensive way and to implement group work in the classroom more effectively. It means scheduling online assignments in a timely fashion so they can be used as a formative assessment tool and so maximize class time. Regarding group work, cogenerative dialogue unraveled the fact that the scientific wording and mechanics of chemistry books represent a new language for students, whatever regardless native language. This should be taken into consideration when assigning and assessing student textbook reading. Overall, this experience opened up a venue for understanding why some science concepts are difficult to understand and helped to shape instructor teaching styles in subsequent semesters. This democratic classroom environment brings about decreasing academic and social distances between the instructor and students, a critical issue for community college students in the USA. They need to develop a sense of belonging to an academic setting while understanding how the different identities that shape their ways of knowing and thinking contribute to sucess in higher education. In sum, this dialogue helps to develop academic literacy by exploiting students' personal literacy, which reinforces their self-esteem and confidence in their capacity to thrive in their academic journeys.

4:00 PM | Room 308B | Student roles in and perspectives on SoTL

F13.2 "THERE WAS…A REAL APPETITE FOR THEM TO TELL ME WHAT THEY WANTED": EXPLORING CONCEPTIONS OF STUDENT VOICE IN TEACHING ENHANCEMENT

Individual Paper (30 minutes)

Saranne Weller (1), Camille Kandiko Howson (2)
(1) University of the Arts London (London, United Kingdom); (2) King's College London (London, United Kingdom)

Teaching observation is widely used in universities to provide feedback and sponsor critical practitioner reflection on teaching, usually undertaken by peers or educational developers. As such, student voices in university teacher development are often absent. In particular, while there are some well-developed examples of undergraduate student participation in aiding teachers to develop their practice in US contexts (Cook-Sather, 2011), to date educational development in the UK is predominantly supported by professional development faculty with little direct input from students. This small-scale study sought to implement and evaluate the engagement of students as observers of teaching in partnership with educational developers in the development of teaching faculty. The study was undertaken in the context of a formal faculty development qualification in a research-led university in the UK.

This study specifically sought to respond to previous research on student voice work which, it has been argued, does not fully acknowledge the complex realities of expertise and authority in the classroom in faculty-student engagement strategies (Taylor & Robinson, 2009; Seale, 2010). Three undergraduate students, three new teachers and one academic developer participated over a four month period in which students undertook a teaching observation, provided feedback on teaching practice and attended a taught seminar of the faculty development programme. Concept map-mediated interviews were conducted prior to any activity, between the activities and at the conclusion of the study. This multi-method approach explored a range of topics concerning student expertise, distinctiveness of student perspective on practice and conceptualisation of student voice for the purposes of teaching enhancement. This paper reports the outcomes of the analysis of the interview transcripts focusing on how students and teachers perceived how they might engage in teaching and learning and its improvement.

This analysis identified five ways the participants conceptualised student voice in student-faculty enhancement activities:

1) Dialogues of care – developmental conversations between students and faculty understood in affective terms with individuals recognising and empathising with the shared emotional experience of teaching and learning;

2) Technicist dialogue – the 'giving' and 'listening' to the student voice in relation to teaching and learning that is mediated through technological mechanisms of teaching assessment such as student surveys framing student voice as "data";

3) Consumer dialogues – conversations about the enhancement of teaching and learning as one of identified "vendor"-"client" exchange and response to demand;

4) Creative dialogues – conversations about teaching that are initiated through student and faculty reflexivity on positionality, insight and perspective;

5) Individual versus representation – formal student representation at course and institution level juxtaposed with informal conversations about subject content and the individualised experience of learning.

This paper presents and explores these conceptions, drawing on the interview data and theories of participation, as the basis for engaging practitioners and researchers in working with more critical accounts of student voice in student engagement activities. This leads to an argument about how students can be part of enhancement activities that promote deeper engagement and reflection on the scholarship of teaching and learning. The session will further this discussion.

3:30 PM | Room 309A | Inquiry into student learning

F14.1

Individual Paper (30 minutes)

IMPLEMENTING A THREE-YEAR PORTFOLIO PROJECT: DOCUMENTING, ASSESSING AND IMPROVING STUDENT LEARNING AND PERFORMANCE WITH COURSE AND INQUIRY PORTFOLIOS

Joan Erickson (1), Stephanie Whitus (1)
(1) Aurora University (Aurora, United States)

At the beginning of the fall 2010 semester, our institution's Faculty Development Committee explored ways for its faculty to focus on the scholarship of teaching; in particular, to examine the relationships between teaching practices and learning outcomes. Committee members read a variety of articles and two books on teaching improvement. The books included Making Teaching Community Property: A Menu for Peer Collaboration and Review (Hutchins, 1996) and Making Teaching and Learning Visible: Course Portfolios and the Peer Review of Teaching (Bernstein, Nelson Burnett, Goodburn, & Savory, 2006). Committee members then engaged in preparation activities to facilitate a Course Portfolio and Peer Review of Teaching Project for faculty from across the university to investigate student learning in their courses. The project began the following semester and continued for a full year. The process followed closely the one presented in Bernstein et al.'s (2006) text, in which the authors describe a course portfolio as "a reflective investigation of how course structures, teaching techniques, and assessment strategies enhance or detract from student learning" (p. 8). In addition, phone and Skype interviews with one of the book's co-authors (Dr. Amy Goodburn -- University of Nebraska, national consultant for peer reviews and course portfolios) were held, and Goodburn served as a consultant throughout the first year of the project.

In March of 2011, the Course Portfolio Project kick-off session was held. The twenty-two participating faculty represented a variety of disciplines, years of teaching experience, and purposes for developing a course portfolio. The group met monthly to discuss articles on a range of teaching topics, including active engagement, collaborative projects, active learning and fostering critical thinking. Each session also consisted of a workshop-style period which facilitated individual reflection and enabled participants to make progress on their own portfolios. The final sharing of completed portfolios occurred in March of 2012, demonstrating ways to more systematically examine and reflect upon evidence of student learning. Some faculty in this group continued the enthusiasm that they derived from their projects and formed an Inquiry Portfolio group that has been active for the subsequent two years. Development of the Inquiry Portfolios followed closely the model presented in the book Inquiry into the College Classroom: A Journey toward Scholarly Teaching (Burnett & Goodburn, 2007).

This presentation discusses multiple aspects of Aurora's three-year portfolio project, including lessons learned, examples from individual courses, and the use of course portfolios as a means for disseminating knowledge and practice. Feedback from focus group interviews of program participants is also presented, and includes participants' perceptions of this experience and specific ways their project portfolios have helped make their teaching practices more effective tools for improving their students' learning.

4:00 PM | Room 309A | Inquiry into student learning

F14.2 BECAUSE STORIES ARE IMPORTANT – PHYSIOTHERAPY STUDENTS' NARRATIVES OF THEIR HIGHER EDUCATION EXPERIENCES

Individual Paper (30 minutes)

Claire Hamshire (1), Christopher Wibberley (1)
(1) Manchester Metropolitan University (Manchester, United Kingdom)

This paper will present findings gathered from a three-year longitudinal narrative study in which the central aim was to listen to physiotherapy students' stories told in their own words over a series of narrative interviews throughout their degree programme. The findings will focus on both personal and social circumstances that students' identified, through their stories, that shaped their experiences during the process of becoming and being a Physiotherapy student.

The seven students who volunteered to be included in the study were interviewed on at least five occasions and at each interview they were encouraged with a narrative prompt to tell the stories of their experiences as a series of 'episodes' beginning and ending wherever and however they felt was most appropriate. The students told their own stories, in their own words without the interruption of pre-set questions, so that their accounts were not curtailed in any way. Thus this data was collected in narrative form, transcribed verbatim and then narrative fragments were collated for each student to allow the orientations of their stories to emerge.

Analysis of the narrative fragments revealed that whilst each individual's experience of university life was multi-layered, for each student a specific orientation dominated their re-telling of 'being a student' across their interviews. Thus the stories are presented in relation to these orientations: peer support (two students); financial difficulties (two students); learner self-direction (two students); or personal difficulties (one student).

These temporal narratives offer an insight into what university life was like for those undergoing it, providing a greater understanding of what 'being a student' meant for each of these students. The study demonstrates that 'becoming' and 'being' a student involves students developing a sense of themselves and also of belonging to an institution. Ultimately higher education is necessarily a process of becoming and as such can be considered as a transformation of 'being', as students develop over time.

Having presented a summary of the findings as outlined above, the paper will consider implications of the stories for the student engagement agenda; and make recommendations for curriculum design and delivery to meet student needs.

4:30 PM | Room 309A | Inquiry into student learning

F14.3 'THIS CLASS REALLY OPENED MY EYES': USING CLASSROOM-BASED RESEARCH TO EXPLORE THE TRANSFORMATIVE POWER OF A THRESHOLD CONCEPT IN SOCIOLOGY

Individual Paper (30 minutes)

Alison Thomas (1)
(1) Douglas College (New Westminster, Canada)

Teaching Introductory Sociology offers the frequent reward of seeing students challenged - and then changed - by the ideas they encounter. In their end-of-semester evaluations my students often report that they look at their social world differently after taking the course and some relate this explicitly to the concept of the 'sociological imagination' (Mills, 1959) – the understanding that individual actions have to be viewed in relation to the societal context in which they occur. This is such a fundamental way of thinking in sociology (Persell et al, 2007) that it can readily be seen as an example of what Meyer and Land (2003) refer to as 'threshold concepts' – crucial concepts in any discipline, which students must grasp in order to progress in their learning and which, once mastered, are both transformative (cf. Mezirow, 2000) and irreversible.

Reflecting on my students' comments, I began to wonder whether the 'epiphanies' they reported were indeed fully transformative and would therefore have a lasting impact on their view of the social world. Unlike students majoring in Sociology, relatively few of those I teach take more than this one introductory course and so this is likely to be the only exposure to the subject and the 'sociological imagination' that they ever get. At the same time, my awareness that many students also struggle with this threshold concept further increased my interest in examining how they do or do not come to understand it, as well as what kind of impact it has on their thinking. Realising that formal methods of assessment were providing me with insufficient information about what students were really learning and retaining, I decided to employ various classroom assessment techniques (Angelo and Cross, 1993) to track student learning for the duration of the semester, and to follow this up with a survey one year after the end of the course. This approach enables both me and the students themselves to document how their thinking about the relationship between the individual and society changes (or not) over time. In this presentation I report on the data collected from over 300 students in the nine first year classes that I have taught in the past three years, and assess what my findings reveal about the ease with which students do or do not grasp the 'sociological imagination' – in other words, begin to think like a sociologist.

