


# issotl

INTERNATIONAL SOCIETY  
FOR THE SCHOLARSHIP  
OF TEACHING & LEARNING

The 12th annual conference of the International  
Society for the Scholarship of Teaching and Learning

27-30 October 2015 in Melbourne, Australia



Program and  
Book of Abstracts



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## ISSOTL 2015 Secretariat

ICMS Australasia

GPO Box 5005

Melbourne VIC 3205

Ph: +61 (0) 3 9682 0500

Fax: +61 (0) 3 9682 0344

[info@issotl2015.com.au](mailto:info@issotl2015.com.au)





# Welcome

## Welcome from the President and the ISSOTL Board

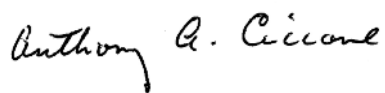
On behalf of the ISSOTL Board, a warm welcome to all of our delegates from around the world to the 12th annual conference of the International Society for the Scholarship of Teaching and Learning. We are very grateful to the RMIT/Monash University team for their efforts in putting together a rich program, diverse in content and format, that promises to engage all of us in interdisciplinary, cross-cultural and international dialogues on the scholarship of teaching and learning.

The theme of this year's conference, Leading Learning and the Scholarship of Change, invites all of us to examine critically the concept of leadership in higher education. In typical SoTL fashion, we do this first by asking the "what is" question: what does leadership look like? What new forms has it begun to take in the current challenging environment for higher education? How are we bringing these new forms to bear on important teaching and learning issues? Secondly, we ask the "what works" question: What have we learned about leadership that makes a serious impact on teaching and learning? And finally, we reflect on what we have learned, imagine new possibilities and, in so doing, produce a scholarship of leading that provides a framework for individual, disciplinary, and institutional change. Each of us has a role to play in this process and we look forward to sharing the diverse perspectives all of us bring to this conversation.

With your help, the Society continues to improve services to our members. Each region is now represented by two VPs and this change has fostered stronger international collaboration and regional activities. We encourage you to seek out your regional representative (Canada and Europe have scheduled meetings) and join these efforts. Visit [www.issotl.com](http://www.issotl.com) to experience new opportunities to communicate and collaborate, and to learn about exciting changes to our journal, Teaching and Learning Inquiry. Attend the Society's business meeting on Thursday and consider joining one of our special interest groups. Find a student and engage him or her in a conversation about student learning. If you have recently joined ISSOTL, plan on attending the "new to ISSOTL" session immediately preceding the opening session on Tuesday. And finally, do approach any of us on the Board to learn more about how you can become actively involved in shaping the Society.

ISSOTL is very pleased to return to Australia and to experience the intellectual and cultural vibrancy of Melbourne for the first time. We look forward to seeing you next year in Los Angeles, California.

All the best,



**Tony Ciccone**  
ISSOTL President



# Welcome

## Welcome from the Vice-Chancellor and President, RMIT University

**O**n behalf of RMIT University, I'm delighted to welcome you to our City campus and to Melbourne, for the 12th annual conference of the International Society for the Scholarship of Teaching and Learning.

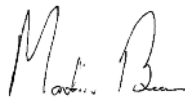
RMIT is pleased to promote the scholarship of learning and teaching by co-hosting this year's conference with Monash University. As a university we pride ourselves on helping students and staff succeed. We are committed to help them apply their passion and agility to respond to our rapidly changing environment – to shape the world in which we all live and work. The scholarship of learning and teaching facilitates an evidenced-based approach to our educational practices, and promotes enhancements in student learning and staff teaching.

The theme for this year's conference – “Leading Learning and the Scholarship of Change” – provides an opportunity to work on the issues of redesigning our programs, so they are even more aligned with industry and community needs; to rethink how we deliver our programs to an increasingly diverse student body; and to rethink what it means to study and gain formal qualifications that will have meaning in a complex and global community.

This week you will discuss, debate and synthesise findings from your colleagues from across the globe – a terrific opportunity for everyone attending the Conference. The voice of our students will be a crucial feature of all the sessions, because it is absolutely vital to the future success of universities that students are active partners in curriculum design and delivery.

I wish you all the best for a successful conference and I look forward to the outcomes.

Yours sincerely



**Martin Bean CBE**  
**Vice-Chancellor and President**  
**RMIT University**



## Welcome from the President and Vice-Chancellor, Monash University

**O**n behalf of Monash University, it is a great pleasure to welcome you to Melbourne for the 12th annual conference of the International Society for the Scholarship of Teaching and Learning.

Monash is delighted to have the opportunity to co-host this conference with RMIT University. Since it was established, Monash has supported a culture of excellence in education. Recently, we have made a further commitment to providing students with an outstanding learning experience that is student-centred in its approach, is characterised by integrating student discovery, creativity and opportunity and underpinned by quality.

The ability to engage with others across the globe to explore different approaches to teaching and learning across disciplines, environments and student profiles offers valuable opportunities to enhance student learning.

Post-secondary education is constantly changing and we must be ready to challenge the experience we provide to students to ensure they are prepared for the global community that awaits them.

It is through more effective analysis of teaching structures to assist better learning among students that the path to excellence will be created. With the pressures of a competitive and globalising world it is important to benchmark our standards with an international panel of universities to assist in assessing international quality outcomes.

This year's theme "Leading Learning and the Scholarship of Change" will explore how universities can lead quality learning and teaching practice as we move inevitably towards more changes in higher education. I encourage you to engage, discuss and challenge the concept of leadership in teaching and learning with your colleagues throughout the conference and beyond.

Best wishes for a successful conference.



**Professor Margaret Gardner AO**  
**President and Vice-Chancellor**  
**Monash University**



# Welcome

## Welcome from the Conference Co-Chairs

We are very pleased to welcome you to Melbourne, Australia for the twelfth annual conference of the International Society for the Scholarship of Teaching and Learning (ISSOTL). RMIT and Monash Universities, as co-hosts, have worked with the ISSOTL Board to plan a broad program of interesting, challenging and thought provoking sessions to facilitate scholarly exchanges about how we approach the task of enhancing learning and teaching in a rapidly changing educational context. This year, over 550 participants from 20 countries come together in the cosmopolitan city of Melbourne to discuss, debate and deliberate on the theme Leading Learning and the Scholarship of Change. Whether the format is a keynote, workshop, roundtable, panel discussion, symposium, or short presentation you will be invited to reflect on how each of us can provide leadership for learning and teaching.

Our keynote speakers come from many locations and bring their insights into the various sub-themes including the diverse nature of leadership in the academy, future pedagogies for future students, leading engagement both inside and outside the academy, how local scholarship leads to changing practice and what does leading scholarship in learning and teaching look like in the twenty-first century.

We have been particularly pleased with the generosity of our keynote and invited speakers this year to be able to provide such a diverse range of offerings, including Associate Professor Chng Huang Hoon from the National University of Singapore, Professor Rosemary Deem from the University of London, Professor Margaret Gardner AO from Monash University, Professor Gregor Kennedy from University of Melbourne, Professor Vijay Kumar from the Massachusetts Institute of Technology, Dr Katarina Mårtensson from Lund University, Professor Geoff Scott from the University of Western Sydney and Associate Professor Manjula Devi Sharma from the University of Sydney. Each speaker is a leader in their own right and has significantly contributed to the scholarship of learning and teaching.

This conference has been made possible through the support and hard work of many people, institutions and sponsors. We would like to thank Monash University and RMIT University for their generous contribution of staff and facilities, Joanne Rae our conference coordinator, the ISSOTL Board and Associate Professor Michelle Scoufis as their representative on the conference Executive, members of the Program Committee chaired by Professor Denise Chalmers, our conference management team from ICMS Australasia, our student volunteers from RMIT University and our generous sponsors the University of Technology Sydney, the City of Melbourne, the Council of Australian Directors of Academic Development, the University of Queensland, and special thanks to the Australian Government's Office for Learning and Teaching for supporting dissemination activities.

Enjoy your time in the city of Melbourne and the opportunity to engage with new and familiar colleagues. Take home new ideas that you can implement in your own institution and reflect on how you will be a leader for the scholarship of learning and teaching.



**A/Professor Angela Carbone**  
**Director, Education Excellence**  
**Monash University**  
**Conference co-chair**



**Professor Geoff Crisp**  
**Dean Learning and Teaching**  
**RMIT University**  
**Conference co-chair**



# 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. Through building intellectual and collaborative infrastructure, the Society supports the associational life that fosters scholarly work about teaching and learning.

The Society provides this support by:

- Recognising and encouraging scholarly work on teaching and learning in each discipline, within scholarly societies, and across educational levels
- Promoting cross-disciplinary conversations to create synergy and prompt new lines of inquiry
- Facilitating the collaboration of scholars in different countries and the flow of new findings and applications across national boundaries
- Encouraging the integration of discovery, learning and public engagement, and
- Advocating 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](http://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
- Access to members-only sections of the ISSOTL website
- Opportunity for interaction and collaboration with an international scholarly community
- Opportunity to shape an exciting international organisation
- Advance notices of ISSOTL activities and conferences

## Get Involved

- Join the Society's online discussions on its website ([www.issotl.com](http://www.issotl.com)) and Facebook page
- 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  
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Randy Bass, Georgetown University  
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# About ISSOTL

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Gary Poole, University of British Columbia  
Michael Prosser, University of Sydney  
Paul Ramsden, University of Sydney  
James Rhem, National Teaching & Learning Forum  
Eugene Rice, American Association for Higher Education  
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Jennifer Robinson, Indiana University  
Anthony Rosie, Sheffield Hallam University  
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Whitney Schlegel, Indiana University  
Anita Salem, Rockhurst University  
Ian Scott, University of Cape Town  
Diane Sieber, University of Colorado  
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

October 27-30, 2015: "Leading Learning and the Scholarship of Change" in Melbourne, Australia



## ISSOTL Board of Directors

Anthony Ciccone, President  
*Former Director, Center for Instructional and Professional Development*  
*Professor Emeritus of French*  
*University of Wisconsin-Milwaukee*  
ciccone@uwm.edu

Peter Felten, President-Elect  
*Assistant Provost*  
*Executive Director, Center for the Advancement of Teaching Learning & Center for Engaged Learning*  
*Professor of History*  
*Elon University*  
pfelten@elon.edu

Kathy Takayama, Past President  
*Associate Provost and Executive Director, Teaching and Learning*  
*Columbia University*  
k.takayama@columbia.edu

Sean Brawley, Australasian Countries Regional Vice President  
*Professor of Modern History and Head of Department of Modern History, Politics and International Relations*  
*Macquarie University*  
sean.brawley@mq.edu.au

Sarah Bunnell, United States Regional Vice President  
*Assistant Professor of Psychology*  
*Teagle Pedagogy Fellow*  
*Ohio Wesleyan University*  
slbunnell@owu.edu

Bettie Higgs, European Regional Vice President  
*Co-Director, Ionad Bairre, the Teaching & Learning Centre*  
*University College Cork, Ireland*  
b.higgs@ucc.ie

Sherry Linkon, United States Regional Vice-President  
*Professor of English and Faculty Director of Writing Curriculum Initiatives*  
*Georgetown University*  
sl15@georgetown.edu

Karen Manarin, Canada Regional Vice President  
*Associate Professor, English & General Education*  
*Mt. Royal University in Canada*  
kmanarin@mtroyal.ca

Katarina Mårtensson, European Regional Vice-President  
*Academic Developer*  
*Lund University, Sweden*  
katarina.martensson@ced.lu.se

Michele Scoufis, Australasian Countries Regional Vice President  
*Associate Dean, Director of Learning and Teaching, Business School*  
*The University of Sydney*  
michele.scoufis@sydney.edu.au

Brad Wuetherick, Canada Regional Vice President  
*Executive Director, Center for Learning & Teaching*  
*Dalhousie University*  
Brad.Wuetherick@dal.ca

Mary Ann Danielson, Secretary  
*Associate VP for Academic Excellence and Assessment*  
*Professor of Communication Studies*  
*Creighton University*  
maddam@creighton.edu

Beth Marquis, Treasurer  
*Assistant Professor, Arts & Science Program & McMaster Institute for Innovation & Excellence in Teaching & Learning*  
*McMaster University*  
beth.marquis@mcmaster.ca

Aaron Long, Student Representative  
*Ph.D student in English*  
*University of Kansas*  
A.Long@ku.edu

Roselynn Verwood, Student Representative  
*Ph.D. student in Educational Studies*  
*University of British Columbia*  
rverwoor@uvic.ca

# 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.

## Convenings Committee

Sarah Bunnell

*Ohio Wesleyan University, USA slbunne@owu.edu*

Chng Huang Hoon

*National University of Singapore, pvochh@nus.edu.sg*

Anthony Ciccone

*University of Wisconsin-Milwaukee, USA*

*ciccone@uwm.edu*

Geoffrey Crisp

*RMIT University, Australia geoffrey.crisp@rmit.edu.au*

Peter Felten (Committee Chair)

*Elon University, USA pfelten@elon.edu*

Dorothea Herreiner

*Loyola Marymount University, USA dherreiner@lmu.edu*

Bettie Higgs

*University College Cork, Ireland b.higgs@ucc.ie*

Beth Marquis

*McMaster Institute for Innovation & Excellence in*

*Teaching & Learning, Canada*

*beth.marquis@mcmaster.ca*

Margy MacMillan

*Mount Royal University, Canada*

*mmacmillan@mtroyal.ca*

Jessie Moore

*Elon University, USA jmoore28@elon.edu*

Roselynn Verwood

*University of British Columbia, Canada*

*rverwoor@uvic.ca*

## Membership Committee

Mary Ann Danielson (Committee Chair)

*Creighton University, USA maddam@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*

Vacancies: USA rep, Europe rep, Canada rep,

Australasia rep

## Communications Committee

Aaron Long

*University of Kansas, USA A.long@ku.edu*

Sang Nam

*Quinnipiac University, USA sang.nam@quinnipiac.edu*

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 maddam@creighton.edu*

Susannah McGowan

*susannah.mcgowan@gmail.com*

Bridgett Piernik-Yoder

*University of Texas Health Science Center at San*

*Antonio, USA piernikyoder@uthscsa.edu*

## Publications Advisory Committee

Sean Brawley

*Macquarie University, Australia*

*Sean.brawley@mq.edu.au*

Margy MacMillan

*Mount Royal University, Canada*

*mmacmillan@mtroyal.ca*

Pat Hutchings

*Committee Chair Carnegie Foundation, USA*

*hutchings@carnegiefoundation.org*

Mick Healy

*Healy Higher Education Consultants, UK*

*mhealy@glos.ac.uk*

Rebecca Nowacek

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



Nancy Chick, ex-officio  
*University of Calgary, Canada nancy.chick@ucalgary.ca*

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

Gary Poole, ex-officio  
*University of British Columbia, Canada  
gary.poole@ubc.ca*

### **Budget and Finances Committee**

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

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*

Joanna Renc-Roe  
*Central European University, Hungary rencroej@ceu.hu*

Margy MacMillan  
*Mt. Royal University, Canada mmacmillan@mtroyal.ca*

Sarah Bunnell,  
*Ohio Wesleyan University, USA slbunnel@owu.edu*

### **Leadership and Elections Committee**

Sherry Linkon  
*Georgetown University, USA Sll5@georgetown.edu*

Kathy Takayama  
*Columbia University, USA k.takayama@columbia.edu*

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

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

### **Advocacy and Outreach Committee**

Arshad Amhad  
*McMaster University, Canada arshad@mcmaster.ca*

Jennifer Meta Robinson  
*Indiana University, USA jenmetar@indiana.edu*

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

Jaci Friberg

Diana Gregory  
*Kennesaw State University, USA c.gregory@kennesaw.edu*

Mary Huber  
*Carnegie Foundation, USA*

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

Katarina Martensson  
*Lund University, Sweden Katrina.martensson@ced.lu.se*

Trent Maurer  
*Georgia Southern University, USA  
tmaurer@georgiasouthern.edu*

Marian McCarthy  
*University College Cork, Ireland mmccarthy@ucc.ie*

Lauren Scharff  
*US Air Force Academy, USA laurenscharff@gmail.com*

Carmen Werder  
*Western Washington University, USA  
carmen.werder@wwu.edu*

### **Teaching & Learning Inquiry (TLI) Editors**

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

Nancy Chick  
*University of Calgary, Canada nancy.chick@ucalgary.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 [tmaurer@georgiasouthern.edu](mailto:tmaurer@georgiasouthern.edu). | Thursday, October 29, 5:45-7:00pm, Meeting Room 16.07.001

## 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@ucalgary.ca](mailto:nancy.chick@ucalgary.ca). 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. | Thursday October 29, 7:00-8:15am, Meeting Room 16.07.001,

## Decoding the Disciplines

Since its inception in the late 1990s the Decoding the Disciplines approach has been used by instructors, faculty developers, and educational researchers in at least nine countries as a means of increasing student learning and as a framework for research in the scholarship of teaching and learning. Beginning with a focus on specific bottlenecks to learning, practitioners of Decoding conduct systematic analysis of the kinds of mental operations that students must master to overcome these obstacles, model and provide practice of these skills, deal with emotional resistance to learning, and assess the results. If you are interested in

learning more about how others are using this paradigm or in networking with other scholars of teaching and learning in this field, please contact David Pace, [dpace@indiana.edu](mailto:dpace@indiana.edu) or Joan Middendorf, [middendo@indiana.edu](mailto:middendo@indiana.edu) | Thursday, October 29, 5:45-7:00pm, Meeting Room 16.07.002

## 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 to John Draeger, [draegejd@buffalostate.edu](mailto:draegejd@buffalostate.edu). | No Meeting

## 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](mailto:atwinedge@hotmail.com). | Wednesday, October 28, 7:00-8:15am, Meeting Room 16.07.001



## **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](mailto:hussj@nku.edu). | No Meeting

## **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) [ellen.lynch@uc.edu](mailto:ellen.lynch@uc.edu) or Susan Polich at [smpolich@carilionclinic.org](mailto: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](mailto:lcornell-swanson@uwsa.edu). | Wednesday, October 28, 5:45-7:00pm, Meeting Room 16.07.003

## **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](mailto:mmessine@bsu.edu), and indicate you are responding to this announcement and whether you are a member of ISSOTL and/or ASA. | No Meeting

## **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](mailto:Carmen.Werder@wwu.edu) and Roselynn Verwoord [rverwoor@uvic.ca](mailto:rverwoor@uvic.ca). | Thursday, October 29, 7:00-8:15am, Meeting Room 16.07.007


## **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](mailto:A.V.Jackson@leeds.ac.uk) or Israel Dunmade, [IDunmade@mtroyal.ca](mailto:IDunmade@mtroyal.ca) | Thursday, October 29, 7:00-8:15am, Meeting Room 16.07.007

# Proposal Reviewers

Earle Abrahamson	University of East London
Arshad Ahmad	McMaster University
Heather Alexander	Griffith University
Julianna Alitto	University of Wisconsin Waukesha
Catherine Anderson	McMaster University
Ajanthy Arulpragasam	Curtin University
Ana Vitoria Baptista	University of Aveiro
Emma Bartle	ITaLI - The University of Queensland
Debra Bateman	RMIT University
Tina Bavaro	Australian Catholic University
Elizabeth Beckmann	Australian National University
Theresa Beery	University of Cincinnati College of Nursing
Dawn Bennett	Curtin University
Ayse Aysin Bombaci Bilgin	Macquarie University
Shampa Biswas	Washington State University
Stephen Bloch-Schulman	Elon University
Klara Bolander-Laksov	Stockholm University
Angela Brew	Macquarie University
Carmela Briguglio	Curtin University
Natalie Brown	University of Tasmania
Barbara Cambridge	National Council of Teachers of English
Denise Chalmers	University of Western Australia
Adam Chapnick	Canadian Forces College
Zarina M. Charlesworth	University of Applied Sciences and Arts Western Switzerland
Andrea Chester	RMIT University
Scott Chiu	California Lutheran University
Anthony Ciccone	University of Wisconsin-Milwaukee
Moira Cordiner	University of Tasmania
Mike Cosgrave	University College Cork
Geoffrey Crisp	RMIT University
Laura Cruz	Western Carolina University
Sally Dampier	Confederation College
Mary Ann Danielson	Creighton University
Marcel D'Eon	University of Saskatchewan
Stephen Dilks	UMKC
Christine Dinkins	Wofford College
John Draeger	SUNY Buffalo State
Rosalind Duhs	University College London
John Egan	University of Auckland Faculty of Medical & Health Sciences
Julia Evanovitch	McMaster University
Peter Felten	Elon University
Rachael Field	Queensland University of Technology
Helen Flavell	Curtin University
Abbi Flint	Higher Education Academy
Mark Fraser	University of Wollongong
Bridgett Galvin	Framingham State University





Karen Gardner	The University of British Columbia
Janice Gidman	Faculty of Health And Social Care
Kathryn Gray-White	Georgia Gwinnett College
Amy Griffin	Australian Defence Force Academy
Balbir Gurm	KPU
Amy Haddad	Creighton University
Marina Harvey	Macquarie University
Christina Hendricks	University of British Columbia
Ann-Sofie Henriksson	KTH Royal Institute of Technology
Bettie Higgs	University College Cork
Jenny Hill	University of West England
Jody Horn	University of Central Oklahoma
Mary Huber	The Carnegie Foundation for the Advancement of Teaching
Patricia Hutchings	The Carnegie Foundation for the Advancement of Teaching
Monica Jacobe	The College of New Jersey
Elizabeth Johnson	Deakin University
Daniel Johnson	University of North Carolina Wilmington
Sandra Jones	RMIT University
Piera Jung	Vancouver Island University
Mo Kader	Consultica Worldwide Management Consultants
Peter Kandlbinder	University of Technology Sydney
Mary Kayler	University of Mary Washington
Megan Kek	University of Southern Queensland
Niamh Kelly	University of British Columbia
Louise Kuchel	The University of Queensland
Romy Lawson	University of Wollongong
Thomas Leahey	Indiana University East
Peter Looker	Nanyang Technological University
Alice Macpherson	Kwantlen Polytechnic University
Kimberly Maich	Brock University
Karen Manarin	Mount Royal University
Deborah Mansell	Mount Royal University
Beth Marquis	McMaster University
Katarina Mårtensson	Lund University
Wendy Matthews	Wayne State University
Trent Maurer	Georgia Southern Univeristy
Chinedu Mba	NorQuest College
Jacquelin McDonald	University of Southern Queensland
Jo McKenzie	IML, UTS
Nancy McKenzie	McMaster University
Patricia McLaughlin	RMIT University
Geoff Meyer	The University of Western Australial
Heather Monkhouse	University of Tasmania
Jessie Moore	Elon University
Carol Morris	The Open University
Phillip Motley	Elon University

# Proposal Reviewers

Adrienne Moyle	The University of Auckland
Meloni Muir	University of Sydney
Melanie Nash	MGSE
Anne-Marie Nickel	Milwaukee School of Engineering
Gregor Novak	United States Air Force Academy
Rebecca Nowacek	Marquette University
Adele Nye	University of New England
Annabel Orchard	Monash University
Patricia Owen-Smith	Oxford College of Emory University
Priya Pamdarinathan	Murdoch University
Stefanie Panke	University of North Carolina
Kathleen Perkins	Columbia College Chicago
Ross Peterson-Veatch	Goshen College
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Jayanti Ray	Southeast Missouri State University
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Rochelle Rodrigo	Old Dominion University
Gillian Rose	University of Reading
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Nirma Samarawickrema	Monash University
Gayani Samarawickrema	Victoria University
Philip Savage	McMaster University
Lauren Scharff	U.S. Air Force Academy
Kirsten Schliephake	Monash University
Michele Scoufis	University of Sydney
Kathryn Segedy	North Carolina Central University
Joe Shapter	Flinders University
Nicola Simmons	Brock University
Tammy Smith	Monash University
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Chris Thompson	Monash University
Marion Tower	University Queensland
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Cristina Varsavsky	Monash University
Subra Vemulpad	Macquarie University
Josephine Walwema	Oakland University
Shrinika Weerakoon	University of Colombo
Paul White	Monash University
Janelle Wilkes	University of New England
Keithia Wilson	Griffith University

# Conference Hosts

## RMIT University

RMIT is a global university of technology and design and Australia's largest tertiary institution.



The University enjoys an international reputation for excellence in professional and vocational education and outcome-oriented research.

RMIT is a leader in engineering, accounting and finance, computer science and information systems, communication and media studies, psychology, education, law and economics.

RMIT has three campuses in Melbourne, Australia, two campuses in Vietnam and a centre in Barcelona, Spain. We also offer programs through partners in Singapore, Hong Kong, mainland China, Indonesia, Sri Lanka, Belgium, Spain and Germany, and we enjoy research and industry partnerships on every continent.

The University's student population of 82,000 includes 28,000 international students, of whom 17,600 are taught outside Australia (almost 7,000 at RMIT Vietnam).

RMIT was awarded the Premier's Award for International Education and the award for Excellence in International Education (University) in the inaugural Victorian International Education Awards.

[www.rmit.edu.au](http://www.rmit.edu.au)

## Monash University

Monash University was founded in Melbourne in 1958 making it the second oldest



university in the State of Victoria. It remains, however, a youthful organisation; enthusiastic, optimistic and accessible. It believes quality education and research can change the world for the better.

Monash has over 63,000 students enrolled at its five Australian campuses and its two overseas campuses in Sunway (Malaysia) and South Africa. It is a member of Australia's Group of Eight, an alliance of leading Australian universities recognised for their excellence in teaching and research.

Monash engages in an extensive range of high quality research. It is home to several major research facilities, including the Monash Vision Group, the Monash Science Technology Research and Innovation Precinct (STRIP), the Australian Stem Cell Centre, 100 research centres and 17 co-operative research centres. Monash also has a research and teaching centre in Prato, Italy, a graduate research school in Mumbai, India and a graduate school in Jiangsu Province, China.

Monash provides a wide range of undergraduate and postgraduate courses, many of which are multi-disciplinary, through its ten faculties: Art, Design & Architecture, Arts, Business and Economics, Education, Engineering, Information Technology, Law, Medicine, Nursing and Health Science, Pharmacy and Pharmaceutical Sciences and Science. Almost 9,000 students are enrolled in programs outside of Australia.

Since December 2011, Monash has had a global alliance with the University of Warwick in the United Kingdom.