While my focus is in one respect very discipline-specific, I believe that both my research question and the methods of data-collection I am employing make this relevant to all who teach introductory courses in any field. Specifically, I am emphasising the benefits of going beyond traditional methods of assessing what students have learned in order to identify those foundational aspects of our disciplinary knowledge that students find most challenging - and to explore how they grapple with them. I will therefore actively invite audience members to consider how they might similarly explore students' experiences when encountering the 'threshold concepts' that exist in their own discipline.

3:30 PM | Room 309B | Inquiry into teaching practices

F15.1 SCREENING OURSELVES - POPULAR FILM AS A TEACHING AND LEARNING RESOURCE

Individual Paper (30 minutes)

Timothy Buell (1), Diane Salter (2)
(1) OISE - University of Toronto (Toronto, Canada); (2) Vice Provost Teaching and Learning, Kwantlen Polytechnic University (KPU) (Surrey, Canada)

This paper describes a web-based, searchable, hypertext-enriched multimedia annotated database of 1,200 films in which higher education is the basis of the narrative, or is otherwise depicted in a significant manner. An overview of this resource, including a demonstration of its scope and search engine capabilities, will be followed by an interactive discussion of its use in teaching and learning applications, and in faculty professional development.

When it comes to their close-ups, educators – along with everyone from actuaries to zookeepers – have produced a huge body of literature about how Hollywood has portrayed their profession. Regarding education, the first major study is "The Portrayal of Education in American Motion Pictures, 1931-1961" (Schwartz, 1960); however, its scope is limited to primary and secondary education. The same is true of the numerous journal articles and over sixty books we have identified: The vast majority of the articles are about "teachers in the movies" (meaning K-12); and only three books and three doctoral dissertations are devoted entirely to films featuring higher education.

These studies share the same methodologies and the resultant shortcomings. The authors select a group of films; provide plot details and content analyses; create a set of professorial typologies, including personal characteristics; which are used to point out the differences between "reel vs real" academic life. Finally, they identify Hollywood's tendency toward "academic bashing," in the aggrieved words of one commentator, who adds, "I can think of almost no movies that are even interested in what an academic actually does, the nuts and bolts of that life."*

The resource we refer to advances previous scholarship in several ways: The filmography (n = 1,200) is the largest to date; including silent films (1894 – 1925) not found in previous studies. It is also the first to include representative stills and video clips, all on a searchable web-based platform. Unlike previous studies, which are mainly descriptive and preoccupied with how higher education is (mis)represented by Hollywood, this project has been designed for those interested in incorporating a film or group of films into the curriculum, and as a resource for faculty professional development.

Our presentation is directly related to the main conference theme of nurturing creativity and passion through creative approaches to teaching and learning and the engagement of students in learning. For example, students entering university for the first time will inevitably have preconceived images of professors and teaching methods gained in part from popular film. The interactive format will allow participants to actively query the database, providing them with knowledge of the stereotypes and preconceptions that students may have upon entering the college classroom, which may impact classroom interactions, and provides insight into how race and gender affect student evaluations of professors. Presenters and participants will discuss reasons for such differences and how an understanding of the differences can be used as a catalyst for conversation in academic development settings, and in the classroom.

* Farr, M. (2003). "Beautiful Minds and Nutty Professors: The Groves of Academe, As Viewed by Hollywood." University Affairs, October

4:00 PM | Room 309B | Inquiry into teaching practices

F15.2 WHEN LESS IS MORE: INSTRUCTOR AVAILABILITY, STUDENT RATINGS, AND THE PROMOTION OF SELF-EFFICACY

Individual Paper (30 minutes)

Bryan Ruppert (1), David Green (1)
(1) Seattle University (Seattle, United States)

Today's students have been socialized in an environment in which around-the-clock "instant-gratification communication" has been the norm. As instructor communication strategies are a central feature of immediacy and as out-of-class communication is on the rise, we are interested in two questions:

(1) How can we as instructors reframe our immediacy strategies to manage expectations and promote students' self-efficacy and ingenuity?
(2) By adopting communication strategies that foster students' self-regulation and problem-solving, can less mean more for our students' formation?

This session draws on Bandura's (1997) work on self-efficacy and Wlodkowski's (2008) arguments about creating conditions that allow students a sense of control in order to develop into independent learners. Combining these notions with the concept of "immediacy" (see for instance: Boice, 1996; Burke et al., 2013), we measure student perceptions of instructor immediacy and availability when the instructor practices communication strategies that encourage students to develop their self-reliance and their organization skills.

Over a five-year period, an instructor significantly but clearly reduced email availability; office-hour availability remained the same. Surprisingly, end-of-course evaluations of perceived availability remained unchanged. More surprising still, we found that the instructor was perceived as more available than his colleagues, most of whom had no communication policy in their syllabi. We discuss the extent to which clarity and expectations-setting may be the more salient (and yet often ignored) factors in students' perceptions of instructor availability.

As yet unclear is the extent to which the instructor's in-class framing shifts students' expectations. Further study would help determine whether clarity about availability, for instance, trumps 24/7 access, and whether students realize the self-regulation skills and confidence they are developing as a result of these course practices.

Session participants will have opportunity to reflect on and discuss their own policies about availability in an effort to promote immediacy while developing students' independence and confidence. Together, we may also explore how a recalibration of norms can free them up to engage with their students more meaningfully.

References

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W. H. Freeman & Co.

Burke, L. A., Karl, K., Peluchette, J., & Evans, W. R. (2013). Student incivility: A domain review. Journal of Management Education. Advance online publication. doi 10.1177/1052562913488112

Boice, R. (1996). Classroom incivilities. Research in Higher Education, 37(4), 453–486.

Wlodkowski, R. J. (2008). Enhancing adult motivation to learn: A comprehensive guide for teaching all adults (3rd ed.). San Francisco, CA: Jossey-Bass.

3:30 PM | Room 309B | Inquiry into teaching practices

F15.3 REVERSE ENGINEERING OF REFLECTION SITUATIONS IN HIGHER EDUCATION. THE CASE OF A PHYSICAL-EDUCATION TEACHER-TRAINING PROGRAM

Individual Paper (30 minutes)

Philippe Chaubet (1), Verret Claudia (1), Grenier Johanne (1), Parent Patrick (1)
(1) UQAM - Université du Québec à Montréal (Montréal, Canada)

How can we know whether or not university professors succeed in stimulating students' reflection about the profession they are preparing for in higher education programs, be it teaching, nursing or engineering? What criteria can tell us if students have reflected or not? Is it possible to link the reflection they engage in to professional competencies they are developing? To put it bluntly, where and when are we good, as university teachers, at helping students transform the way they view themselves and their future profession?

We undertook our research with no claim to certainty about our abilities as teachers to trigger reflection in our students. Intuitions based on students asking smart questions, linking practice to theory in original ways, suddenly paying attention, and so on, seemed weak proof of our ability to stimulate their reflection. Furthermore, to avoid being caught in a methodological dilemma about defining what good or poor reflection is (Sumsion & Fleet, 1996), we decided to approach the problem from a relative standpoint. Our belief is that reflection should not be graded on a scale from rough to perfect. As Donnay & Charlier put it, it should rather be evaluated in qualitative terms from simple to complex, isolated to integrated, global to differentiated cognitive structure (2008).

Though reflection should always relate to the framework of the intended occupation, it should also concern students' sense of mission and identity, their beliefs, competencies, behaviour and the work environment they will find themselves in, but most of all, their evolution in respect to these areas (Korthagen, 2004). From the standpoint that reflection causes a change in perspective (Brockbank & McGill, 2007; Osterman & Kottkamp, 2004), change can be considered one of the core signatures of reflection (Chaubet, 2010a), providing, then, a theoretical and methodological hook to capture clues about reflection (Chaubet, 2010b), which, in turn, allows the underlying facilitating conditions to be pinpointed.

Our research on reflection was carried out in 2013-2014 with the participation of 250 undergraduate students and we four professors at UQAM. Our methodological approach was comprehensive and qualitative. First, the four of us conducted semi-structured group interviews relative to five courses we give in a physical-education teacher-training program (with the ethical precaution of never interviewing our own students). Second, we analysed students' comments about how they see themselves transformed by their training. We then reconstructed the underlying situations, in a kind of reverse engineering of situations capable of stimulating reflection. We also interviewed each other, thus putting ourselves in the position of instructors-researchers-participants.

Preliminary results show that 1) students do transform their ways of seeing and doing things in their intended profession during these five courses; 2) most students recognize the same transformations, which tends to prove teachers do influence reflection in consistent ways; 3) active ways of teaching seem better stimulators of reflection than more traditional ones; 4) the research design has a "positive contamination" effect, empowering both the students and university teachers involved.

DAY AT A GLANCE
SATURDAY, OCTOBER 25, 2014

7:00 - 8:30	Breakfast for all attendees - Room 2000CD
8:30 - 10:00	**Concurrent sessions - G**
10:00 - 10:30	Break - Hall 2000
10:30 - 12:00	**Closing Plenary** **PANEL** **Transformations in Undergraduate Education: Beyond MOOCs** Thérèse Laferrière, Université Laval Vivek Venkatesh, Concordia University Didier Paquelin, professor and director of Aquitaine Digital University Room 2000AB
12:00 - 1:30	Lunch on your own

8:30 AM | Room 2000A | Inquiry into student learning

G01 ASSESSING STUDENT LEARNING ON OFF-CAMPUS STUDY PROGRAMS FOR IMPROVEMENT

Panel
(90 minutes)

Joan Gillespie (1), Elizabeth Ciner (1), David Schodt (1)
(1) Associated Colleges of the Midwest (Chicago, United States)

How do you assess student learning in off-campus programs in a way that leads to program improvement? What difference does it make that students are studying a particular subject at a particular site? To what extent is learning both inside and outside the classroom integrated, and how can we both ensure and demonstrate that this is occurring? This session describes a pilot assessment by the Associated Colleges of the Midwest (ACM) in Fall 2013 that provides an easily replicable way to assess student learning in off-campus study programs, while at the same time affording opportunities to engage faculty and directors in the field in setting program goals, planning and implementing an embedded assessment and scoring student submissions using a rubric. Session presenters will describe the project and share assignments, examples of student writing and a rubric derived in part from the AAC&U Values rubric. Participants will be able to practice scoring student work and leave with a model for assessing student learning abroad and engaging stakeholders in assessment.