[www.monash.edu.au](http://www.monash.edu.au)



# ISSOTL 2015

## Organising Committee

### **Executive Committee**

Geoffrey Crisp (Conference Chair) RMIT University

Angela Carbone (Conference Chair) Monash University

Michele Scoufis (ISSOTL Board) The University of Sydney

### **Local Organising Committee**

Geoffrey Crisp – RMIT University

Angela Carbone – Monash University

Joanne Rae – Monash University

### **Program Committee**

Denise Chalmers (Chair) – The University of Western Australia

Natalie Brown – University of Tasmania

Peter Looker – Nanyang Technological University

Sandra Jones – RMIT University

Cristina Varsavsky – Monash University

Sue Webb – Monash University

Katarina Martensson – Lund University

Arshad Ahmad – McMaster University

Gordon Joughin – Griffith University

# Program at a Glance

	Tuesday 27 October	Wednesday 28 October	Thursday 29 October	Friday 30 October
0700 – 0815		SIGs	SIGs	
0830 – 0900				
0900 – 0930	Pre-Conference Workshops	Plenary Keynote	Plenary Keynote	Invited Speaker
0930 – 1000		Concurrent Session A	Concurrent Session E	Concurrent Session J
1000 – 1030				
1030 – 1100	<b>Morning Tea</b>	<b>Morning Tea</b>	<b>Morning Tea</b>	
1100 – 1130	Pre-Conference Workshops			<b>Morning Tea</b>
1130 – 1200		Concurrent Session B	Concurrent Session F	Closing Keynote
1200 – 1230				
1230 – 1300	<b>Lunch</b>	<b>Lunch/Poster Session</b>	<b>Lunch/Poster Session</b>	Closing
1300 – 1330				
1330 – 1400	Pre-Conference Workshops	Plenary Keynote		
1400 – 1430		Invited Speaker	Invited Speaker	
1430 – 1500		Concurrent Session C	Concurrent Session G	
1500 – 1530	<b>Afternoon Tea</b>			
1530 – 1600	Pre-Conference Workshops	<b>Afternoon Tea</b>	<b>Afternoon Tea</b>	
1600 – 1630				
1630 – 1730	Registration New to ISSOTL	Concurrent Session D	Concurrent Session H	
1745 – 1900		SIGs	SIGs	
1730 – 1800	Welcome to Country and Opening Remarks			
1800 – 1845	Opening Keynote			
1845 -1900	Welcome			
1900 – 2000	Welcome Reception			

# General Information

## Catering

Morning, and afternoon tea will be available during the Conference and will be served in both Building 16 Storey Hall and Building 80 Swanston Academic Building. Lunch will only be served in Building 16 Storey Hall. Catering is included in your registration fee. Please refer to the table below for catering times. If you are attending a workshop on Tuesday 27th October, please note lunch is not included. Lunch will not be provided on Friday 30 October.

	Tuesday	Wednesday	Thursday	Friday
<b>Morning Tea</b>	10.30	10.30	10.30	11.00
<b>Lunch</b>		12.30	12.30	
<b>Afternoon Tea</b>	15.00	15.30	15.30	

## Conference App

Download the ISSOTL 2015 Conference app which is available for iOS and Android devices.

To download scan the QR code below or search 'World Leading Conferences' in your App Store.



Access Code: **ISSOTL**

## Dietary Requirements

If you have advised the Conference Secretariat of special dietary requirements, please speak to a member of the catering staff during the designated break times. Catering staff will have a full list of those with special dietary requirements.

## Duplication/Recording

Unauthorised photography, audio taping, video recording, digital taping or any other form of duplication is strictly prohibited in Conference sessions.

## Electricity

The electrical supply in Australia is 240 volts, 50 Hz. The connection for appliances is a flat 3-pin plug of unique design. Most hotels provide 110 V outlets for shavers.

## Emergency Details

In an emergency telephone 000 for Ambulance, Fire Service or Police.

## Exhibition

The Conference exhibition will be located in the Foyer, Level 5, Building 16, Storey Hall and will be open at the following times:

Wednesday	0800 – 1730
Thursday	0800 – 1730
Friday	0830 – 1130

## Internet

Free WiFi is available throughout RMIT University. To access the WiFi, select the "RMIT-University" network on your device, and follow the prompts. Password is rmit.3456

## Lost and Found

Any found item may be turned into the Registration Desk located in the Foyer, Building 16, Storey Hall.

## Luggage Storage


Please note on the last day there will be no storage facilities at the conference venue so please leave your luggage at your hotel to pick up after the conference.

## Mobile Phones

Australia operates on a digital network. Delegates are asked to switch off their mobile phones or set them to silent when in sessions.

## Name Badges

For security purposes, delegates, speakers and exhibitors are asked to wear their name badges to the sessions. Entrance into sessions is restricted to registered delegates only.

Conference name badge and lanyards  
sponsored by 

## Parking

There is no on-campus parking available for visitors to the University. However there are a number of commercial car parks within a very short walk. Metered street parking is also available around the City campus. Please note, time limits and clearway restrictions apply.

## Program

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

## Registration Desk

The registration desk is located in the Foyer, Level 5, Building 16, Storey Hall. The registration desk will be open at the following times:

Tuesday	0800 – 1900
Wednesday	0700 – 1730
Thursday	0700 – 1730
Friday	0830 – 1300

## Security

Please ensure that you take all items of value with you at all times when leaving a room. Do not leave bags or laptop computers unattended.

## Shopping

Shops open from 0900 to 1730 during the week with late night shopping on Thursdays to 2100. On Saturdays and Sunday most shops are open between 1000 and 1700.

## Speakers

Please ensure that you are available in your presentation room at least 15 minutes prior to the start of the session. Speakers will need to upload their presentations onto the computer in the session room before the session starts.

## Taxes

A Goods and Services Tax (GST) of 10% applies to all consumer goods and is included in retail prices.

## Tipping

Tipping is not the general custom in Australia and service charges are not added to accounts by hotels and restaurants. However, you may tip hotel porters and food and drink waiters in restaurants (up to 10% of the bill) for special service. At any time, tipping is at your discretion.

## Twitter Account

Follow @issotl2015 for updates regarding the conference. The conference hashtag is #issotl15.



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At UTS, Learning and Teaching are highly valued. Our staff are passionate in their commitment to learning and innovation that is relevant to today's world.

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learning.futures is characterised by practices which combine the best online and face-to-face teaching and make use of our dynamic new learning spaces in a vibrant and energising inner city environment.

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# Venue

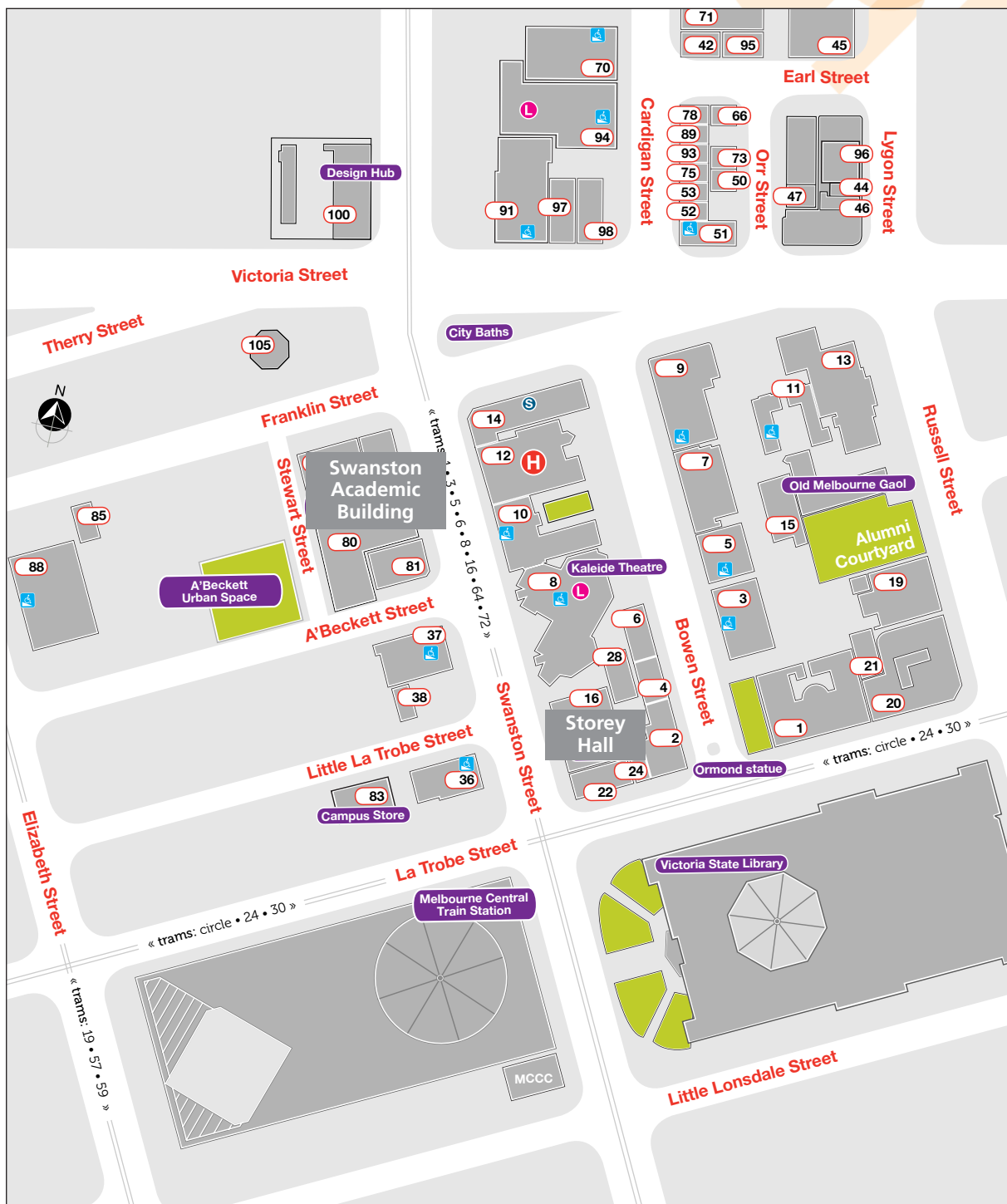
## RMIT University

336 – 348 Swanston St, Melbourne, Victoria, 3000, Australia

Storey Hall, formerly the Hibernian Hall and the Guild Hall, was constructed between 1884 and 1887. The building has been classified by the National Trust and listed by the Australian Heritage Commission. Renovated and rebuilt in the mid-1990s, today it is a high-impact, multi award-winning space featuring cutting-edge technology and design.

The venue is an easy walking distance from a range of accommodation options, which will be available to delegates to book at the time of registering for the conference.

## Location Map



# Sponsors and Exhibitors

## Platinum Partner

### University of Technology Sydney

Contact Person: Associate Professor  
Jo McKenzie, Director, Institute for  
Interactive Media and Learning  
PO Box 123  
Broadway NSW 2007  
Phone: +61 2 9514-2000  
Email: [jo.mckenzie@uts.edu.au](mailto:jo.mckenzie@uts.edu.au)  
Web: [www.uts.edu.au](http://www.uts.edu.au)



UTS is a dynamic and innovative university in central Sydney, at the heart of the city's creative precinct. One of Australia's leading universities of technology, UTS has a distinct model of learning, strong research performance and a leading reputation for engagement with industry and the professions.

Our students are engaged in creative and inspiring learning that enables them to build strong professional identities, future-focussed graduate capabilities and global citizenship.

Our vision is to be a world-leading university of technology.

## Conference Supporter

### The City of Melbourne

The City of Melbourne actively collaborates with Melbourne's knowledge sector to build social prosperity and promote Melbourne's reputation as a cultural and global educational destination.



Melbourne received the accolade of Most Admired Knowledge City at the 2013 Knowledge Cities World Summit.

City of Melbourne is a proud sponsor of the conference.

## Exhibitors

### PebblePad

#### Table Top: 7

Contact Person: Alison Poot  
PO Box 1174  
Buderim, QLD 4556  
Phone: 0400 899 820  
Email: [info@pebblepad.com.au](mailto:info@pebblepad.com.au)  
Web: [www.pebblepad.com.au](http://www.pebblepad.com.au)



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### Smart Sparrow

#### Table Top: 6

Contact Person: Greg Higgins -  
Director, Academic & Learning  
Communities  
16-122 Kippax Street  
Surrey Hills NSW 2010  
Phone: +61 410 728 064  
Email: [greg@smartsparrow.com](mailto:greg@smartsparrow.com)  
Web: [www.smartsparrow.com](http://www.smartsparrow.com)



Smart Sparrow is a learning design platform for next-generation courseware. It allows anyone to create rich, interactive and personalised learning experiences and then continuously improve them using real-time learner analytics.

### The Higher Education Academy

#### Table Top: 5

Contact Person: Jonathan Ray  
The Higher Education Academy  
Innovation Way, York  
Phone: 01904717500  
Email: [international@heacademy.ac.uk](mailto:international@heacademy.ac.uk)  
Web: [www.international.heacademy.ac.uk](http://www.international.heacademy.ac.uk)



The Higher Education Academy is a UK-based organisation responsible for enhancing teaching and learning in HE. We aim to support and develop those who teach.



# Plenary Speakers

## Associate Professor Chng Huang Hoon



Chng Huang Hoon is an Associate Professor in the Department of English Language & Literature, National University of Singapore (NUS). Her teaching and research interests lie in discourse, gender and ideology. She

has taught several courses on these subjects in her teaching career at NUS, and has published several papers on the subject. Huang Hoon has served in various administrative appointments in the past 14 years, including Assistant Dean (External Relations, 2004-2008) and Director, Centre for Development of Teaching and Learning (2008-2012). In 2012, she assumed her current position as Associate Provost (Undergraduate Education), where she oversees all matters relating to the undergraduate curriculum, and assists both the Vice Provost (Undergraduate Education) and the Provost in various special university-level initiatives, including initiatives relating to General Education and Technology-Enhanced Education in NUS.

## Professor Rosemary Deem



Rosemary Deem is currently Vice Principal (Education), Dean of the Doctoral School and Professor of Higher Education Management at Royal Holloway, University of London, UK. From 2001 until January 2009 she

was Professor of Education, from 2004-6, Graduate Dean for Social Sciences and Law and from 2007-9, Research Director for the Faculty of Social Sciences and Law, all at the University of Bristol. An Academician of the UK Academy of Social Sciences, Rosemary is a sociologist who has also worked at Loughborough, York, the Open and Lancaster Universities and the former North Staffordshire Polytechnic. At Lancaster she was Dean of Social Sciences (1994-7) and founding director of the University Graduate School (1998-2000). She was a UK Education Research Assessment Exercise sub-panellist in 1996, 2001 and 2008, has twice chaired the British Sociological Association, directed the UK Education Subject Centre ESCALate from 2001-2004 and was Vice-Chair of the Society for Research into Higher Education from 2007- 2009. From 2001-2005 she was joint editor of the Blackwells international journal *The Sociological Review* and is currently on the Editorial Board of *Studies in Higher Education*, *Equal*

*Opportunities International and Higher Education Quarterly*. She is a co-editor of the international journal *Higher Education* (published by Springer). In 2013 she was appointed OBE for services to higher education and social sciences. In September 2014 she was elected as incoming Chair of the UK Council for Graduate Education. Her research interests include higher education policy, leadership, governance and management, public service modernisation and leadership development, equality in educational organisational settings, doctoral research students, research and teaching relationships; the purposes of higher education.

## Professor Margaret Gardner AO



Professor Margaret Gardner became President and Vice-Chancellor of Monash University on September 1, 2014. Prior to joining Monash, she was Vice-Chancellor and President of RMIT from April 2005 until August

2014. She has extensive academic experience, having held various leadership positions in Australian universities throughout her career, including at The University of Queensland and Griffith University. Armed with a first class honours degree in Economics and a PhD from the University of Sydney, in 1988 she was a Fulbright Postdoctoral Fellow spending time at the Massachusetts Institute of Technology, Cornell University, and the University of California, Berkeley. Professor Gardner currently chairs the Museums Board of Victoria, the Strategic Advisory Committee of the federal Office for Learning and Teaching, and is a director of the Fulbright Commission Advisory Board and Universities Australia. She has been a member of various Committees in the areas of the arts, education and industrial relations, including the Council of Australia Latin American Relations Board (COALAR), the ANZAC Centenary Advisory Board and International Education Advisory Committee which led to the 'Chaney' Report. In 2007, Professor Gardner was made an Officer of the Order of Australia in recognition of service to tertiary education, particularly in the areas of university governance and gender equity, and to industrial relations in Queensland.



# Plenary Speakers

## Professor Gregor Kennedy



Gregor Kennedy is the PVC (Educational Innovation) at the University of Melbourne and is Head of Learning Environments, the department responsible for virtual and physical learning spaces. He is also

Professor in the Centre for the Study of Higher Education and his current work involves leading the University's strategy in technology-enhanced learning and teaching, undertaking research and supporting staff in the use of learning technologies. Gregor has spent the last 15 years conducting and overseeing research and development in educational technology in higher education. His research interests include university staff and students' use of technology; interactivity, engagement and self-regulation in online learning environments; the use of 3D immersive simulation for learning; and the use of learning analytics in educational research and evaluation. He has published widely in these areas and is the co-lead editor of the Australasian Journal of Educational Technology.

## Professor Vijay Kumar



Vijay Kumar has been providing leadership for sustainable technology-enabled educational innovation at MIT – as Assistant Provost, Senior Associate Dean of Undergraduate



Education, Director, Office of Educational Innovation and Technology and presently as Associate Dean and Senior Strategic Advisor for Digital Learning. His research and consulting engagements are directed toward strategy, planning and implementing technological innovations for education. He is currently co-leading an NSF supported initiative that explores productive linkages between the Learning Sciences and Online Learning. Vijay has been actively involved in Open Education efforts around the world including Co-leading an NSF supported MIT-Haiti Initiative for STEM education through educational technology and open resources, serving as Advisor to India's National Knowledge Commission, UNESCO, MIT OpenCourseWare (OCW), the Smithsonian as well as the Massachusetts Governor's STEM Council and the Qatar Foundation International. Vijay is co-editor of a Carnegie Foundation book "Opening Up Education"

(MIT Press, August 2008) and of *Valuable, Viable Software in Education: Case Studies and Analysis*", (EDUCOM, McGraw-Hill, Primis, September 1993). He has authored numerous articles in the area of educational innovations and technology strategy. Vijay was recently awarded an honorary Professorship by Tianjin Open University. He has also been appointed as the Exxon-Mobil Distinguished Chair for Technology Enabled Learning, Qatar University.

## Dr Katarina Mårtensson



Katarina Mårtensson, is an academic developer at the Centre for Educational Development, Lund University, Sweden, since 2000. She particularly works with academic teachers and



leaders within the university in order to promote and support scholarship of teaching and learning (and leading). Her main research interest is in how social collegial contexts and leadership influence academics in their professional learning. In other words, learning in the academic workplace, and what role colleagues and leaders might have in that learning. From that point of view she is interested in organizational learning and strategic educational development, where academic culture, leadership, and SoTL are important aspects. Recent publications include a PhD-thesis (2014): "Influencing teaching and learning microcultures: Academic development in a research-intensive university"; an exploratory study of strong academic microcultures (Roxå & Mårtensson 2011/2013), two publications about significant networks (*Studies in Higher Education*, 2009 and a chapter in a Routledge book edited by Carolin Kreber, 2009), an article about network approaches to influencing teaching and learning cultures at university (*Higher Education*, 2011), and SoTL as a way to develop a quality culture in a university (*Higher Education Research & Development*, 2011). She has for almost three years been a member of the editorial team of the Swedish online journal *Högre Utbildning* and is since 2013 a co-editor of *IJAD*, *The International Journal for Academic Development* (Taylor & Francis). She is also, between 2014-2016, one of two vice-presidents Europe in the International Society for Scholarship of Teaching and Learning.

### Professor Geoff Scott



Geoff Scott is Emeritus Professor of Higher Education and Sustainability at the University of Western Sydney, Australia. From 2004-12 he was Pro Vice-Chancellor (Quality) and then Executive Director of Sustainability at

UWS. He is co-chair of the Sustainable Futures Leadership Academy, helped establish RCE-Greater Western Sydney & is author with Canada's Michael Fullan of the widely used book Turnaround Leadership for Higher Education. He has recently completed an international OLT project on Turnaround Leadership for Sustainability in Higher Education with Daniella Tilbury, Leith Sharp and Liz Deane and another project for OLT with Kerri-Lee Krause and colleagues in 11 Australian universities on Inter-university moderation and the assurance of higher education subject and program achievement standards. In 2008 he led the ALTC study of Learning Leaders in Times of Change with colleagues from ACER. In 2010 he led the national survey of sustainability in the curriculum of Australia's universities. He is a former member of the Board of Directors of the Australian Council for Educational Research, a Fellow of the Australian College of Education, a member of TEQSA's Panel of Experts and a higher education auditor in many countries. He is currently a Senior Teaching Fellow with Australia's Office for Learning and Teaching. In 2007, he was the Recipient of the Australian Higher Education Quality Award.

### Associate Professor Manjula Devi Sharma



Associate Professor Manjula Sharma is the Director of the Institute for Innovation in Science and Mathematics Education and heads the Physics Education Research group at the University of Sydney. Nationally,

she leads the Science and Mathematics network of Australian University Educators, SaMnet; and Advancing Science and Engineering through Laboratory Learning, ASELL Schools. Prof Sharma has over 100 peer-reviewed publications and has received funding of over \$3M. She is driving research on leadership development and active learning strategies. The findings from her work are being translating into practice and informing decisions. As a change agent she invests in professional learning and building capacity in science and mathematics education across sectors – universities and schools. Her work is recognised internationally through research partnerships, service on expert/advisory panels, editorial boards and conference committees. Her awards include the 2012 Australian Institute for Physics Education Medal and 2013 OLT National Teaching Fellowship.

# Program Tuesday 27 October 2015

Room Number	16.07.008	16.07.007	16.07.001	16.07.002	16.07.003
0900-1030	Workshop 1 <b>Gregor Novak</b>	Workshop 2 <b>Michele Scoufis</b>	Workshop 3 <b>Connie Guberman</b>	Workshop 5 <b>Evie Kendal</b>	Workshop 7 <b>Marina Harvey</b>
1030-1100	MORNING TEA				
1100-1230	Workshop 1 <b>Gregor Novak</b>	Workshop 2 <b>Michele Scoufis</b>	Workshop 3 <b>Connie Guberman</b>	Workshop 5 <b>Evie Kendal</b>	Workshop 7 <b>Marina Harvey</b>
1230-1330	LUNCH				
1330-1500	Workshop 1 <b>Gregor Novak</b>	Workshop 2 <b>Michele Scoufis</b>	Workshop 4 <b>David Pace</b>	Workshop 6 <b>Ruth Whittle</b>	Workshop 7 <b>Marina Harvey</b>
1500-1530	AFTERNOON TEA				
1530-1630	Workshop 1 <b>Gregor Novak</b>	Workshop 2 <b>Michele Scoufis</b>	Workshop 4 <b>David Pace</b>	Workshop 6 <b>Ruth Whittle</b>	Workshop 7 <b>Marina Harvey</b>
1630-1730	Registration				
1730-1800	Welcome to Country and Opening Remarks				
1800-1845	Opening Keynote (Storey Hall) - <b>Professor Vijay Kumar</b>				
1845-1900	Co-host Introduction				
1900-2000	Welcome Reception				

80.07.009	80.09.006	80.02.003	80.10.013	80.09.012
Workshop 8 <b>Sophie Karanicolas</b>	Workshop 10 <b>Tina Bhargava</b>	Workshop 12 <b>Deirdre Van Jaarsveldt</b>	Workshop 13 <b>Josephine Csete</b>	Workshop 15 <b>Kerry Howells</b>
MORNING TEA				
Workshop 8 <b>Sophie Karanicolas</b>	Workshop 10 <b>Tina Bhargava</b>	Workshop 12 <b>Deirdre Van Jaarsveldt</b>	Workshop 13 <b>Josephine Csete</b>	Workshop 15 <b>Kerry Howells</b>
LUNCH				
Workshop 9 <b>Spiros Soulis</b>	Workshop 11 <b>Carol Miles</b>		Workshop 14 <b>Deb Clarke</b>	
AFTERNOON TEA				
Workshop 9 <b>Spiros Soulis</b>	Workshop 11 <b>Carol Miles</b>		Workshop 14 <b>Deb Clarke</b>	
New to ISSOTL				
Welcome to Country and Opening Remarks				
Opening Keynote (Storey Hall) - <b>Professor Vijay Kumar</b>				
Co-host Introduction				
Welcome Reception				



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## Workshop 1

Full Day Workshop

### COMPREHENSIVE FLIPPED LEARNING PEDAGOGY VIA DECODING AND JUST-IN-TIME TEACHING

Gregor Novak<sup>1</sup>, David Pace<sup>2</sup>, Kimberly De La Harpe<sup>1</sup>

<sup>1</sup> United States Air Force Academy

<sup>2</sup> Indiana University

The participants in this workshop will develop templates for pre-instruction assignments, in-class activities and post-instruction closure and assessment modules. These will be comprehensive, integrated modules in the spirit of Flipped Learning (Hamdan 2013.) Flipped Learning is an inductive pedagogy scheme, guiding the student through a considerable amount of independent work in preparation for the lesson and post-lesson assessment, thus freeing the class time for instructor led discussion, clarification and extension. A particular lesson development process starts with identifying the commonly encountered bottlenecks and constructing pedagogically sound techniques of addressing these. This procedure, developed by David Pace and Joan Middendorf, is known as the decoding cycle (Pace, 2004) and provides the foundation for learning activities. Following the Just-in-Time Teaching paradigm (Novak, 1999, Simkins, 2010), pre-class assignments are then prepared to help students become aware of these bottlenecks and attempt to deal with them. To illustrate the real world connection of the upcoming lesson, worked-examples of solutions to relevant problems, as developed by an expert on the subject, are presented for the student to analyze and self-explain (Chi, 1989.) This is the essence of the flipping of both the timing and the nature of the student work. The student does some preliminary work before the formal lesson and the application precedes the theory. Anticipating student responses to the, usually web-based, pre-class assignment, the instructor then prepares a rough outline of the in-class activities, which include discussion of actual student responses, mini-lectures, demos, short videos, clicker-based discussion and small-group peer to peer conversations. Education research has demonstrated the efficacy of breaking up the fifty minute lesson time into this kind of variety of small segments (Deslauriers, 2011.) We have done a considerable amount of work developing modules from pre-class worked-examples, interactive video and JITT to in-class (e.g. clicker-based) activities to matching post-class and formative assessment material to close the feedback loop and will share these with the workshop participants.

[http://134.68.135.20/ISSOTL15\\_JITT/](http://134.68.135.20/ISSOTL15_JITT/)

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.

Deslauriers, L. et al. (2011): 'Improved Learning in a Large-Enrollment Physics Class', *Science* 332, 862 (2011)

Hamdan, N. et al.(2013) Flipped Learning White Paper: [www.flippedlearning.org/review](http://www.flippedlearning.org/review) Novak, G.M., Patterson, E.T., Gavrin, A.D., Christian, W. (1999). 'Just-In-Time-Teaching: Blending Active Learning with Web Technology', Prentice Hall Pace, D. & Middendorf, J (2004), *Decoding the Disciplines: Helping Students Learn Disciplinary Ways of Thinking: New Directions for Teaching and Learning*, Number 98 Paperback 'December 2, 2004 Schaffhauser, D. 2 Great Techniques for the Flipped Classroom, *Campus Technology Magazine* October 2014 Simkins, S., & Maier, M. (Eds). (2010). *Just-in-Time Teaching across the disciplines and across the academy*. Sterling, VA: Stylus Publishing.