The pilot project was tested at four off-campus program sites and required students to complete an assignment embedded in an existing course to demonstrate content knowledge as well as learning and development strategies in a new environment. The program sites designed 'neighborhood walk areas,' which could be interpreted loosely by faculty and program directors to mean a local residential or commercial area, adjoining rooms in an art museum, or buildings and public places associated with a historic moment. Students submitted written observations in response to a set of prompts, at the beginning and end of the program. A group of evaluators, including faculty and directors, analyzed responses according to a rubric to see what learning was demonstrated and the extent to which the interaction of site and classroom in a program fosters student learning.

This session is designed for faculty and administrators interested in understanding global learning that engages stakeholders and produces useable results. It could also be useful to those who are planning curriculum and co-curricular events at an off-campus site, through measurable learning goals, teaching a course or courses that emphasize experiential learning as a pedagogy, engaging faculty on and off-campus in setting and assessing learning goals, creating meaningful assignments, embedding qualitative assessment in a course and a program, and constructing a rubric.

The session offers participants an inside look at a successful assessment of student learning in off-campus programs, from the initial planning stages through implementation and evaluation of the project itself. The takeaway of this session is a qualitative model for assessing student learning and a rubric to evaluate student responses; it is a tool that participants might want to adapt to their own programs.

The work carried out for this project is supported by a grant from the Teagle Foundation, Learning in Study Abroad. The project design was inspired by a presentation the presenters heard at ISSOTL 2013.

8:30 AM | Room 2000B | New and diverse contexts for SoTL

G02 FROM ISOLATION TO A VIBRANT COMMUNITY OF PRACTICE FOR TEACHING

Panel (90 minutes)

Hilary Eppley (1), Chip Nataro (2), Joanne Stewart (3)
(1) DePauw University (Greencastle, United States); (2) Lafayette College (Easton, PA, United States); (3) Hope College (Holland, MI, United States)

Communities of practice provide a way for teachers of a discipline to both share teaching materials and improve the content and pedagogy of a subject. IONiC, the Interactive Online Network of Inorganic Chemists, is a community of practice that formed in response to the isolation typically experienced by inorganic chemists at small colleges. The diverse nature of our field and a faculty member's specialized training makes it difficult to construct and teach a course that fully exposes students to the breadth of the discipline. Our community has used both virtual and face-to-face methods to encourage members to share their own expertise and draw on the expertise of others to improve inorganic chemistry classrooms around the world.

Starting with a small group and the help of extensive outside technical support, we built a website backbone for the community, VIPEr (Virtual Inorganic Pedagogical Electronic Resource, http://www.ionicviper.org). We seeded the site with model learning objects (LOs), "bite-sized" teaching materials that are easy to adapt for different classrooms. Members of this group have also coached new users to contribute their own LOs to the site. We built in Web 2.0 interactions, providing discussion forums where members can post about specific content questions or carry out in-depth discussions on textbooks and literature discussions. Users can comment on the individual LOs, offering suggestions to improve it or just saying that they used it and liked it. Over time, VIPEr has expanded to include a blog, a Twitter feed and a Facebook page, which bring people back to the VIPEr website on a regular basis.

We have always supported our virtual community through larger face-to-face meetings of community members. We have hosted symposia at national meetings of the American Chemical Society on undergraduate research in order to bring together potential users as well as to publicize the website. We have also hosted faculty development workshops, bringing together pedagogical best practices and cutting edge scientific content. Outside experts in a particular area of inorganic chemistry present primary literature papers, and then groups of faculty jointly develop new classroom materials based on the papers and presentations for publication on VIPEr.

An important component of sustaining a thriving community is getting the day to day work of the community done, as well as helping each individual excel at both the teaching and professional development aspects of their jobs as college professors. Collaboration methods have allowed the leaders of IONiC to advance the community by building strong connections which include teaching advice via Skype chat, peer-supported professional writing groups, and Google ecosystem-based meetings. We have introduced our workshop participants to some of these activities as a way of bringing them into more active roles in the community.

Panel members will briefly summarize some of the literature on communities of practice, explain the various components of our project mentioned above, and facilitate discussion of best practices for nascent disciplinary groups.

8:30 AM | Room 2102A | SoTL and the changing landscape of higher education

G04.1 "PORTAL PEDAGOGY": TRANSCENDING THE BOUNDARIES IN HIGHER EDUCATION

Individual Paper (30 minutes)

Sarah McDonald (1), Paul Taylor (2)
(1) Monash University (Melbourne, Australia); (2) Warwick University (Coventry, United Kingdom)

Education in the twenty-first century is characterised by narratives of global connectivity. Digital technologies, connectivity through mobile platforms and social media married with changing expectations of students and parents have put pressure on the Higher Education sector to reimagine the kind of global learning and flexible delivery contained in a modern higher degree. The HE sector has sought to address these developments through the implementation of a series of strategies such as intensified student exchange and recruitment, the establishment of off-shore campuses, an expanding online delivery presence, and increasing flexibility of delivery for on-campus students. While each of the current options taken up by universities addresses different aspects of the abovementioned trends in the sector, all have inherent problems and imbalances in their approach.

This paper will outline some of the current trends in international education and the role of transdisciplinarity and transnationalism in the global context of HE. We reflect on the effectiveness of the current trends in international education and propose that the innovative "Portal Pedagogy" approach makes a significant contribution to the HE by connecting geographically distant students through innovative technology and curriculum to create a student-centred community of inquiry neither bound by disciplines nor countries. By bringing together a firm commitment to cross-disciplinary interaction, student driven learning and technological solutions to pedagogical and logistical challenges, "Portal Pedagogy" offers a hybrid model of current approaches that seeks to go beyond the limitations of online delivery and student exchange programs in order to offer a more flexible, meaningful, and globalised learning experience to students.

We will use two case studies to examine the practical use of the portal and the implementation of 'portal' pedagogy. The first, Forms of Identity, is a third year interdisciplinary module taught simultaneously to a single cohort that are physically located in both Monash University, Australia and Warwick University, UK. The second is the International Conference of Undergraduate Research (ICUR), which is an event where students from the UK, Australia, Malaysia, South Africa and Singapore interact with each other in real-time, without having to leave their home university. It is a platform for undergraduates to present their research in joint sessions alongside peers on the other side of the world, interacting with fellow presenters and audiences in real-time through both the portal space and social media.

9:00 AM | Room 2102A | SoTL and the changing landscape of higher education

G04.2 CASTING A CONNECTIVIST STONE TO GENERATE NETWORKING RIPPLES-CMOOCS AND ELEARNING PROFESSIONAL DEVELOPMENT

Individual Paper (30 minutes)

Ashwini Datt (1)
(1) University of Auckland (Auckland, New Zealand)

MOOCs are the much discussed disruptive change in higher education. How can MOOCs help develop digital literacies and the capacity for elearning? Can the connections catalysed through connectivist MOOCs (cMOOCs) be the answer to developing and sustaining elearning communities of practice (CoP)? This paper demonstrates creativity in academic development using emerging technologies.

Rethinking the classroom -- Interactive learning and teaching in the digital age (ACADPRAC 703) -- is the inaugural online offer of a postgraduate paper on elearning by the Centre for Learning and Research in Higher Education at the University of Auckland. ACADPRAC 703 has always generated great interest among academics but very few enrolments for credit. Low enrolments meant smaller cohorts with fewer possible connections and exchanges of ideas and information. So, can a cMOOC be the answer to this on-going challenge which includes time, access, flexibility, networking and accountability?

Drawing on connectivist principles and specific pedagogical considerations, a mini open online component (mooc) is being offered as part of ACADPRAC 703 this year. This is to enable greater participation, engagement and networking without the requirement for deadline driven formal assessments of the credit-bearing course.

The mooc is based on the:

1. Assumption that to become successful, elearning practitioners, lecturers need an awareness of what technology can afford and how such affordances can be capitalised for better teaching and learning. The latter depends on skills development including digital literacies. "The ability to work with current digital tools to connect fragmented, diffuse and distributed knowledge nodes… is perhaps the most important literacy that the MOOC environment rewards" (McAuley, Stewart, Siemens & Cormier (2010, p47). Immersing in the elearning space as a learner gives them a useful practical insight.

2. Expectation that the online environment will offer the flexibility and networking opportunity that will catalyse greater participation beyond the limitations and requirements of the formally assessed course. The self-initiated connections formed by the participants will enable the development of an effective and sustainable CoP. Such CoPs are crucial for an awareness of the new and diverse contexts for the scholarship of teaching and learning. cMOOC is a network that is formed on peer support, shared interest and academic orientation much like a CoP (Yeager & Bliss (2013).

The design of the mooc is based on evidence and experiences presented in current literature to allow wider participation and networking opportunities beyond the enrolment, cost and assessment barriers of the credit-bearing, taught course.

References

McAuley, A., Stewart, B., Siemens, G., & Cormier, D. (2010). The MOOC model for digital practice. Charlottetown, Canada: University of Prince Edward Island. Retrieved from http://www.elearnspace.org/Articles/MOOC_Final.pdf

Yeager, C., & Bliss, C. A. (2013). CMOOCs and global learning: An authentic alternative. In Journal of Asynchronous Learning Networks, 17 (2): 133-147.

9:30 AM | **Room 2102A** | **SoTL and the changing landscape of higher education**

G04.3 NURTURING PASSION AND CREATIVITY IN TEACHING AND LEARNING THROUGH INCLUSIVE PRACTICES IN POST-SECONDARY EDUCATION SYSTEMS

Individual Paper (30 minutes)

Dave Philpott (1), Melanie Greene (2)
(1) Memorial University of Newfoundland (St. John's, Canada); (2) Memorial University of Newfoundland (St. John's, Canada)

n recognition of an increasingly diverse student population, a Teaching and Learning Framework was developed at Memorial University. This framework emphasizes work that is engaging, supportive, inclusive, responsive, committed to discovery, and is outcomes-oriented for both educators and learners. The plan was to create a starting point for supporting Memorial's students so as to help create additional knowledge and to address specific needs in ways that have been shown to be effective on Memorial's campus and at other institutions.

The goal was to develop a number of initiatives that builds on existing knowledge, proven programs, and existing supports in order to respond to the specific needs of identified groups of diverse learners: 1) academically vulnerable first year students; 2) students with individual learning needs associated with disorders and/or mental health issues; 3) international students and those from non-western cultures.This session provides an overview of this process.

Memorial's teaching and learning initiatives were inspired primarily by models of educational persistence and departure. Undergraduate student attrition research theorizes that persistence is the product of a complex set of interactions among personal and institutional factors. Increased levels of student involvement have been found to be influential in persistence and to play a key role in socialization. The challenges faced by non-traditional students have also received considerable attention in the literature; research has shown that non-traditional students have a higher rate of attrition than traditional students. These students face the challenge of finding a balance between their academic and external commitments that allows for them to sustain a sufficient level of engagement.