## Workshop 2

Full Day Workshop

### ADAPTIVE LEARNING LEADERSHIP: HOW MIGHT WE BE LEARNING LEADERS-SHAPERS OF WHAT MIGHT BE RATHER THAN SERVANTS OF WHAT IS?

Michele Scoufis<sup>1</sup>, Tom Schwarz<sup>2</sup>

<sup>1</sup> University of Sydney Business School

<sup>2</sup> Kinnogene Inc

Heifetz refers to 'adaptive challenges' as problems which are difficult to identify and have no known solutions. These require new knowledge, developmental capacities and tools to resolve (Drago-Severon et al, p.5. 2010). In universities such demands are experienced by those in leadership roles at all levels-for example, how to transform traditional learning and teaching to create enhanced learning for students.

Learning Goals and Outcomes: In this workshop we will explore and experience what it takes at a personal and systems level to be a successful learning leader in a time of change, uncertainty, complexity and transformation.

By the end of our workshop participants will be able to:  
\*identify the shape and dimensions of adaptive learning leadership and why easy fixes (called technical changes, Heifetz 2009) are problematic in university settings,  
\* reflect on personal insights gained and plan the development they may wish to embark upon in terms of their own transformative leadership,  
\*identify ways in which University systems interact with adaptive learning and leadership systems.

Workshop Methods: Experiential action methods will be used to explore the nature of adaptive learning leadership in universities from the perspectives of leader's and system's (Heifetz, Grashow and Linsky, 2009) and the 'Case in Point' approach (Johnstone and Fern, 2010).

By 'moving up to the balcony and leaving the dance floor' (Angelo, 2015), participants will conclude with reflection, personal meaning making and the identification of specific approaches and changes that empower the Learning leader/participant.

Foundational References: The workshop builds upon previous National projects (eg 'Cultivating the Roles of the Associate Dean (Teaching and Learning) and the Course Coordinator (Southwell et al, 2008), 'Leading Excellence' (Bennett et al, 2008), and Scott's (2008) 'Learning Leaders in Times of Change'. 'The Art of Changing the Brain' (Zull,2002) provides valuable neurological insights into the nature of adaptive leadership and learning. Moreno's (1969) concept of role theory and focal conflicts forms a useful framework for emergent making meaning from the experiences of Learning Leadership.

Workshop Facilitators Associate Professor Michele Scoufis is a Senior Consultant in the University of Sydney Business School Educational Practice Unit. She, (with Professor Sean Brawley) is the Australasian Vice President of ISSOTL. Most recently Michele has been a leader on National projects that relate to Learning Leadership capacity building and has drawn upon a Communities of Practice Model to foster CsOPs amongst learning leaders, both academic and professional at all levels of the University.

Dr Tom Schwarz (PhD, IAF CPF, ICA CToPF, AQF TAE) is the Principal of Kinnogene (Aus) and is a professional Consulting Facilitator, Professional Facilitator Assessor and Facilitation Trainer, and leadership mentor.. He has extensive experience in leadership capacity building and leadership development in multiple contexts eg *Leading in the New Normal: A leadership laboratory for Senior Leaders*. Tom was a Founding Director of

the Global Institute for Facilitative Leadership, as well as an inaugural IAF global Hall of Fame award recipient.

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### Workshop 3

Half Day Workshop

#### **FROM HARM TO HOPE: ADDRESSING THE IMPACT OF GENDERED EXPECTATIONS ON DIVERSE STUDENTS**

**Connie Guberman<sup>1</sup>**

*1 University of Toronto Scarborough, Toronto, Canada*

This workshop session will explore the impact of violence in the lives of students, how it affects their learning, their sense of academic potential and vision for their future. Participants will discuss how we as teachers and administrators can collaborate to create learning environments that are responsive and flexible in addressing students' diverse needs. Policy implications and recommendations will be an anticipated outcome of interactive activities. Over the last two decades in Canada and around the world, there has been great commitment to create safe university and college campuses and to address issues of violence in intimate or dating relationships. Yet little has been done proactively to acknowledge and address the needs of students who have experienced violence or harm in their home. Women students and those who identify as LGBT are particularly affected by the trauma of violence in their lives. They are often not able to concentrate, complete assignments, feel confident or engage in class or co-curricular activities. For the past twenty years the focus of my work has been on issues of violence and safety. Most recently, in partnership with a local community organization we received a grant from Status of Women Canada to 'engage young people to prevent violence against women on campus.' This workshop will not only host a discussion but will have interactive planning exercises to explore practices and innovative initiatives to address student needs — needs in the words of one student 'to be safe to talk about safety.' Teachers are often the first ones with whom students share their experiences. Responding to the harm in their lives is critical to the success of our increasingly diverse student populations - it's a new dimension to our work in leading learning for change.

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### Workshop 4

Half Day Workshop

#### **DECODING THE DISCIPLINES: A TOOL FOR INVITING FIRST GENERATION COLLEGE STUDENTS INTO ACADEMIC DISCIPLINES**

**David Pace<sup>1</sup>, Joan Middendorf<sup>1</sup>**

*1 Indiana University*

Every year throughout the world first generation college students find themselves completely unable to adjust to the demands of the courses they are taking. Unaware of the mental operations that are required in a field, they fall back on generic techniques of learning that are quite inappropriate for the challenges they face. Their instructors attempt to help them master the mental processes required in the discipline, but these are often so automatic to these experts that they unconsciously omit some of the most essential steps that students must master. The result is a much too often a disaster for the student and a loss to society.

College instructors, professionals in teaching centers, and SoTL practitioners in the United States, Canada, Ireland, the U.K., Sweden, Norway, Germany, Belgium, South Africa, and

Australia are now using the Decoding the Disciplines approach to respond to this challenge. Beginning by defining crucial bottlenecks to student learning, they systematically make explicit the kinds of mental operations that are required to get passed these obstacles, model these for students, and assess student mastery of specific skills. In this workshop the co-founders of Decoding the Disciplines will present the basics of this paradigm, and explore how it can be used. As an example of this process, participants will see how students first arriving in college were taken through a ten-day course in which they were systematically introduced to the mental operations, required in a particular discipline (history). The strategies used in the course will be briefly shared, as will examples of assessments and short video tapes of students describing how the experience changed their understanding of what required for college work. The majority of the workshop will be devoted to hands-on work in which the Decoding paradigm will be applied to particular disciplines of concern to the participants, with emphasis on easing the transition of first-generation college students into the world of higher education. Crucial bottlenecks to learning in each discipline will be identified, and participants will have an opportunity to participate in an interview process designed to make explicit the mental operations that students must master to overcome one of these obstacles. Then they will brainstorm how these steps can be modeled for students and assessed. Participants should emerge from this workshop with ideas for using Decoding in SoTL research. Instructors will have gained new tools for drawing larger numbers of their students into the learning processes of their disciplines, and professionals from teaching centers will have new strategies for helping faculty.

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)

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### Workshop 5

Half Day Workshop

#### **WHAT HAPPENED ON GREY'S ANATOMY LAST NIGHT? TEACHING MEDICINE AND MEDICAL ETHICS USING POPULAR CULTURE**

**Evie Kendal<sup>1</sup>, Basia Diug<sup>1</sup>**

*1 Monash University*

Why students opt to pursue medicine as a career has been the subject of much scholarly debate. Historically, theorists like G. S. Becker (1962) and Bernard Lentz and David Laband (1989) have attributed many cases to 'human capital formation' within the family unit. To summarise Lentz and Laband's argument, the children of doctors experience an intergenerational transfer of career-specific human capital that a) motivates them to voluntarily pursue a career in medicine, and b) better prepares them for pursuing this course of study. While it may still be true that there are a disproportionate number of doctors' children successfully applying to medical school in the 21st century, as in the 20th, the purpose of this seminar is to engage with other motivating factors that inspire students to enrol in medicine and allied health degrees. Specifically, we are interested in exploring the impact of popular culture on the perception of medical studies and careers, and whether this too may motivate and prepare future doctors and allied health professionals.

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It is known that medical and nursing students watch medical television dramas and comedies. One study from John Hopkins University cites 84% of medical students and 81% of nursing students (n=849) reported watching medical television dramas (Czarny et al. 2008). A repeat of this study was done in Australia in 2011 in which 93.7% of medical students reported watching medical dramas (Weaver and Wilson, 2011). Among the shows specifically mentioned in these studies were Grey's Anatomy, House M.D., Scrubs and E.R. If accepting that a parent can serve as a role model for a future doctor, it seems reasonable to hypothesise that a fictional character may function as a substitute role model for students who do not have doctors or health professionals in their families. This seminar explores the relationship between healthcare career aspirations and consumption of medically-focused popular culture within this cohort. Further, the above data indicates that incorporating popular culture references into medical and health education is likely to increase student engagement and represents a source of untapped potential for effective communication of medical information from lecturers to students and, further downstream, from doctors to patients. Medical teaching facilities engaging with this form of education have reported consistently positive results (from students and tutors) indicating the significant potential this mode of teaching has for enhancing student learning (Glasser et al., 2001).

This seminar will model an interdisciplinary approach to the use of popular culture in medical education, viewing some scenes from popular medical dramas and opening a discussion of the ways in which they address medical and ethical issues. Theories will be discussed for how 'medicine' became so popular and why doctors appeared in fictional films before criminals, clergy and cowboys (Glasser, 2010). Audience participation will be encouraged throughout with the goal of building confidence in interdisciplinary teaching modes. Both seminar leaders are members of Monash's Medical Education Research and Quality unit (MERQ) and have extensive experience in classroom teaching, specialising in the design and use of activity-based learning.

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## Workshop 6

Half Day Workshop

### **BREAKING DOWN BERLIN WALLS: BRINGING ABOUT BOTTOM-UP CHANGE IN THE RECOGNITION OF TEACHING AND LEARNING IN A RESEARCH-INTENSIVE UNIVERSITY**

**Ruth Whittle<sup>1</sup>**

*1 University of Birmingham, UK*

Over the last few years I have conducted two individual research projects in the scholarship of teaching and learning, one about change management for students on a placement abroad and one on student transition from secondary school to university, through university and into employment.

In both projects I knew that I needed to find recognition by and engagement with stakeholders within my own unit and beyond: on the one hand the scholarship of teaching and learning has an uncertain footing in a research-intensive university; on the other hand similar projects were being conducted in other units and that would help me; there were also central resources that would be important to access in order to implement actions on the basis of my findings. It was important to work together in order to avoid replication and learn from others. Buy-in was thus vital for all the parts of the project. I found various hurdles along the way of which I had only anticipated some but then realised that this was a common experience.

In this workshop I would like to facilitate an exchange of practical experience and identify the nature of the frustrations felt by colleagues to 'do good' (Hellstrom 2004). The 'walls' which we have to overcome may have to do with university management's and/or colleagues' prioritisations under pressure to perform (e.g. in the area of non-teaching & learning research); general work overload; the managerialism in as well as fragmentation of delivery, both of which have mushroomed in the UK and no doubt in institutions elsewhere when it comes to 'student support' in all guises; casualisation of what had traditionally been regarded as academic work, and last not least the delineation of budget centres. Resistance to change is a well-known pattern behavioural pattern in universities (Brown 2013/Harris 2003).

This workshop will help identify common experience, it should conceptualize this in order to identify how change (here: bottom-up change) can be achieved despite the hurdles. The workshop should start off with a short impulse presentation by me, followed by group discussions on experience in different HE settings. This will be gathered in plenary presentations followed by a second round of group work where participants can investigate how the different approaches in the literature on change and innovation could help them to address their hurdles in a fruitful way, but also what the workshop could contribute to this discussion. There would be possibility for an article authored by a group of participants.

Key literature to be considered as part of the workshop:

Brown, Stephen (2013): 'Large-scale innovation and change in UK higher education'. 'Research in Learning Technology 21, no page numbers, [http://www.researchinlearningtechnology.net/index.php/rlt/article/view/22316/pdf\\_1](http://www.researchinlearningtechnology.net/index.php/rlt/article/view/22316/pdf_1). Harris, Dona L et al (2003): 'Facilitating academic institutional change: redefining scholarship. Family Medicine 35(3), 187-94. Hellstrom, T (2004): 'Between a Rock and a Hard Place: Academic Institutional Change and the Problem of Collective Action'. 'Higher Education: The International Journal of Higher Education and Educational Planning 48(4), 511-528.

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## Workshop 7

Full Day Workshop

### **HAVE A BLASST WORKSHOP: LEADING SOTL WITH STANDARDS FOR QUALITY SESSIONAL TEACHING**

**Marina Harvey<sup>1</sup>**

*1 Learning and Teaching Centre, Macquarie University*

Universities across the world rely on sessional staff to provide teaching. This reliance on sessional staff has been increasing and this significant trend has resulted in sessional staff being integral to student learning across higher education organisations. The increase in sessional staff has not been accompanied by an increase in systematic approaches to quality enhancement and assurance of learning and teaching with sessional staff. The BLASST workshop opens with a general overview of international trends around sessional staff and provides a forum for discussion about the learning and teaching issues associated with this trend. Participants are then introduced to the Sessional Staff Standards Framework, developed over 10 years of research in Australian universities to provide a systematic approach to quality. The Framework is designed to stimulate reflection and action, and to enable institutions, faculties, departments and individuals to work towards consistency in good practice with regard to sessional staff. It is an evidenced-based foundation for reflective decision-making, and can be used to inform practices and priorities, primarily through benchmarking. The BLASST Sessional Staff Standards Framework establishes criteria and standards by

which we may evaluate current practice in quality learning and teaching, and in management and administrative policy, procedures and systems affecting Sessional Staff. The Framework is also available online as the BLASST Benchmarking Interactive Tool (B-BIT). Workshop participants are introduced to the B-BIT through a 'thinking aloud' exercise. After this introduction each participant will engage with the B-BIT in an experiential benchmarking exercise, assessing their own educational context against these national standards. At the end of the online benchmarking exercise, participants will be able to generate their personalised colour-coded summary report and action plan.