The strategies employed to develop this proposal were drawn primarily from research on student success and retention (literature review), information on pre-existing programs (environmental scan), an analysis of in-house data on students at our institution, and consultations with key informants at all of Memorial's campuses.

While an expanding literature has emerged on diversity in higher education, the process of developing institutional initiatives is usually excluded from such discussions, while the focus remains on effective practice. The proposals that were developed do not propose a totally new initiative but constitute a co-ordination and strengthening of existing services and programs; a weaving of supports to engage a diverse body of students in a sense of community.

This presentation will act as a guide through the process of developing projects addressing learner diversity and engage attendees in a discussion of institutional practices that have been implemented in support of overcoming challenges, as well as provide feedback on institutional and student outcomes. This session will be of particular interest to those wishing to implement similar initiatives on their campuses, as possible adaptations for practice will be addressed. Findings from this research will be shared, followed by an open discussion where the exchanging of research, initiatives, and best practices for the enhancement of teaching and learning is welcomed.

8:30 AM | **Room 2102B** | **New and diverse contexts for SoTL**

G05.1 LIVED MULTICULTURALISM: THE CASE FOR EFL EXPERIENCES IN TESOL PROGRAMS

Individual Paper (30 minutes)

Jamie Gabrini (1), Meghan Roth (2)
(1) D'Youville College (Buffalo, United States); (2) International TEFL Academy (Buffalo, United States)

The recent push in the United States to raise standards has neglected to fully include multicultural engagement, which is crucial for developing teacher creativity and flexibility. Teaching English as a Second Language (TESOL) programs teach multiculturalism, but most ESL teachers are locally-born and have never lived in multicultural communities. English as a Foreign Language (EFL), however, is taught in non-English speaking countries typically by Anglophones living abroad, thereby providing teachers with intercultural engagement similar to that of ESL students in the US. There is therefore need for TESOL programs to embody a more practical and global approach by incorporating opportunities for acquiring vital communicative skills though modes of interaction, which include cultural experiences that broaden the depth of a teacher's cultural competence. This paper reviews relevant literature about sociolinguistics and multicultural education and, with the Bahktinian concept of dialogic discourse in mind, explores the need for ESL programs to provide access to genuine and authentic intercultural interaction. Through the voices of overseas EFL teachers, we explore lived experiences that encouraged cross-cultural understanding and creativity and conclude with recommendations for connecting future teachers to such experiences.

G05.2 INFORMATION CONTRADICTIONS IN PROJECT-BASED LEARNING (PBL*) STUDENT ENGINEERING TEAMS: A CULTURAL-HISTORICAL ACTIVITY THEORY APPROACH

Individual Paper (30 minutes)

Michael Jones (1)
(1) Sheridan College (Toronto, Canada)

While many will agree that the applied sciences are important in a knowledge-based society, how applied scientists are educated remains a matter of debate. Currently, engineering education is in flux with respect to curriculum design and delivery. Traditional models based on the passive reception of information and exam assessment may ignore context, integrative thinking and the development of non-technical "soft" skills necessary for professional practice, so raising the concern of accrediting agencies and industry leaders requiring graduates with such skills.

Facing similar problems 50 years ago, medical education began to adopt a problem-based learning (PBL) approach. PBL encourages student-led investigation of applied problems, aided by faculty who play a facilitative and advisory role (Savery, 2006). Even skeptics have noted PBL increases student motivation and develops key professional skills (Albanese, 2000; Schmidt, Vermeulen, & van der Molen, 2006).

This paper suggests a similar approach can be effective in the applied sciences. Many engineering problems are project-based. Project-based learning (designated here as PBL* to differentiate from PBL) is structured around broad, integrated design goals, and requires significant sustained effort by a larger group as compared to traditional PBL (Bédard, Lison, Dalle, Côté, & Boutin, 2012; Kolmos, 1996).

To support PBL*, professional engineering associations have sponsored student design competitions where teams of motivated students engage in a given activity, structured by specific rules and deadlines set forth by the governing body. Over some years, these student teams develop into knowledge-based organizations (Choo, 2006) that face information management challenges similar to those faced in industry.

This paper chooses cultural-historical activity theory (CHAT) as a theoretical frame to understand how PBL* teams negotiate the challenges of PBL* teamwork. CHAT is founded in human agency and activity, but situates that agency in social and historical forces that often operate in contradiction (Engestrom, 1987). CHAT provides a multifaceted and complex lens to examine these contradictions, and has been used in a range of information science research contexts (Allen, Karanasios, & Slavova, 2011; Wilson, 2009).

While there are a variety of PBL* contexts, one particular context will be studied in depth– Formula SAE (FSAE) automotive racing, so named after the sponsoring professional Society for Automotive Engineers. FSAE is an international engineering competition with over 500 university teams participating in over 10 competitions worldwide. FSAE team members leverage their formal studies along with other sources of information to design, manufacture, test and race an open-wheeled racecar.

This paper outlines preliminary results from dissertation research, based on discussions with FSAE students, faculty advisors and competition officials. It is hoped that through exchanging experiences of information seeking and use, respondents will inform better practices to these complex challenges in FSAE and other PBL* domains. It is also hoped this research will provide insight into the use of CHAT as a theoretical frame in SoTL research.

9:30 AM | Room 2102B | New and diverse contexts for SoTL

G05.3 THE PAINTED WALL: HOW A NEW DEAL MURAL SPARKED CREATIVITY AND PASSION IN FIRST-YEAR STUDENTS

Individual Paper (30 minutes)

Joan Navarre (1)
(1) University of Wisconsin-Stout (Menomonie, United States)

Many first-year writing programs aim to educate and engage students with inquiry-based research. This paper describes a research project that identified discipline-specific writing and information literacy outcomes and used a painted wall to spark creativity, passion and academic achievement. In Spring 2013 students in two sections of first-year writing studied a long-overlooked New Deal mural (c. 1936) at the University of Wisconsin-Stout entitled Learning, Industry, Skill and Honor. Students stared at a painted wall, described and analyzed the mural, conducted oral history interviews, researched in the university archives, welcomed guest speakers, explored blueprints and garnered a new understanding of the significance of this historic New Deal mural. Eager to share the results of their research, the students designed, constructed and curated an exhibit interpreting their discoveries. Moreover, two students presented their research at the Midwest Honors Conference and one student earned the honor of presenting her research findings at the National Honors Conference, the first time a student from my university has achieved such distinction. Singular honors aside, the research conducted by all of my students resulted in improved communication and information literacy skills, high-impact learning and a contribution to the historic record. Their research was published in The Living New Deal, a digital archive created and curated by the University of California-Berkeley: https://livingnewdeal.berkeley.edu/projects/harvey-hall-mural-university-of-wisconsin-stout-menomonie-wi/

As my illustrated paper highlights, this inquiry-based research project crossed disciplines, met fundamental first-year writing outcomes and nurtured curricular innovation. We teach in an exciting time of new and diverse contexts for the Scholarship of Teaching and Learning and for inquiry-based research. Intellectual curiosity in first-year students can be ignited by something as simple as a painted wall.

8:30 AM | Room 2104A | Disciplinary approaches to teaching, learning and SoTL

G06 ADDRESSING THE UNDERREPRESENTATION OF WOMEN UNDERGRADUATES IN PHILOSOPHY -- WHAT DO WE KNOW? WHAT DON'T WE? AND WHAT CAN WE DO?

Panel (90 minutes)

Stephen Bloch-Schulman (1), Nim Batchelor (1), Ann Cahill (1), Helen Meskhidze (1), Sean Wilson (1), Claire Lockard (1)
(1) Elon University (Elon, United States)

Our panel will discuss a well-known, little-researched problem in philosophy: the underrepresentation of women in our classes and in the major. This is essential to address not only because it presents a problem itself, but because the lack of women in philosophy at the undergraduate level is a problem for the underrepresentation of women in our professional ranks as well -- which is likely a cause of further underrepresentation at the undergraduate level (Paxton et al. 2012). Current research shows a decline for many programs in the percentage of women in philosophy at each step, from introductory classes to majors to graduate students to professionals, and the strongest drop from the introductory level to the major (Paxton et al. 2012). There are two main lines of research attempting to understand the problem: the "Different Voices" model and the "Perfect Storm" model (Antony 2012). The first assumes that there is something different about women than men and that philosophy is unwelcoming/more difficult for people who have the qualities typically associated with women. The "Perfect Storm" model hypothesizes that the basic sexist structure of society is heightened within philosophy because of philosophy's particular characteristics: for example, that women are socially penalized for being aggressive. On this model, women who are not aggressive have a hard time

flourishing in philosophy, where aggressiveness is often expected, and those who are aggressive (and thus might flourish in philosophy) are penalized socially for being so. Women who enter philosophy, therefore, find themselves in a double-bind: damned if they are, damned if they aren't.

Our panel will outline the state of the problem generally, and then turn to our own department's concerns, which differ somewhat from those described in the current scholarship: we do not have a drop off from introductory classes to major; rather, we have a low percentage of women who take a philosophy class, but those who do are as likely as men to take other classes and to major in philosophy. Our panel will describe how we are pushing the current research in new directions, asking: how do we encourage women to take a philosophy class (without changing anything that has kept women coming back for more classes)? We are a team of students and faculty looking into the problem from different perspectives (including student and faculty perspectives) and using different methods (statistical, theoretical, phenomenological) to understand how gender may be playing a role in the decision not to take any or to take one or more philosophy classes. We are examining the advising structure, the way our classes fit into their requirements, expectations incoming students have about philosophy and philosophy classes, and how those who take the classes experience them. We will still be in the data gathering phase of our work, and in the panel we will update attendees on the current state of our project and discuss with them possible alternative solutions to the problem.

8:30 AM | **Room 2104B** | **SoTL and institutional cultures**

G07.1 A GRADUATE CERTIFICATE IN COLLEGE PEDAGOGY: RESISTANCE AND RESILIENCE IN INSTITUTIONAL CHANGE

Individual Paper (30 minutes)

Jennifer Robinson (1)
(1) Indiana University (Solsberry, United States)

Universities and colleges are famously in the dual roles of forging new knowledge and stewarding old. Such orientations are not simply ascribed to separate departments like digital gaming and classics. Instead, we must combine them in our everyday research and teaching, in our collective hiring and retaining of academic staff. The training of graduate students puts these tensions into special focus as their mentors weigh the important responsibility to prepare them fully for roles as future faculty while also being mindful of the financial and temporal costs of the doctoral degree. This paper describes the efforts at a large American research university to institute a school-wide graduate certificate in college pedagogy. It situates the certificate alongside other academic preparation, by incorporating departmental training, interdisciplinary seminars, graduate-level reading and research, and practica. In addition to providing the course sequence and rationale for the certificate, the talk will reveal the iterative sequence of proposing and reproposing such a credential (resilience) and the particular usefulness of SOTL to address points of resistance that may be common to other campuses. A comparison of the features of a few notable certificate programs will provide a frame of reference and allow the audience to critique and learn from several attempts to bring SOTL to bear on preparation for teaching in doctoral education.