Learning goals and outcomes Participants of the BLASST workshop will

- \* engage with an online poll to learn about recent research on learning and scholarship of sessional staff
- \* listen to a short introduction to the BLASST framework
- \* observe a couple of participants practice using the BLASST framework through a 'thinking aloud' exercise
- \* benchmark their department/faculty or organisation by working through the BLASST framework - using an online tool so it is easy and efficient
- \* reflect on the evidence provided by their colour coded summary report
- \* discuss the results of this benchmarking experiment
- \* act on the results, by planning an action/method/experiment to work towards improving good practice with sessional staff.

Anyone working as a sessional teacher or with sessional teachers in higher education can attend. People who support and manage sessional staff including departmental or faculty administrators, unit, program or subject convenors, heads of schools and disciplines, and Human Resources staff, may also find the workshop useful.

The workshop is facilitated by Dr Marina Harvey, an OLT National Teaching Fellow who uses Participatory Action Research to investigate sessional staff issues. She has researched this topic for the past decade and her fellowship enables her to continue to work towards national good practice and benchmarking with the BLASST framework. She has facilitated BLASST workshops across many universities and states of Australia.

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## Workshop 8

Half Day Workshop

### **EVERYTHING OLD IS NEW AGAIN: BUILDING TEACHER CAPACITY TO DESIGN EFFECTIVE AND ENGAGING FLIPPED CLASSROOMS FOR CONTEMPORARY LEARNING SPACES**

**Sophie Karanicolas<sup>1</sup>, Catherine Snelling<sup>1</sup>, Tracey Winning<sup>1</sup>**

*1 The University of Adelaide*

Background: It can be said that the flipped classroom is a modern day twist on an old pedagogical approach of preparing students for class time through set readings. However, experience tells us that this type of pre-class preparation did not always work for the majority of students. Commentators define the flipped classroom as a contemporary pedagogical model where lecture and homework elements are reversed (Hamden et al, 2013; Lage et al, 2000). Homework tasks are completed in advance of class time, be it in a physical or virtual learning space. Regardless of the form, core aspects of today's flipped classroom facilitate awareness of students understanding and enable higher order and contextual learning through active participation during class time (reviewed in Hamden et al., 2013; McLaughlin et al., 2014).

Significance of the Workshop Topic Integral to the

contemporary flipped classroom are feedback cycles that provide students with an insight into their individual level of understanding and teachers with insight into the students collective level of understanding. Most significantly, teachers can now design class time based on the students learning needs due to the range of learning technologies we have at our fingertips today; this form of pre-class and integrated feedback loops which drives student centric learning was not easily accessible to educators even a decade ago. Consequently, our students will inadvertently become active participants in the co-design of learning activities throughout all the phases of the flipped classroom, be it pre-, during and/or post-class time.

The Evidence Based Session Format This interactive session builds on the University of Adelaide's Flipping with a Framework workshop conducted across three institutions. The session's facilitators co-lead a 2015 Office for Learning and Teaching grant, aimed at building teacher capacity to effectively translate the flipped classroom concept into effective classroom practice. The design of this workshop has been developed through a peer review process at all three of the partner universities. Participants will be involved in a 'real life' experience of a flipped classroom through the completion of a short pre-workshop activity, which will compliment the group-based work during the face-to-face interactive session. Actively participating in this workshop will provide insight into some of the challenges that students face when asked to learn in this way, and the challenges that teachers experience when asked to design learning in this way.

Session Outcomes Central to all successful flipped classrooms is the teacher's ability to translate this learning concept into real-life practice. Following participation in the workshop, teachers will be able to design their flipped classroom for the first time, or refine their already existing flipped learning approaches. Colleagues attending this workshop will be asked to actively participate in creative, collegial and collaborative face-to-face discussions on both the challenges and effective use of flipped classrooms in their own teaching contexts. Engaging in open and collaborative discussion and activities will raise an awareness into the pedagogical challenges that require careful consideration if flipped classrooms are to play an integral role in the future of higher education.

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## Workshop 9

Half Day Workshop

### **IT IS STUDENT DRIVEN, TEAM BASED AND AGILE: LEARNING DESIGN FOR DIGITAL ENVIRONMENTS**

**Spiros Soulis<sup>1</sup>, Angela Nicolettou<sup>2</sup>**

*1 Office of the Dean Learning and Teaching, RMIT University*

*2 College of Design and Social Context, RMIT University*

It is student driven, team based and agile: Learning Design for digital environments

Spiros Soulis, RMIT University Spiros is a Project Manager with 20 years experience in facilitating workshops, leading teams and recently incorporating Agile methodologies in Learning and Teaching.

Angela Nicolettou, RMIT University Angela is the Manager of the Digital Learning Team at the College of Design and Social Context. Experience includes working as a lecturer in Higher Education with a focus on curriculum design and assessment.

Emerging technologies are providing the platform and opportunities to challenge current ways of working as learning designers. The demand for flexible, learner-driven design that uses social technologies with an emphasis on interactive and engaging learning experiences is on the increase and is rapidly



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becoming the benchmark for Higher Education, as is evidenced in the NMC Horizon Report 2015 (Johnson, et al., 2015). We will argue that since the paradigms are evolving and changing in digital learning we need to rethink our practices. To this end, we will provide a theoretical framework for this new practice and introduce you to Agile project management methodology.

At RMIT University we have responded to these future learning paradigms by developing a Learning Design (LD) framework that has at its core the student as end user and designer (Nicolettou & Soulis, 2014). Our LD framework uses Agile project management methodology which incorporates the principles of: adaptive, iterative, straightforward and promoting communication (Chookittikul, et al., 2011). Further to this, concepts such as constructive alignment (Biggs & Tang, 2007) meta-design and socio-technical systems (Fischer & Herrmann, 2014) are incorporated in our framework.

**Workshop** This hands-on workshop is for teachers, academics, academic developers, educational designers and those engaged with learning design at any level.

During the workshop:

1. We will show how students can be actively engaged in the learning design process.
2. You will explore the issues that impact on LD in the current and future learning environments using the Horizon report as a premise for discussion.
3. You will experience for yourself the Agile methodology to engage with the key issues relevant to LD for digital environments.
4. Collaborating with workshop participants, you will create a LD model from concepts presented at this workshop.

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## Workshop 10

Half Day Workshop

### TEACHING & LEARNING STRATEGIES TO OUTSMART BIAS

Tina Bhargava<sup>1</sup>, Cia Verschelden<sup>2</sup>

*1 Kent State University, College of Public Health*

*2 University of Central Oklahoma, Office of Academic Effectiveness*

Negative bias is evidenced not only in majority people about non-majority groups, but is also internalized by the people in those groups, with a significant impact on the academic success of non-majority students (Harper, 2012). This workshop will include a brief overview of relevant theory, demonstrations of simple classroom interventions to counteract the negative influences of psycho-sociological 'underminers' on academic performance, and summaries of results from using these interventions with our own students.

At the end of the workshop, participants will be able to:

1. Identify direct and indirect sources of bias that have a negative impact on academic success of non-majority students
2. Understand and conduct course-integrated interventions to counteract the effects of bias on students performance and perceptions of themselves and their learning potential

The workshop demonstrations will include:

I. Pecha Kucha Life Reports to reduce belongingness uncertainty and promote growth mindset: Using Pecha Kucha ([www.pechakucha.org](http://www.pechakucha.org)) Life Reports works well for students whose cultures value oral tradition over the written word, and promotes understanding and empathy to help challenge bias based on ignorance and misinformation. It reduces belongingness uncertainty (Walton & Cohen, 2007), increases hope, and promotes a growth mindset (Dweck, 2006) as students tell about the challenges that they have overcome on

their path to college.

II. Values Affirmation activities to address stereotype threat and pejorative attributions for failure: Involves students sharing struggles that are common and often a part of transitions and stereotype threat (Steele & Aronson, 1995), rather than personal failing (Walton & Cohen, 2007; Wilson & Linville, 1985), and addresses issues of belongingness through values affirmation (Cohen et al, 2009), and 'indirectly' hope.

III. Implicit Association Tests and neurobics to outsmart implicit bias: This intervention for both face-to-face and online students involves completing online Implicit Association Tests (<http://implicit.harvard.edu>) to build awareness of biases (Greenwald & Banaji, 1995) about stigmatized groups, engaging in individual reflective writing, group brainstorming about the societal shapers of implicit bias, and developing and practicing neurobics (Watson, 1988; Katz & Rubin, 1999) to outsmart these biases (Banaji & Greenwald, 2013).

IV. Modified Monopol to recognize the impacts of social injustice and low hope: Helps students recognize power differentials between sub-groups, the underlying social injustices that impact their experiences, and how marginalized groups are deprived of a voice in decision-making processes (Snyder et al, 2002; Aronson et al, 2013).

At the conclusion of the demonstrations, Drs. Verschelden and Bhargava will share their results from using these interventions for the past two years with first-year experience and upper-level sociology students at University of Central Oklahoma, and undergraduate public health students at Kent State University in Ohio, respectively.

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## Workshop 11

Half Day Workshop

### HAS THE TRADITIONAL ESSAY/TERM PAPER SEEN BETTER DAYS? MOVING TOWARD AUTHENTIC ASSESSMENT IN THE UNIVERSITY CLASSROOM

Carol Miles<sup>1</sup>, Keith Foggett<sup>1</sup>

*1 University of Newcastle, Australia*

Perhaps one of the most universally applied assessment tools in universities is the academic essay. While a preponderance of research has addressed the effectiveness of the traditional 'essay' or 'term paper' assignment for the assessment of the development of students critical thinking and problem solving skills, little has been published about the general efficacy of the tool for measuring specific course learning outcomes. With the plethora of authentic assessment tools currently available, it is questionable whether the traditional essay provides the best means for measuring student academic achievement.

Written assessment tools often present insurmountable challenges for first year students who feel it necessary to focus on the writing and referencing process (previously unfamiliar to them) and not on course content. They often think of these activities as 'research' and see little relationship to their chosen areas of study (especially in the professions and sciences). These assessments also represent tremendous marking load for teaching academics. Is it worth it? Is academic writing really the primary skill all current university students need to learn?

For the purposes of this workshop, the term paper/academic essay is defined as a long piece of expository writing addressing either a specific or general topic that is required to be written in standard essay style and referenced academically in one of the myriad of referencing styles. This workshop will consider the contributions of current published evaluation research regarding the academic essay, and current thinking around how this may or may not be congruent with the

engaged student activities desirable for the modern (often blended) classroom. Focus will be placed on whether the skills developed and measured through students writing of essays are those overtly stated in specific course outlines/syllabi, or whether the majority of the effort is directed toward some common generic skills (such as critical thinking) that university teachers feel responsible for developing regardless of the content of the course. Current research indicates that if this is the case, the essay may not be a particularly effective method of assessing evidence of competency. Workshop facilitators are Professor Carol Miles, Director of the Centre for Teaching and Learning at the University of Newcastle whose expertise is in the area of psychometrics and educational measurement/university assessment, and Keith Foggett, Associate Director of Learning Development, responsible for providing student support that focusses on assisting students in developing academic writing skills to succeed at academic essays.

Workshop participants will complete an exercise considering a number of traditional essay assignments from a variety of disciplines and determine the learning outcomes that are actually being measured, the activities students will need to perform to successfully complete the assignment and the objectivity of the grading procedures. A selection of more authentic assessment tasks will be presented and participants will be asked to reconsider the validity of the essay assignment compared to other forms of assessment. An extensive reference list will be supplied to participants.

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## Workshop 12

Half Day Workshop

### DIFFICULT DIALOGUES: CREATING DEMOCRATIC SPACES FOR CIVIL DISCOURSE IN UNIVERSITY CLASSROOMS

Deirdre E. Van Jaarsveldt<sup>1</sup>

*1 Centre for Teaching and Learning, University of the Free State, South Africa*

The Difficult Dialogues project is an international initiative that promotes the art and skill of civil discourse in higher education. The project involves the creation of spaces in university classrooms for reflective discourse on contentious issues that relate to curricular content.

Within these spaces students can learn to display civility by expressing themselves and responding to others in a respectful manner. They also have the opportunity to construct their own beliefs, identity and social relations rather than having these dictated by others. Discourse of this nature consequently presents a wealth of learning opportunities, including the enhancement of academic proficiency, the development of skills essential for adult life, as well as responsible citizenship.

The Difficult Dialogues project emphasises the preparation of academic members of staff to facilitate civil discourse and to engage with controversy in teaching and learning. Since the launching of the project at the University of the Free State (UFS), South Africa in 2012, approximately 100 members of staff have undergone intensive development. Scholarship development is intentionally strengthened and a number of workshops, conference papers and publications have emerged from the project. A book publication containing rich evidence on the growth and experiences of the participants, as well as new knowledge created with regard to the deeper issues foundational to the project implementation at this university, is also in progress.

Research results have indicated that the project has enabled self-reflective practice and that participants have experienced

transformative learning. It was found that transformative learning is stimulated in an enriching, inclusive learning environment. Practicing motivational conditions and dispositions for democratic discussion, for example, were found to be exceptionally helpful.