9:00 AM | Room 2104B | SoTL and institutional cultures

G07.2 THE COLLEGIAL PROJECT COURSE: A STRATEGY FOR SUPPORTING SOTL THROUGH A SOCIO CULTURAL PERSPECTIVE

Individual Paper (30 minutes)

Roy Andersson (1), Torgny Roxå (1)
(1) Lund University (Lund, Sweden)

This paper presents and discusses how to support disciplinary communities of academic teachers while they embark on a trajectory of emergent scholarship of teaching and learning. It acknowledges the fact that the identity of academic teachers and their social positioning in hierarchies is formed during day-to-day collegial interaction (Roxå, Olsson et al. 2008; Trowler 2008). Going public about your own teaching under these circumstances is not only a founding element of becoming a scholarly teacher, it is also a social action with potential implications for identity, status, and subsequent perceptions of Self. Ingrained collegial relations, recurrent practices, or unvoiced assumptions about students and academic teaching may complicate individual teachers' first steps towards an engagement in the scholarship of teaching and learning.

Bearing these potentially restricting aspects in mind, there is a need for a new and more sophisticated tool to reach further into collegial contexts and thereby involve new categories of academic teachers previously not engaged in SoTL. A new element has therefore been developed and added to our arsenal of staff development activities, the Collegial Project Course. Together with other already successful activities (Andersson 2010, Olsson et al. 2010), it forms a coherent pattern for institutional development, linking together teacher training courses, quality assurance systems, scholarship activities, a reward system, etc.

The Collegial Project Course is an elective course in the qualifying programme in teaching and learning in higher education at our institution. The course is only open to groups of lecturers/teachers sharing a social context (subject, division, etc.). The aim of the course is to provide the participants with the opportunity to collectively address relevant teaching issues chosen by themselves through a SoTL-process. The course is focused on discussing, reading and writing about pedagogical issues, especially those related to teaching and learning inside the group's domain of teaching responsibilities. It pursues opportunities for peer review of teaching, collaborative reading of educational literature, and an extensive use of teaching and learning narratives originating from authentic teaching situations.

Evaluations consistently show that participants appreciate the collegial approach. It offers them an opportunity to deal with challenges emerging in their immediate practices. It allows them to negotiate concepts and perspectives from educational literature and adapt their meaning to their everyday experiences of teaching and learning. And maybe most of all it has provided them with a common language when discussing teaching and learning locally.

Also, as a somewhat 'unintended learning outcome', it influences participants' expectations on what constitutes 'a course'. Thereby it has an impact on more general conceptions of teaching and learning and on the Scholarship of Teaching and Learning. As indicated through evaluations, the Collegial Project Course shifted patterns of collegial behaviour by including peer teaching and peer review of written accounts about teaching situations.

It is suggested that the intervention described above points towards a strategy for adopting a sociocultural perspective to extend support for SoTL to an even larger domain.

9:30 AM | Room 2104B | SoTL and institutional cultures

G07.3 GETTING INTO THE RHYTHM TO PRACTISE GENEROUS SCHOLARSHIP: A MEANDER THROUGH THE SEVEN INTERSECTING PATHS OF THE ACADEMIC WRITING RETREAT

Individual Paper (30 minutes)

Sally Knowles (1)
(1) Edith Cowan University (Perth, Australia)

Writing retreats offer rich possibilities for growth and pleasure in academic, especially writerly, identities. The retreat model engenders generous nurturing of the academic self as well as towards others through collaboration and collegiality. The paper discusses the teaching and learning initiatives my colleague Barbara Grant (The University of Auckland) and I have devised to meet the demands of the current environment by assisting university staff with heightened performance expectations. We are interested in examining what new forms of identity construction are required to negotiate academic work-life in a highly competitive environment in which only a few can ever be deemed 'successful' or 'productive' in the narrow ways 'ideal' academic identities are being conceived. This paper calls into question prevailing neo-liberal policy discourses that privilege products and quantify knowledge production, and it critiques hostile institutional cultures that discourage creativity. Indeed, retreat participants consistently describe a longing for vibrant writing communities that are largely absent from routine academic life. I first describe the retreat design and the ways it appeals to an individual's need for encouragement and development and inspires participants to relish their writing projects, ignites the fire in their bellies, and forges confident academic identities. The paper also illuminates the ways in which the retreat's holding framework (seven paths and eight walls) is somewhat transgressive in that it aims to unravel the strictures of individualism and competitiveness within academia by fostering collaborative, co-operative models of intellectual generosity and kindness. The retreat ethos (Grant, 2006; Knowles & Grant, 2014) has distinctive features that actively seek to disrupt institutional messages that brand researchers in particular ways. As retreat designers, our practice is to ensure that the retreats change organically in response to participants' input. This is facilitated through the end-of-retreat discussion where suggestions are actively sought for changes to the model (and, if there is enough agreement, acted upon). Our data from formal feedback processes suggests that it is not only retreats that are changing in this way: in some cases, attendance at retreats is producing changes to institutional cultures. To illustrate how such changes are filtering back to our institutions, I will outline two research projects that affirm the value of cross-fertilisation between the creative and performing arts and 'traditional' disciplinary approaches for SOTL publishing. In addition to drawing attention to the similarity between the processes of writing fiction and writing non-fiction, there is great value in academic writing rituals being fuelled by research ideas and potential narratives associated with reflective teaching practices. Moreover, creative writing provides an alternative way to disseminate research beyond the academic community. More specifically, by analysing how narratives might be used by academics for reflection and for developing research ideas or resolving research and teaching dilemmas/challenges, I will show how creative processes are especially relevant for developing research ideas and for producing reflective narratives as research that is relevant for a wider readership.

8:30 AM | Room 2105 | Leadership, academic development and SoTL

G08 STEREOTYPE THREAT AND ACHIEVEMENT GAPS: DEVELOPING UNDERSTANDING AND EXPLORING INTERVENTIONS WITH FACULTY

Workshop (90 minutes)

La Vonne Cornell-Swanson (1), Jennifer Heinert (2), Deb Hoskins (3), Cyndi Kernahan (4)
(1) University of Wisconsin System (Madison, United States); (2) University of Wisconsin Colleges (Washington County, United States); (3) University of Wisconsin at La Crosse (La Crosse, United States); (4) University of Wisconsin at River Falls (River Falls, United States)

In 2012 the Office of Professional and Instructional Development (OPID) of the University of Wisconsin System launched a faculty development initiative designed to engage faculty in learning about Stereotype Threat theory. The faculty development initiative began with facilitating a book discussion among the OPID Council representatives (Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do, by Dr. Claude Steele) who represent each of the 26 institutions in the UW System. The discussion was followed by a system-wide spring 2013 conference that featured both a keynote and workshop presented by Valerie Purdie-Vaughns (expert and researcher on Stereotype Threat), which kicked off a statewide common read series at local university campuses.

In this workshop, we will help participants design and assess a faculty development initiative around Stereotype Threat. First, we will define and explain Stereotype Threat and how this phenomenon contributes to achievement gaps for students of color, women in math and science, and first generation students. Participants will identify where Stereotype Threat might be occurring in their courses, programs, or campuses, identifying both populations and spaces. Next, we will discuss how this theory was shared across campuses in the UW System and what we learned about how best to introduce faculty and administrators to this sensitive topic and how to assess that understanding. Finally, we will share interventions designed to alleviate Stereotype Threat. Several studies have been conducted to test both classroom-level and campus-wide programs and many have shown how relatively simple fixes can close achievement gaps and increase both retention and academic performance.

Our goals are for participants to gain a stronger understanding of Stereotype Threat and how it contributes to widening achievement gaps. Participants will work collaboratively to map out a strategy to implement these ideas within their own contexts. Participants will develop a step-by-step strategy to implement and assess an intervention.

Because we have worked with a variety of people from our campuses, including instructors from across disciplines, administrators, and staff from various academic units (e.g., admissions, academic support, student life), we believe our work will be relevant to many. One lesson we have learned is how a simplistic understanding of Stereotype Threat may lead to ineffective interventions that are not fully understood or well designed. As such, we will focus on the complexity of this work and the need to properly pace and assess the outcomes, something we feel is particularly well-suited to those working in SoTL.

The workshop leaders include: La Vonne Cornell-Swanson, Director of OPID, University of Wisconsin System (UW), Cultural Anthropologist specializing in Cross Cultural Practice; Jennifer Heinert, Director of the UW Colleges Teaching and Learning Center, Associate Professor of English, specializing in Ethnic Studies; Deb Hoskins, Chair of Women's, Gender, and Sexuality Studies, Inclusive Excellence Coordinator for the Center for Advancing Teaching and Learning, UW- La Crosse and Cyndi Kernahan, Social Psychologist specializing in race and prejudice, whose work focuses on how best to help students and faculty learn about sensitive, emotionally-laden topics, UW- River Falls.

8:30 AM | Room 206A | Inquiry into teaching practices

G09.1 **ADDRESSING THE CHALLENGES OF PROVIDING MEANINGFUL ASSESSMENT IN LARGE CLASSES: A COLLABORATIVE INQUIRY AT A RESEARCH- INTENSIVE UNIVERSITY**

Individual Paper (30 minutes)

Mariela Tovar (1), Carolyn Samuel (2)
(1) McGill University Teaching and Learning Services (Montreal, Canada); (2) McGill University Writing Center (Senior Faculty lecturer) (Montreal, Canada)

The presenters will describe a project designed to address the challenges of providing meaningful assessment and feedback to students in large classes. The project was conducted by the "Assessment Working Group", a group of faculty and students at a research-intensive university, with representatives from the institution's teaching support unit, library and writing centre1. The group used a collaborative inquiry-based approach in order to understand existing assessment and feedback practices at the university with a view to learning about creative and effective methods for assessing student work and providing feedback in large undergraduate courses. The ultimate goal of this project was to use the findings to engage the university community in considering effective strategies for evaluating student learning.

In this presentation, we will discuss the questions that guided our inquiry:

1. What are recommended practices for evaluating student learning and providing feedback? For large classes?

2. What constitutes a "large class"?

3. What do we want to find out about assessment and feedback practices in large classes at our university? How will we go about getting this information?

4. What are optimal ways to share our findings in order to engage the university community in considering effective assessment and feedback strategies in large classes?

We will briefly describe our methodology and key results in addressing the above questions. We will highlight what we learned from a review of the literature and from a benchmark exercise that included large research universities with high enrollment courses (Question 1). We will also share how we developed a working definition of a "large class" that takes into consideration contextual and disciplinary factors (Question 2). Furthermore, we will discuss the methods that we used to answer Question 3, which include a survey where 160 instructors reported their actual and desired assessment practices, and follow-up interviews conducted with a selected sample of instructors who reported using interesting strategies to assess their students. The interviews provided a deeper insight into the instructors' rationale for the design and implementation their assignments. Finally, we will share a creative approach we are using to disseminate our results in order to engage the university community: the launch of an Assessment in Large Classes brown bag lunch and blog series. These series provide a forum for the instructors we identified in our interviews to discuss their assessment and feedback strategies with other instructors at the university (Question 4).

In addition to the presenters, the Working Group included the following individuals: Professor Rhonda Amsel (Science); Professor Elizabeth Elbourne (Arts); Ms Kristen Emmett (student, Information Studies); Dr. Lorie Kloda (Library); Professor Kenneth Ragan (Science); Professor David Ragsdale (Medicine); Ms Marcy Slapcoff (Teaching and Learning Services); Ms Daria Sleiman (student, Arts): Professor Shauna Van Praagh (Law); Dr. Laura Winer (Teaching & Learning Services).

9:00 AM | Room 206A | Inquiry into teaching practices

G09.2 USING CASE STUDIES TO ENHANCE PRESERVICE AND INSERVICE TEACHERS' MULTICULTURAL ATTITUDES, EFFICACY, AND UNDERSTANDINGS

Individual Paper (30 minutes)

Yasar Bodur (1), Lorraine Gilpin (1)
(1) Georgia Southern University (Statesboro, United States)

The purpose of this study was to examine the impact of using case studies in a multicultural education course on students' multicultural attitudes and efficacy. Multicultural education aims to eliminate, or minimize, the inequities caused by cultural differences between majority and minority groups in the US. On a larger scale, its goal is to promote social justice in society. We have taught multicultural education courses for many years. One of the challenges we have faced over the years has been to overcome my students' preconceived ideas and dispositions toward people of different cultural backgrounds. Content taught in multicultural education courses include knowledge, skills, and dispositions. However, as it is also shown in the literature, developing preservice teachers' competencies has been a challenge for teacher educators. One of the reasons for this challenge is the disconnect between what is taught in teacher education programs and the realities of school classrooms. Case studies have been used in education as well as in other fields to bridge the gap between theory and practice. It is not always possible to provide a field experience in multicultural education courses. The main goal in integrating case studies into our Cultural Issues course is to address this problem by bringing classroom complexity to our students in written form, namely case studies. This study falls under the SoTL framework in its purest form. The study and the related activities were designed to promote my students' multicultural competencies. What we learned through the project did, and will, improve our teaching of the course.

Data were collected from 45 participants who were enrolled in our fully online Cultural Issues course using the Multicultural Efficacy Scale (Guyman & Wesche, 2005) which measured the multicultural attitudes, multicultural efficacy, and prior experiences with diversity. The instrument was created using Qualtrics and the participants took the instrument online. The first implementation of the survey (pretest) was during the first week of class which is designated for course orientation types of activities. The second implementation of the survey was completed during last week of classes. Participants were divided into treatment and control groups (Treatment n= 31, control n= 14). The treatment group analyzed and responded to 14 cases related to culture, religion, ethnicity, gender, language and sexuality, while the control group did not respond to any case studies.

We analyzed our data using ANCOVA for attitude and efficacy subscales. The questions that measured the understandings were open-ended questions; they were analyzed qualitatively for common patterns and themes. Our findings indicated that the treatment group scored significantly higher on the attitude scale than the control group, while there was no significant difference in the efficacy scale. Preliminary analysis of our qualitative analysis indicated that the participants in the pretest were more concerned about awareness of cultures and differences. We have not analyzed the post-test qualitative data for group comparison purposes yet.

Our findings are encouraging, especially because the treatment group had more positive attitudes at the end of the course than the control group.

9:30 AM | Room 206A | Inquiry into teaching practices

G09.3 INQUIRY INTO THE DEVELOPMENT OF A FLIPPED CLASSROOM PROJECT FOR TRAINING FUTURE TEACHERS

Individual Paper (30 minutes)

Florian Meyer (1), Isabelle Nizet (1)
(1) Université de Sherbrooke (Sherbrooke, Canada)

At the University of Sherbrooke, the training of future secondary school teachers involves a course in learning evaluation that has both theoretical and practical dimensions. In a professional program of this nature, the practical dimension is essentially achieved through a long-term process of internships; this further supports the idea that pedagogical courses in the classroom are, in comparison, mostly "theoretical." Although the course delivers crucial procedural knowledge to future teachers before their third internship, up to this point it focuses essentially on theory and on a few key practical exercises (to improve the students' ability to design and use rubrics). This is a traditional pedagogical model that also has its downsides. As research around professional development shows that future teachers need spaces where they can experiment with the development of complex know-how, we believe that changing this more traditional approach is crucial to improving the development of evaluation competencies. Based on these observations, we came up with the idea of a flipped classroom project. In order to treat a project of this nature as a technological and pedagogical innovation in the context of an initial teacher training program in assessment, we based our pedagogical strategy on the SoTL (Scholarship of Teaching and Learning) approach (Kreber, 2002). Work on the project was done using the TPaCK Model (Mishra & Koehler, 2006), which helped us share our respective expertise, and to the MISA instructional design model (Paquette, 2004), which enabled us to develop pedagogical resources and strategies adapted to the learning needs of students. The literature about flipped classrooms mostly presents the pedagogical issues which this approach seeks to address; it also describes problems that can arise in the context of flipped classrooms (Baranovic, 2013; Bishop & Verleger, 2013; Herreid & Schiller, 2013). These problems are primarily technological and are discussed both from the point of view of students (Enfield, 2013; Pavlovsk, 2013), and from that of the trainers who create multimedia ressources (Herreid & Schieller, 2013; Thiele, 2013). However, the issue of the training needs of trainers and instructional designers in terms of instructional design is never mentioned. To reinvest the research results in our teaching and enhance scientific understanding of this specific kind of pedagogical situation, we analyzed the ways students use technological resources and identified some contributions of the flipped classroom in the context of a large teacher training group; we also documented the learning processes of students in situations of self learning and analyzed how knowledge transfer occurs in the classroom. As a result, this entire project became the starting point for a valuable joint professional development process which we want to share and discuss during our presentation. We would also like to provoke reflection among participants on the exceptional benefits of the high value relationships that can be created between teacher training, instructional design, and research, when technological and pedagogical innovations are based on a SoTL model.

8:30 AM | Room 206B | Emerging technologies and SoTL

G10.1 REFLECTIVE PRACTICE AND STUDENT-CENTERED LEARNING IN AN HONORS SEMINAR AND STUDY ABROAD COURSE: EMERGING TECHNOLOGIES AND 'BLOG AS JOURNAL' PROJECTS

Individual Paper (30 minutes)

Judith Coe (1)
(1) University of Colorado Denver (Denver, United States)

Students enrolled in a CU Denver Honors Seminar: Irish Music, Peace, Politics and Popular Culture (during spring semesters

of 2012, 2013, and 2014) and a Global Study Abroad Maymester Program in Ireland (2014) helped design and participated in two student-centered learning components – a 'Blog as Journal' project (formative learning) and a cloud-based media discussion portfolio (summative learning). The University Honors and Leadership (UHL) Program, a university-wide undergraduate honors program offering both a traditional academic honors curriculum and an honors program in leadership studies, provides a stimulating intellectual environment that nurtures excellence, promotes an interdisciplinary curriculum, rewards intellectual curiosity and creativity, challenges students to expand perspectives, promotes life-long learning and supports opportunities to engage in research projects side-by-side with faculty.

A key aspect of both seminar and Maymester components is to provide a structure for students to develop a technology-based 'flipped' practice (Straumsheim, 2013) in individual and group cyber-research (at the beginning, at all points throughout, and at the end of each unit), reflect on their formative and summative learning and that of their peers (Taylor, 2001; Miller, 2012) – over the course of the semester – to develop aptitudes, skills, habits, and new ideas that come from critical reflection and integration (Zubrietta, 2004), to capture and share crucial learning outcomes and new ideas (Light, Chen and Ittelson, 2011), to recognize the impact of their experience in acquiring and developing new knowledge, skills and attitudes (Folkwein, 2010), and to contextualize the relationship to their academic, personal and professional development (Brookfield, 2014).

My inquiry for this project focuses on trying out a new pedagogical idea (building upon previous teaching with technology and SoTL work using digital portfolios) by engaging Honors Seminar students as co-inquirers in examining how student-centered research and reflective practice deepens and enhances learning – through a "Blog as Journal" approach to formative learning and using a cloud-based media discussion portfolio for summative learning. These two integrated approaches have helped to make students' thinking truly visible (to themselves and to their peers) during the learning process and transformed student notions and beliefs about the learning process as well as individual and collaborative learning roles and intentions, and facilitated an awakening of (or in some cases a first engagement with) authentic creativity, a student-driven research protocol and outcomes. This paper will discuss all aspects of this three-year process and highlight key features (as identified by the students themselves) of the transformative power of this model of teaching and learning.

9:00 AM | **Room 206B** | **New and diverse contexts for SoTL**

G10.2 PREPARING FORMER K-12 TEACHERS AS CONTINGENT WRITING FACULTY: THE BENEFITS OF SOTL FACULTY DEVELOPMENT

Individual Paper (30 minutes)

Christine Tulley (1), Christine Denecker (1)
(1) The University of Findlay (Findlay, United States)

Contingent composition faculty who hail from backgrounds as high school English teachers pose unique challenges for writing programs. As former K-12 teachers, most are used to teaching writing in a setting where writing must meet internal and external mandates for products (Smagorinsky, Wilson, and Moore, 2011), often with an emphasis on grammatical correctness. Therefore, many must relearn to teach writing in a college composition setting where process is emphasized. In addition, many have not been taught to conduct research within classroom settings. In K-12 settings, moreover, writing is often secondary to the teaching of literature and associated topics such as civic responsibility and therefore experience with teaching writing, and related study of writing for SoTL purposes is typically fragmented in nature. While most contingent faculty have graduate training in writing (or a related field) at the master's level as a condition of employment, such training often does not fully prepare these former secondary instructors for the differences between teaching high school and college-level writing or the notion that the scholarship of teaching and learning is inherent in writing instruction as praxis and theory are inseparable elements of composition as a field.