This interactive half-day workshop will be directed by the following questions: What are the basic best practices for the facilitation of civil discourse in a diverse learning environment? How can the content be contextualised for various settings and needs? Some of the most useful tools and techniques will be demonstrated. Topics to be explored are:

- \* the creation of an enriching and inclusive learning environment;
- \* the constructive use of silence;
- \* the incorporation of minority views and
- \* positive responses to incidents that could disrupt or derail discussion

Opportunity will be provided for participants to discuss points of interest, including how scholarship can be advanced through this work.

The facilitator is an experienced teacher, researcher and academic developer who has acquired advanced facilitation skills and has been actively involved in the planning and implementation of the project at the UFS. She has presented her work at conferences and in publications both nationally and internationally.

References Van Jaarsveldt, D.E. and Joubert, A. 2015.

Navigating diversity with nursing students through Difficult Dialogues: A qualitative study. *International Journal of Africa Nursing Sciences*. 2(2015):34-41.

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## Workshop 13

Half Day Workshop

### UNDERSTANDING THE 'RESEARCH GAME' AND USING IT TO FURTHER YOUR OWN CAREER AS WELL AS THE FUTURE OF SOTL

Josephine Csete<sup>1</sup>, Mei Li<sup>1</sup>, Carmel McNaught<sup>2</sup>

*1 The Hong Kong Polytechnic University*

*2 The Chinese University of Hong Kong*

Significance, learning goals and outcomes, including methodological approach:

Database and bibliometric analysis skills will be used to explore five SoTL questions.

- 1) How is scholarship currently measured?The relative merits and limitations of three popular bibliometric databases (Web of Science, Scopus, and Google Scholar) and two specific measures (impact factor and h-index) will be explored.
- 2) How does SoTL 'measure up' as a specific discipline?Analyses of impact factors of SoTL journals, and discipline-specific journals and conference proceedings will be compared to metrics from other disciplines. Participants will discuss possible strategies for raising SoTL's profile as a scholarly discipline.
- 3) What is my current standing as a scholar?Participants will have hands-on experience in looking up suitable dissemination routes for their discipline-specific as well as SoTL studies. They will also have hands-on experience in looking up their own h-index as well as the h-index of other scholars.
- 4) How might I more widely disseminate my scholarship?A variety of strategies for increasing the likelihood of dissemination (social media, research networks and unique researcher identifiers), and some relevant current tools, will be presented. Participants will discuss which options are most

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appropriate and feasible for themselves.

5) How might SoTL build its profile? The understanding and experience gained from engaging in the questions above will lead to a discussion on appropriate strategies for advancing the profile of SoTL as a legitimate and recognized form of scholarship.

In some ways SoTL is disadvantaged at doing well in the current system for measuring scholarship. However, it is hoped that a conversation among participants who have a shared understanding of how the 'research game' is currently played, combined with an awareness of other potential avenues for measurement and dissemination, may propose ideas that can realistically promote recognition of SoTL and encourage more researchers to engage in SoTL as part of their scholarly output.

Plans for workshop time: More than half of the workshop time will be spent in hands-on activities and small-group discussions. All participants are encouraged to bring a laptop or similar device with internet access so they can participate in the hands-on activities (although all activities will be suitable to paired work so that those without devices also benefit). All experience levels in both SoTL and research skills are welcome.

Facilitators relevant experience:

Josephine Csete: PhD in Educational Systems Development and 20+ years experience in this field. At The Hong Kong Polytechnic University (PolyU) she founded the eLearning Development and Support Section and currently coordinates the Staff Development Section.

Mei Li: MSc in Information Science with experience in Canada, UK and Hong Kong. She is a Senior Assistant Librarian at the Pao Yue-kong Library of PolyU, responsible for collection management and development.

Carmel McNaught: Emeritus Professor of Learning Enhancement and former Director of the Centre for Learning Enhancement And Research at The Chinese University of Hong Kong. See <http://www.cuhk.edu.hk/clear/people/Carmel.html>.

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## Workshop 14

Half Day Workshop

### LEARNING TO DO SCHOLARSHIP OF TEACHING AND LEARNING (SOTL): A TASTER OF AN ONLINE SELF PACED RESOURCE

**Deb Clarke<sup>1</sup>**, Lee Partridge<sup>2</sup>, Lesley Petersen<sup>3</sup>

*1 Charles Sturt University, Bathurst, Australia*

*2 University of Western Australia, Perth, Australia*

*3 Academic Consultant, Hawkes Bay, New Zealand*

Scholars new to the academy often find it difficult to balance their energies regarding teaching and research. Scholarship of teaching and learning (SoTL) draws on the synergies between teaching practice and publication and provides a viable scholarly space for reflection, inquiry and publication. This workshop is significant as it provides participants with opportunities to actively engage with an online self-paced resource that scaffolds new scholars ability to engage in SoTL. The workshop specifically addresses the conference theme: Leading SoTL in the Disciplines and/or Across the Institution. The facilitators are members of the Higher Education Research and Development Society of Australasia (HERDSA) Executive Committee New Scholars Portfolio and were recipients of HERDSA Seed (2013) and Strategic (2014) grants that funded the design and development of an online website for new scholars, to assist them to engage with SoTL. Each of the facilitators are/have been employed in their respective tertiary institutions as Academic Developers/ Learning and Teaching Advisers, and been responsible for leading professional learning programs relating to SoTL. One of the facilitators is an

Associate Editor of HERD journal, and designer of a subject relating to SoTL, in her institution's Graduate Certificate in Learning & Teaching in Higher Education.

By participating in the workshop participants will be able to i) explore the variety of definitions of SoTL; ii) justify the pursuit of SoTL; iii) identify relevant SoTL topics to investigate; iv) explore methodological approaches to undertaking SoTL; and v) critique avenues for SoTL dissemination. The participants will actively engage in individual, partner and small group learning activities that provide opportunities to explore the online SoTL resource and provide feedback regarding how the resource might be adapted in their own institution to improve learning and teaching in higher education.

The workshop content is informed by Australian and international research relating to SoTL (see for example; Boyer, Healey, Huber, Hutchings, Poole, Shulman, Takayama, & Trigwell).

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## Workshop 15

Half Day Workshop

### ENHANCING THE RESEARCH PROCESS THROUGH THE PRACTICE OF GRATITUDE BY SUPERVISORS AND HDR STUDENTS

**Kerry Howells<sup>1</sup>**

*1 University of Tasmania*

This highly interactive workshop is for both graduate research students and supervisors and explores the application of recent research that demonstrates the part an increased attention to the practice of gratitude can play in building both personal resilience, stronger relationships, and improved research outcomes. The workshop builds upon two decades of research by the facilitator (eg Howells, 2012; Howells, 2014) who has presented seminars and workshops on the role of gratitude broadly defined here as the act of giving back with acknowledgement of what has been received, in ways that are not necessarily reciprocal' at eleven different universities around Australia and internationally. One of the issues that the workshop addresses is the high attrition and non-completion rates of PhD candidates, who often cite poor relationships with supervisors as the main reason for their withdrawal ((Unsworth et al 2010; Grant and Graham, 1999).

The workshop offers practical strategies to enable participants to bring greater focus and intentionality to their relationships, and thus take leadership in a domain that is given little precedence in academia up to this point. Admittedly, there has been a recent movement towards considering supervision as a pedagogy and a sophisticated skill, rather than solely a part of the research process that should just happen through osmosis (Grant, 2010; Walker, 2010). This is reflected in the many university programs that have been developed to provide instruction and support to both supervisors and students. However, many supervisors would be aware that we need to consider supervision as more than performing a purely structural role, and would concede that there is a social-emotional aspect (Manathunga, 2009). Most programs that support postgraduate students traditionally tend to focus on areas such as research skills, time management, the socialisation process, and clarification of goals and expectations. There is, however, little attention given to the ontological dimensions of higher degree supervision relationships and underlying pedagogical support or resources that need to be directed at facilitating a flourishing relationship between the supervisor and the candidate.

A particular focus of the workshop is how resentment which is conceptually the opposite of gratitude (Roberts, 2004) can

undermine both the creative process as well as personal and relational wellbeing. Positioned in the context of supervisor-student relationships, participants will explore proactive ways of expressing complaint, and see how this is a powerful means of also expressing gratitude. The workshop will draw on data that captures experiences reported by students and supervisors in a recent pilot study in the Faculties of Medicine and Physical Sciences at the University of Tasmania. Outcomes from this study have highlighted themes of enhanced social and personal well being; clearer thinking processes; and improved productivity, when students and supervisors more fully recognise what they receive from the research process and actively give back from this acknowledgment. The workshop will also address the identified challenges in taking up gratitude in this context: lack of trust; cross-cultural differences; and conceptual misunderstandings.

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### **Opening Keynote**

#### **DIGITAL LEARNING OPENING UP NEW OPPORTUNITIES FOR QUALITY AT SCALE**

**Vijay Kumar<sup>1</sup>**

*1 Massachusetts Institute of Technology*

New affordances of technology and the open movement are ushering in an educational ecology characterized not only by an abundance of resources but also greater agency for learners and communities. Traditional assumptions about the development and delivery of educational resources and practice are being challenged, while hitherto immutable structural relationships in the value chain of education are being disrupted.

The rapid emergence and popularity of online courses designed for large enrollment are not only pointing to a potential revolution within higher education they are also adding legitimacy and even, perhaps, urgency to the field of educational research.

Meanwhile, learning science research has also been contributing to an increased understanding of how people learn and what it means to learn within specific disciplines. New modalities are pointing to the need for inquiry into the development of quality and reach of online learning experiences as well as future research on learning effectiveness in general.

This presentation will build on initiatives at MIT and elsewhere to discuss opportunities for educational innovation and research in light of the increasing influences of online learning. In particular, it will look at some of the implications of the availability of large amounts of data. It will also draw from a set of research themes and associated issues at the intersection of Learning Sciences and Online environments particularly, for STEM disciplines.

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0830-0930 Plenary Keynote (Storey Hall) - Dr. Katarina Mårtensson				
Room Number	16.01.001	16.07.008	16.07.007	16.07.001
0930-1030	<p><b>Session A1</b> <b>Theme 6</b> 0930-1000 <b>Lynne Roberts</b> Reflections on the emergence, evolution and current status of a Scholarship of Teaching and Learning community of practice</p> <p>1000-1030 <b>Carmen Werder</b> Research on Writing Instruction Leading SoTL</p>	<p><b>Session A2</b> <b>Theme 1</b> <i>Roundtable</i> 0930-1000 <b>Thomas Pusateri, Diana Gregory</b> Leading through the Center: One CETL's contributions to institutional change</p>	<p><b>Session A3</b> <b>Theme 2</b> <i>Roundtable</i> 0930-1000 <b>Carol Miles, Keith Foggett</b> Beyond the Academic Essay: Authentic assessment in the university classroom</p>	<p><b>Session A4</b> <b>Theme 5</b> 0930-1000 <b>Jen Lyons, Lucia Tome</b> All journals are equal, but some are more equal than others: spoilt for choice or just confused?</p> <p>1000-1030 <b>Glenn Mitchell</b> Leading Learning and the Scholarship of Change</p>
Room Number	80.07.001U	80.03.15	80.08.010	80.05.012
0930-1030	<p><b>Session A9</b> <b>Theme 5</b> 0930-1000 <b>Maree Dinan Thompson</b> Exploring Assessment Literacy in Higher Education: Academics accounts of personalised, localised and institutional assessment practices</p>	<p><b>Session A10</b> <b>Theme 1</b> 0930-1000 <b>Trish McCluskey</b> Connecting Leaders in Learning and Teaching through Networked Learning</p> <p>1000-1030 <b>Melanie Brown</b> Communities of Practice as a Mediation for Institutional Change</p>	<p><b>Session A11</b> <b>Theme 2</b> 0930-1000 <b>Adam Cardilini</b> Creating virtual communities: Engaging staff and students in holistic course-level learning environments</p> <p>1000-1030 <b>Janet Dymant</b> You want us to take/teach outdoor education online?': Student and lecturer perceptions of experiential learning and teaching in the online space</p>	<p><b>Session A12</b> <b>Theme 3</b> <i>Roundtable</i> 0930-1000 <b>Di Weddell</b> Developing and Sustaining Shared Leadership in Higher Education</p>
1030-1100		MORNING TEA		



Plenary Keynote (Storey Hall) - **Dr. Katarina Mårtensson**

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session A5</b> <b>Theme 4</b> 0930-1000 <b>Earle Abrahamson</b> Great Unexpectations - A Journey through Student Engagement 1000-1030 <b>Tara Newman</b> Leading Institutional Change through Learning and Teaching Communities</p>	<p><b>Session A6</b></p>	<p><b>Session A7</b> <b>Theme 2</b> 0930-1000 <b>Chris Browne</b> Undergraduate constructionism: concrete learning for future engineers 1000-1030 <b>Ivy Chia May</b> Incorporating Experiential Learning in the Curriculum- The Skills Future Initiative</p>	<p><b>Session A8</b> <b>Theme 6</b> 0930 -1000 <b>Janice Miller-Young</b> Boundary Crossing and Troublesomeness: Experiences of Scholars in a SoTL Development Program 1000-1030 <b>Robert Nelson</b> The lost originality of leadership</p>