This presentation describes one comprehensive university's faculty development program put into place to specifically meet

the needs of former high school English teachers who become contingent faculty in composition. An emphasis was placed on teaching college writing methods and professionalization into the field of rhetoric and composition, including an introduction to SoTL-based writing research. Findings indicate that such training programs indicate that former high school teachers are often some of the most engaged and connected members of our profession, as they have a unique understanding of the transition between secondary and college writing first-year students face, and research-based classroom practice is key to this engagement.

8:30 AM | Room 308B | Inquiry into teaching practices

G13.1 CAPABLE OF HONORS WITHOUT KNOWING IT: RISING TO EXPECTATIONS

Individual Paper (30 minutes)

Lauren Scharff (1), John Hertel (1)
(1) U. S. Air Force Academy (USAFA, United States)

Should honors courses be reserved for high aptitude students? Previous studies have indicated that honors students are more likely than non-honors students to graduate on time and perform better academically (e.g. Cosgrove, 2004) and to report more best practices in their courses (Seifert, Pascarella, Colangelo, & Assouline, 2007). However, these studies only compared students already enrolled in either honors or non-honors programs. We additionally assessed the impact of using an honors course approach on the attitudes and behaviors of non-honors students who believed they were enrolled in a regular (non-honors) core course. The methods used in the honors-style courses studied in this project were well accepted best practices (e.g. use of primary literature, primarily discussion-based instruction, more writing and essay exams than multiple-choice assessments). Our ongoing, three-year study examined self-reported behaviors and attitudes (questionnaires and focus groups) and actual performance on matched course assignments and overall course performance, for courses in behavioral sciences (freshman-level), law (sophomore-level), political science (sophomore-level), and philosophy (junior-level).

Early findings suggested that 1) new honors students (second-semester freshmen) started out similar to non-honors students in regular core courses, but, by the end of the semester, reported higher levels of class participation and increased importance attached to deep understanding of the material, and 2) both honors and non-honors students (freshmen – juniors) reported adjusting their behaviors based on what they perceived was needed to "succeed" in a course (rising to expectations as well as doing less if that was all that was needed).

However, when honors and non-honors students were enrolled in separate courses that had identical, honors-level expectations with the same instructor (but were distinguished by whether or not the courses were labelled as honors), some of these differences decreased over the course of the semester. For example, honors students consistently reported starting major assignments earlier and reading more deeply prior to class. Non-honors students became more likely to do the same as the semester progressed. Although the honors students' grades were on average higher, there were no significant differences in grades for non-honors students enrolled in regular or the honors-approach sections. Although some non-honors students reported stress as they adjusted to the higher expectations of the honors-style courses, by the end of the semesters, all students in the honors-style sections reported appreciation for their instructors and for the focus on "learning how to think."

The above pattern of findings suggests that the way courses are taught is more important with respect to fostering habits associated with deeper learning than are student characteristics. Instructors typically have many excuses for not using many of the best-practice approaches in non-honors courses, often due to class size, but in some cases due to pre-conceived attitudes about students (e.g. non-honors students wouldn't be able to "handle" the higher expectations we have for honors students). Discussion in this session will center around ways to acknowledge our potential biases about different groups of students and how to redesign even our larger, non-honors courses to best promote learning by all students.

9:00 AM | Room 308B | Inquiry into teaching practices

G13.2 FIRST ENCOUNTERS OF THE EPORTFOLIO KIND: INTRODUCING EPORTFOLIOS AT A TWO-YEAR COLLEGE

Individual Paper (30 minutes)

Brenda Refaei (1)
(1) University of Cincinnati Blue Ash College (Cincinnati, United States)

Over the past decade, eportfolio use has increased, but students have different experiences with them. Our data echoes the results shown in Tosh et al. (2005). Students perceived the eportfolios as an extra chore, and they had little patience with instructors who were not proficient in the chosen platform. As noted in Tzeng (2011), students new to eportfolios need to be convinced that the extra effort is useful, but they may find the technology to be a barrier to their success as Tosh et al. also noted. Our students are skeptical concerning having to learn a new technology without clear indications of the practical advantages. Bolinger and Shepard (2010) indicated their students demonstrated positive attitudes concerning the learning potential of eportfolios, but this was an experienced group of graduate students. Their focus and metacognitive awareness of their own learning would be greater than that of first year students with less practice in metacognitive awareness. Interestingly, Lopez-Fernandea and Rodriquez-Illera (2009) studied students from "traditional Spanish universities" and found that these students did appreciate the personal development possibilities of eportfolios but also remained skeptical of their practical use.

Our own data with student surveys and student ePortfolios suggest that students at an open-access college do not match the perceptions of students in graduate programs or traditional four-year universities. They are more similar to the group profiled by Tosh et al. (2005) in that they need to be convinced that eportfolios are worth the effort, they view them as pragmatic tools to pass the class, and they need extensive scaffolding to understand they have control of the reflective process and the creation of their eportfolios. Hallam et al. (2008) report that, in a multi-university study of eportfolios, implementation frequently rested at the unit level rather than at higher levels, which is certainly true in our institution.

The implications for pedagogy include intensive scaffolding of the learning process from creating the eportfolio to populating the eportfolio to reflecting on the eportfolio. Even when such intensive scaffolding is done, when it is taken away, students may struggle with producing the eportfolio.

References:

Bolliger, D. & Shepherd, C. (2010). Student perceptions of ePortfolio integration in online courses. Distance Education 31(3): 295-314. DOI: 10.1080/01587919.2010.513955

Hallam, G. C., Harper, W. E., McCowan, C. R., Hauville, K. L., McAllister, L. M., & Creagh, T. A. (2008) ePortfolio use by university students in Australia: Informing excellence in policy and practice. Australian ePortfolio Project, Stage 1. Queensland University of Technology, Department of Teaching and Learning Support Services, Brisbane , Qld. Retrieved from http://eprints.qut.edu.au/31912/

Tosh, D., Light, T.P., Fleming, K. & Haywood, J. (2005). Engagement with Electronic Portfolios: Challenges from the Student Perspective. Canadian Journal of Learning Technology 31(3): n.p. Retrieved from http://www.cjlt.ca/index.php/cjlt/article/viewArticle/97

Tzeng, J. (2011). Perceived values and prospective users' acceptance of prospective technology: The case of a career eportfolio system. Computers & Education 56 (1): 157–165.

Lopez-Fernandez, O. & Rodriguez-Illera, J. (2009). Investigating university students' adaptation to a digital learner course portfolio. Computers & Education 52 (3): 608–616.

8:30 AM | Room 309A | SoTL and institutional cultures

G14.1 QUALITY ASSURANCE AND STRATEGIC EDUCATIONAL DEVELOPMENT: POTENTIALS AND PITFALLS

Individual Paper (30 minutes)

Guðrún Geirsdóttir (1)
(1) Associate professor and director of the Centre for Teaching (Reykjavík, Iceland)

The Center forTeaching was founded at the University of Iceland in 2001. From its establishment, its main goal has been to enhance the development of teaching and learning at the university. It is a small center, centrally located and providing pedagogical as well as educational technology services to the teachers within the different schools and departments of the University.

Like similar establishments worldwide, the Center finds itself caught in a turmoil of different institutional as well as departmental discourses and practices of teaching that need to be acknowledged in educational development. One of the Center's activities is its involvement in a new university quality enhancement framework established by a national Quality Board in 2011, introducing a framework focused on the learning experiences of students and enhancement of quality.

The Center's staff have played an active role in the quality process, gathering information from student focus groups, working with different departments on creating self-evaluation reports and as members on the quality board of the University. To account for the student experience, various methods such as annual on-line surveys of students' conceptions of the quality of teaching, faculty self-review reports and student interviews and focus groups carried out by the Center, have been applied at the institutional as well as departmental level.

While the quality process has provided ample information on students' experience of teaching and learning within the University, it has also raised problematic questions about the Center's role within the institutional quality framework and processes, and its capacity to strategically use those processes to enhance educational practices. As in many other centers with complex roles, the Center's staff needs to 'work on multiple levels with multiple approaches' (Blackwell and Blackmore, 2003:15) but often find themselves 'in a squeeze' between policy and practice (Palmer, Holt and Challis, 2011), debating the " morality of stance and loyalty" (Gosling, 2007).

In this paper, the focus is on the Center's strategic attempts to make use of institutional quality processes to enhance educational practices within the University. The Center's strategies will be scrutinized in light of ongoing efforts to transform its practices towards a more sustainable strategic approach through: 1) increased organizational focus (i.e. how can we be more strategic in regards to resources, influences and implementation, see for example Blackmore and Blackwell, 2006; Palmer, Holt and Challis, 2011); 2) cultural/disciplinary awareness (i.e. how can we appeal to cultures of the academics in local units of the institution, see for example Havnes and Stensaker, 2006); 3) contextual and constructivist focus on learning and thus educational development (i.e. how can learning be supported in the broader context of academics, see for example Asmundsen and Wilson, 2012; Mårtenson, Roxå and Stensaker, 2012l) and 4) scholarly and reflective practice (i.e. how is reflective and critical inquiry stressed in our practices).

9:00 AM | Room 309A | SoTL and institutional cultures

G14.2 PROFESSIONAL TURNS: THE JURIDICAL FIELD, AUSTRALIAN PRACTICAL LEGAL TRAINING PRACTITIONERS, AND SCHOLARSHIP OF TEACHING AND LEARNING

Individual Paper (30 minutes)

Kristoffer Greaves (1)
(1) Deakin University (Belmont, Australia)

There is a paucity of scholarship of teaching and learning in Australian practical legal training.

I study practical legal training practitioners' ("PLT practitioners") engagement with scholarship of teaching and learning.* I investigate this engagement through individual and extra-individual domains, exploring how structures are inscribed into practices, and questioning whether practices can affect structures in and around PLT.

This qualitative research draws on documentary sources and semi-structured interviews with thirty-six PLT practitioners from university-based and non-university-based PLT providers. Data analysis was informed by Bourdieu's "reflexive sociology" and de Certeau's "heterological science".

In this paper, I will discuss intersections between PLT practitioners' engagement with scholarship of teaching and learning, and their career trajectories as lawyers and teachers, against the background of legal education's history and structures. This interdisciplinary research provides internationally relevant insights about practice research, and scholarship of teaching and learning in the professions, particularly legal education.

*Practical legal training ("PLT") is post-graduate pre-admission competency-based training. Satisfactory completion is an eligibility requirement for admission to the Australian legal profession. PLT is usually taught by lawyers.

9:30 AM | Room 309A | SoTL and institutional cultures

G14.3 UNDERSTANDING THE POSITIONING OF TEACHING AND LEARNING THROUGH THE EYES OF CANADIAN RESEARCH UNIVERSITY PRESIDENTS

Individual Paper (30 minutes)

Brad Wuetherick (1)
(1) Dalhousie University (Halifax, Canada)

Over the past decade there has been a significant turn over in presidents at the major research universities in Canada. Whatever the institutional environment, the arrival of new presidents can be times of uncertainty and excitement. Over this same decade, I have worked at three different institutions that welcomed a new President. In all three cases, the President's inaugural address served as a significant indicator of how teaching and learning was to be subsequently positioned as institutional strategic directions and academic plans moved forward. This is what led me to explore the question of how teaching and learning is positioned in the inaugural addresses of university presidents at Canadian research universities, particularly given the (perceived) tensions between teaching and research.

Inspired by recent work done in Canada, the US, the UK and elsewhere on SoTL through the lenses of the Arts and Humanities, this paper uses a research methodology from my initial disciplinary background of History, called historical discourse analysis. In addition to analyzing the publicly available transcripts and videos of the inaugural addresses of a number of different research universities, this paper explores numerous secondary documents (strategic directions, academic plans, publicly available metrics about teaching and learning) to give context to the primary source material - the inaugural addresses.

In addition to exploring the results of this historical inquiry about the positioning of teaching and learning at Canadian research universities, the present paper will also explore the use of the historical discourse analysis methodology in the context of the ongoing discussion on the place of SoTL through the lenses of the arts and humanities, as raised by Chick (2010), McKinnery and Chick (2012), and others.

8:30 AM | Room 309B | Assessment, accountability, and SoTL

G15.1 (SELF-)ASSESSING TEACHING COMPETENCIES AND PERFORMANCE

Individual Paper (30 minutes)

Jacques Grégoire (1), Elie Milgrom (1), Benoit Raucent (1), Vincent Wertz (1), Pascale Wouters (1)
(1) UCLouvain (Louvain-la-Neuve, Belgium)

In many Higher Education institutions, it is taken for granted that, whereas it is possible to measure the research performance of an academic through various kinds of bibliometric indices, there is very little available to effectively assess teaching competencies and performance. In many cases, the most prevalent (and often sole) source of information about teaching is based on the notoriously unreliable student answers to different questionnaires.

If we are to progress towards a true scholarship of teaching and learning, we need effective tools to assess teaching competencies and performance and, even more importantly, to help academics self-assess their own teaching competencies and performance so as to decide in which areas they need or wish to progress.

At UCLouvain, one occasion where the issue of the relevant and objective analysis of teaching competencies and performance is of foremost importance is whenever an academic is up for promotion. Commissions are constituted to review the portfolios submitted by candidates and to propose decisions to university management. They are explicitly required to take three elements into consideration in their recommendations: research, teaching, and other services.

In the past three years, the commission responsible for academic promotions for the faculties of science, engineering, and agronomy has been using a rubric to assess teaching competencies and performance. This rubric is broken down into five factors related to teaching competencies and distinguishes four levels of performance; it is explicitly based on SOTL principles.

Acceptance of the teaching rubric was not immediate: many objections had to be overcome. Once the rubric was applied, however, commission members discovered that their assessment of teaching competencies and performance became more objective and relatively straightforward. It became also much easier for the commission chair to provide effective feedback to the candidates, clearly indicating in which areas they could and should progress. Since the teaching rubric has been made public, candidates for promotion are now able to use it to assess their own teaching competencies and performance.

The success of the teaching rubric led the commission chair to propose two more tools: a research rubric and a services rubric, which are being used by his commission for the first time this year.

The presentation will focus mostly on a discussion of the teaching rubric, with the aim of eliciting contributions from the audience for its improvement.

9:00 AM | Room 309B | Assessment, accountability, and SoTL

G15.2 WHAT COUNTS AS A GOOD JOB IN TEACHING? BECOMING A TEACHER AS WE RACE TO THE TOP

Individual Paper (30 minutes)

Colleen Gilrane (1), Kristin Rearden (1), Hannah Louderback (1), Jessica Covington (1)
(1) The University of Tennessee, Knoxville (Knoxville, United States)

We are in Year 3 of our naturalistic case study evaluating an undergraduate minor + graduate internship year designed to help prospective US elementary (K-5) teachers develop the habits of mind for teaching for enduring understandings (Wiggins & McTighe, 2005) -- even as their lived experiences as novice teachers conspire to encourage them to "study for the test" of the next day's evaluation rubric. Evidence of different types (narrative as well as quantitative), from different tools (edTPA, TEAM-TN), from different evaluators (connected to UT, connected to LEA's, and Pearson) and used for candidates at different stages of their careers (pre-internship, internship, inservice) converges to demonstrate that by focusing on teaching for deep understanding, rather than for a specific rubric or evaluation scheme, we are not doing our candidates a disservice even when those schemes and rubrics are high-stakes phenomena in their professional lives. We are preparing teachers for 20 or 25 or 30 year careers, not simply for success on this year's rubric.

We have focused our efforts on helping our candidates learn to document the important things they are doing in their planning and teaching for deep understanding, and then to articulate those things according to the terminology of the particular scheme or rubric by which they are being assessed. We cannot overstate the importance of an inquiry-based, workshop approach in our work with teachers toward these goals. While we come from different disciplinary backgrounds, we share a passion for inquiry-based teaching. There is much content we must bring to our candidates, and we are committed to providing opportunities for their engaged participation (Hickey & Zuiker, 2005; Jurow et al., 2012) in applying this content with support, and to that purpose we aside time in class to allow us to respond to them as they work.

Whether we label this as a literacy "workshop" or as a science "laboratory," the important things are creating a space in which our candidates engage in genuine inquiry as they solve situated (Lave & Wenger, 1991; Wenger, 1998), real-life problems, and being there to respond as needed. Lorri Shepard (2011) has described the writing workshop "as both assessment tool and prompt for productive interactions ...whereby children develop an understanding of themselves as authors who receive feedback as a natural part of improving" (p. 27). We view our in-class work sessions as spaces for our candidates to develop an understanding of themselves as professionals who receive feedback as a natural part of improving--and not only as part of unnatural, high-stress and high-stakes formal assessments. Just as writing teachers focus first on students' meaning, and then on how to use the mechanics of language to communicate that meaning, we work with our candidates first to focus on good teaching, and then to translate that for the various audiences to whom they are accountable. Accounts from two students are part of this work which will be available in book form in early 2015.

9:30 AM | Room 309B | Theories and practices of SoTL

G15.3 WAYS OF UNDERSTANDING DEEP AND SURFACE APPROACHES TO LEARNING - WHY IS IT SO HARD?

Individual Paper (30 minutes)

Anders Ahlberg (1)
(1) Lund University (Lund, Sweden)

For the past decade approximately a thousand academics (including doctoral students) have taken teacher training courses at the faculties of Science and Engineering at Lund University, Sweden. As in many such training programmes the concepts of deep and surface approaches to learning are central (Marton & Säljö, 1976, followed by interpretations by Biggs 1985 and Ramsden, 1992). The concepts are introduced by the course leaders, integrated into participant activities, and followed up by brief classroom assessment questionnaires which are compiled by the course leaders and subsequently reported back to course participants. The paper proposed here is based on compilations of these surveys.

Regardless of whether university teacher training courses are taught in English or Swedish, the participating academics show the same range of understandings of these central concepts. The three most commonly expressed ways of understanding them can be broken down as follows:

- Some participants indeed see these approaches as being fairly deliberate personal strategies used by students to deal with segments of curriculum, which they may not consider particularly meaningful.
- Others however instead believe that deep/surface approaches to learning reflect in-depth vs superficially taught curriculum (which could alternatively be described in terms of SOLO- or Bloom's taxonomy categories).
- Yet another understanding of these central concepts of educational theory is that a shallow approach to learning is bound to happen if students are exposed to rote learning in their education.

These are to some extent correct, and can be justifiably related to each other. But the bottom line question that the audience of this proposed session will be invited to answer is: why are these central concepts of university pedagogy so differently understood by university teachers? Why are they so hard to understand?

References

Biggs, J., (1985) The role of metalearning in study processes' (British Journal of Educational Psychology, 55, 185-212, 1985).

Marton, F. and Säljö (1976) On Qualitative Differences in Learning — : Outcome as a function of the learner's conception of the task" Brit. J. Educ. Psych. 46, 115-27

Ramsden, P. (1992). Learning to Teach in Higher Education, Routledge.

AUTHOR LIST

AUTHOR LIST

Abbi Flint
Derek France
Susan Frank
Tawanna Franklin
Rachelle Franz
Steve Freeman
Adriana Freitas
Nancy Freymond
Jennifer Friberg
Stanley Frielick
Ruth Furlonger
Jamie Gabrini
Kathy Gallucci
Bridgett Galvin
Qi GAO
William Garr
Bernie Garrett
Tyler Gaston
Guðrún Geirsdóttir
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Colleen Gilrane
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Geneviève Maheux-Pelletier
Karen Manarin
Beth Marquis

AUTHOR LIST

Leslie Marshall
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Bev Mathison
Nancy Matthew-Maich
Alice Mauchline
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Kelly Schrum

AUTHOR LIST

Madeleine Schultz
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Charles Schwab
Rahul Sharma
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Bhavin Shukla
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Garth Tarr
Roy Tasker
Charlotte Taylor
Paul Taylor
Rebecca Taylor
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Natalia Tejedor
Nathan Terry
Sylvie Tessier
Kathryn Tetley
Julie Thériault
Shevell Thibou
Alison Thomas
Joe Thomas
Christopher Thompson
Philippe Thompson-Leduc
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Key Dates

Call for Abstracts Opens
27 October 2014

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27 October 2014

Abstract Submission Closes
24 April 2015

Notification of Acceptance
5 June 2015

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27 July 2015

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3. Diversity in the academy: teachers, students, practice, context
4. Engagement – leading inside and outside the academy
5. From local scholarship to wider practice
6. Leading SoTL in the Disciplines
7. Leading Communities of Practice – everyone's role
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