80.02.017	80.09.06	80.10.013	80.07.06
<p><b>Session A13</b> <b>Theme 5</b> 0930-1000 <b>Kay Crookes</b> Establishing ways in which nurse educators seek to make their teaching meaningful and engaging for nursing students 1000-1030 <b>Christina Kolar</b> University staff perceptions of an inclusive curriculum and capacity building programme implemented for low socio-economic status (SES) university students</p>	<p><b>Session A14</b> <b>Theme 1</b> 0930-1000 <b>Elizabeth Beckmann</b> Leadership through fellowship: professional recognition as a pathway to improving scholarship of teaching and learning in Australian universities 1000-1030 <b>Jennifer Lock</b> Building the bridge from student to instructor: A case study of the Teaching Assistant Preparation Program</p>	<p><b>Session A15</b> <b>Theme 2</b> 0930-1000 <b>Kimberly De La Harpe</b> Flipped Learning: Completing the feedback loop with assessment 1000-1030 <b>Kerry Hood</b> Growing the Flipped Classroom - inspiring teachers and learners</p>	<p><b>Session A16</b> <b>Theme 2</b> 0930-1000 <b>Lee Adam</b> Re-conceptualising plagiarism: Engaging students in quality scholarship 1000-1030 <b>Dawn Bennett</b> Leading SoTL: The case for collaborative approaches</p>

MORNING TEA

# Program Wednesday 28 October 2015

Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1100-1230	<p><b>Session B1</b></p> <p><b>Theme 6</b></p> <p>1100-1130  <b>Rory Chatterton, Samuel Worne, Christine Brown</b>            Collaborating with students to create an on-line Peer-Review of Educational Practice system</p> <p>1130-1200  <b>Jo-Anne Kelder</b>            Guidance for leaders: adapting the Peer Assisted Teaching Scheme (PATS) for quality improvement, quality assurance and scholarly outcomes in teaching</p> <p>1200-1230  <b>Cassandra Saunders</b>            Investigating the use of formative and peer assessment in the scientific discipline: Are they effective learning resources?</p>	<p><b>Session B2</b></p> <p><b>Theme 1</b></p> <p><i>Panel Session</i>            1100-1230  <b>Sandra Jones, Di Weddell, Leo Goedegebuure, Himasha Fonseka, Sinead Colee, Katerina Mårtensson</b></p> <p>Leading the Academy: Collaborating, Innovating and Creatively Engaging all Stakeholders</p>	<p><b>Session B3</b></p> <p><b>Theme 2</b></p> <p>1100-1130  <b>Jurg Bronnimann</b>            Leveraging learning analytics for future pedagogies and scholarship: the academic perspective</p> <p>1130-1200  <b>John Egan</b>            Learning analytics and SoTL: an Imperfect Disciplinary Apparatus</p> <p>1200-1230  <b>Steve Leichtweis</b>            Integrating learning analytics with peer mentoring in first year undergraduate courses</p>	<p><b>Session B4</b></p> <p><b>Theme 5</b></p> <p>1100-1130  <b>Helen Flavell</b>            Being reshaped into SoTL: teaching academics, the reform agenda and impact on SoTL engagement</p> <p>1130 -1200  <b>Kerry Howells</b>            Book club as a means of leading change through sharing research in communities of practice</p> <p>1200-1230  <b>Thomas Pusateri</b>            Transforming institution-wide global engagement through Strategic Internationalization Grants</p>
Room Number	80.07.001U	80.03.15	80.08.010	80.05.012
1100-1230	<p><b>Session B9</b></p> <p><b>Theme 5</b></p> <p><i>Symposium</i>            1100-1230  <b>David Pace, Janice Miller-Young, Michelle Yeo, Manie Moolman, Jennifer Clark, Adrian Jones, Anette Wilkinson, Deirdre van Jaarsveldt</b>            Communities of Decoding: Using the Decoding the Disciplines paradigm to create faculty learning communities on three continents</p>	<p><b>Session B10</b></p> <p><b>Theme 1</b></p> <p>1100-1130  <b>Karen Burke Da Silva</b>            A Collaborative Cross-disciplinary Model of Leadership development for Education focused academics</p> <p>1130-1200  <b>Andrea Greenhoot</b>            Leading Widespread Change through Collaborative Inquiry</p> <p>1200-1230  <b>Gwen Lawrie</b>            Sowing the seeds: developing sustainable practices through shared perspectives, strategies and an inter-institutional collaborative community</p>	<p><b>Session B11</b></p> <p><b>Theme 2</b></p> <p>1100-1130  <b>Trine Fosslund</b>            The pedagogical use of digital technology in higher education</p> <p>1130-1200  <b>Kym Fraser</b>            A creativity MOOC for the 21st century student</p> <p>1200-1230  <b>Lyn Goldberg</b>            Addressing the online learning needs of non-traditional students</p>	<p><b>Session B12</b></p> <p><b>Theme 3</b></p> <p>1100-1130  <b>Anna Rowe</b>            Developing the competencies required to successfully navigate local communities and a globalised world: Affective graduate attributes</p> <p>1130-1200  <b>Theresa Winchester-Seeto</b>            Different viewpoints: comparing graduate attributes from Taiwan and Australia</p> <p>1200-1230  <b>Deirdre Van Jaarsveldt</b>            Facilitating learning about navigating diversity through difficult dialogues</p>

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session B5</b> <b>Theme 4</b> <i>Symposium</i> 1100-1230 <b>Kelly McConaughay, Carol Bender, Angela Brew, Ami Ahern-Rindell</b> Assessing Undergraduate Research: What We Can Learn From Assessment at Multiple Levels</p>	<p><b>Session B6</b> <b>Theme 3</b> 1100-1130 <b>Rebecca Eaton</b> Lessening learning shock: Enhancing university transition and tertiary preparedness for non-traditional pathway students 1130-1200 <b>Robyn Nash</b> The Connections for Learning Program: Promoting success for culturally and linguistically diverse students 1200-1230 <b>Rosanne Coutts</b> Academic skill needs and competency of first year health science students with diverse entry profiles: Views of educators</p>	<p><b>Session B7</b> <b>Theme 2</b> 1100-1130 <b>Margaret Hamilton</b> Interdisciplinary Teams For Engaging in Employability Skills 1130-1200 <b>Aaron Long</b> Fighting for Resources: Scaffolding Undergraduates' Library Research with a Trojan War Role-Playing Game 1200-1230 <b>Sylvia Mackie</b> Future pedagogical design for a university-industry collaborative doctoral program</p>	<p><b>Session B8</b> <b>Theme 6</b> 1100-1230 <i>Symposium</i> <b>Joy Whitton, Meredith Hughes, Erica Brady, Chris Thompson, Priscilla Johanesen</b> The Monash Higher Education Research Program</p>
80.02.017	80.09.06	80.10.013	80.07.06
<p><b>Session B13</b> <b>Theme 5</b> 1100 -1130 <b>Ashley Welsh</b> Embedding Program Evaluation Research into the Implementation of an Innovative New First Year Program for International Students 1130-1200 <b>Claire Hamshire</b> Student stories cannot be counted, a discussion of narrative as a means of resisting the measurement of student experience</p>	<p><b>Session B14</b> <b>Theme 1</b> 1100-1130 <b>Mathew Hillier</b> Webinars as a venue for engagement in professional learning for busy academics 1130-1200 <b>Simon Lancaster</b> The work of the United Kingdom Association of National Teaching Fellows 1200-1230 <b>Jill Lawrence</b> The Associate Dean (Students) role: Does it work for students and institutions?</p>	<p><b>Session B15</b> <b>Theme 2</b> 1100-1130 <b>Gregor Novak</b> Comprehensive Flipped Learning and Inductive Pedagogies 1130-1200 <b>Julia Novak</b> Future flip or future flop?: Flipping large undergraduate mathematics lectures 1200-1230 <b>Annalise O'Callaghan</b> Engaging students through, and in, the flipped classroom: are we there yet?</p>	<p><b>Session B16</b> <b>Theme 2</b> 1100-1130 <b>Mary Ann Danielson</b> Collaborative Curricular (re)Construction (C3): Engaging Students in the Process of Course Re-Design 1130-1200 <b>Jo McKenzie</b> Engaging students in creating learning futures 1200-1230 <b>Donella Caspersz</b> Transformative Listening and Transformative Service-Learning</p>

# Program Wednesday 28 October 2015

1230-1330		LUNCH (including poster session)		
1330-1400		Plenary Keynote (Storey Hall) - <b>Professor Margaret Gardner AO</b>		
1400-1430		Invited Speaker (Storey Hall) - <b>Professor Geoff Scott</b>		
Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1430-1530	<p><b>Session C1</b> <b>Theme 6</b> 1430-1500 <b>Helen McLean</b> Leveraging writing as a social practice: a community of practice approach to support scholarly teaching award applications</p> <p>1500-1530 <b>Marion Tower</b> Developing a Community of Practice in Scholarship of Teaching &amp; Learning for Nurse Academics</p>	<p><b>Session C2</b> <b>Theme 1</b> <i>Roundtable</i> 1430-1530 <b>Dominique Parrish, Patrick Crookes, Joanne Joyce-McCoach</b> Tectonic plates? Fostering situated leadership in a digital age</p>	<p><b>Session C3</b> <b>Theme 2</b> <i>Roundtable</i> 1430-1530 <b>Sandra Jones, Ngan Collins, Nattavud Pimpa</b> Co-designing peer learning experiences for student in multiple transnational locations</p>	<p><b>Session C4</b> <b>Theme 5</b> 1430-1500 <b>Kelley Shaffer</b> Impacting Teaching Goals Using SoTL: A Case Study from a Regional University in the United States</p> <p>1500-1530 <b>Brad Wuetherick</b> Increasing the Impact of SoTL: Supporting Changes in Practice through SoTL Transfer</p>
Room Number	80.07.001U	80.03.15	80.08.010	80.05.012
1430-1530	<p><b>Session C9</b> <b>Theme 5</b> <i>Roundtable</i> 1430-1530 <b>Jude Williams, Heather Alexander</b> Using scholarship and evaluation in program quality to change institutional policies and practices: a case study from Griffith University</p>	<p><b>Session C10</b> <b>Theme 1</b> 1430-1500 <b>Bernadette Mercieca</b> Leadership in the academy through communities of practice</p> <p>1500-1530 <b>Rebecca Sealey</b> Transforming institutional initiatives to a community of scholarly practice through the Teaching and Learning Academy</p>	<p><b>Session C11</b> <b>Theme 2</b> 1430-1500 <b>Sarah Howard</b> Exploring Engineering academics views of writing and implications for future use of online tools to support students writing</p> <p>1500-1530 <b>Alison Kuiper</b> Making the Implicit Explicit: An investigation into teacher presence in face-to-face and online courses</p>	<p><b>Session C12</b> <b>Theme 3</b> 1430-1500 <b>Kerry Bissaker</b> Group Post Graduate Research Supervision: Beyond the Master and Apprentice</p> <p>1500-1530 <b>Karen Manarin</b> Scaffolded Research: Student Attitudes and Student Achievement</p>
1530-1600		AFTERNOON TEA		

LUNCH (including poster session)

Plenary Keynote (Storey Hall) - **Professor Margaret Gardner AO**

Invited Speaker (Storey Hall) - **Professor Geoff Scott**

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session C5</b> <b>Theme 4</b> <i>Roundtable</i> 1430-1530 <b>Peter Lake</b> Tackling disengagement in teaching teams</p>	<p><b>Session C6</b> <b>Theme 3</b> 1430-1530 <b>Camilla Nicoll</b> Preliminary findings of an intensive high-school intervention program aimed at raising student aspiration to attend university  1500 -1530 <b>Penelope Robinson</b> The power of mentoring students with autism, by students with autism - the AWEtism Rethink 'I CAN Network' way</p>	<p><b>Session C7</b> <b>Theme 2</b> 1430-1500 <b>Judy Sng</b> Enriching lecture videos and webcast with digital tags on SAM online platform to promote active learning  1500-1530 <b>Mara Hammerle</b> Active learning in businessand economics: A review of the last decade (2004-2014) with a look to the future</p>	<p><b>Session C8</b></p>
80.02.017	80.09.06	80.10.013	80.07.06
<p><b>Session C13</b> <b>Theme 5</b> 1430-1500 <b>Michelle Yeo</b> Innovating pedagogy in a first year science course  1500-1530 <b>Patrick Crookes</b> What important concepts might the SOTL movement usefully learn from the EBP movement?</p>	<p><b>Session C14</b> <b>Theme 1</b> 1430-1500 <b>Trine Fosslund</b> Becoming the good supervisor: the formation of academics for the 21th st century  1500-1530 <b>Jennifer Lock</b> Documenting quality teaching: Designing a structure for success</p>	<p><b>Session C15</b> <b>Theme 2</b> 1430-1500 <b>Jorge Reyna</b> Designing your Flipped Classroom: an evidence-based framework to guide the flipped teacher and the flipped learner  1500-1530 <b>Bella Ross</b> Flipped Learning, Flipped Satisfaction: Getting the Balance Right</p>	<p><b>Session C16</b> <b>Theme 2</b> 1430-1500 <b>Chrystal Zhang</b> Investigating the role of technology in enabling effective feedback</p>

AFTERNOON TEA



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Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1600-1730	<p><b>Session D1</b></p> <p><b>Theme 6</b></p> <p>1600-1630 <b>Jennifer Clark</b> Teaching First Year History in a Standards Environment</p> <p>1630-1700 <b>Gina Curro</b> Staying on the right side of the Law: a relational model for integrating academic literacies into first year</p> <p>1700-1730 <b>Tomas Zahora</b> Assessing independent learning: literature reviews and critical thinking in the Biomedical Sciences</p>	<p><b>Session D2</b></p> <p><b>Theme 1</b></p> <p><i>Symposium</i> 1600-1730 <b>Diana Gregory</b> Diversity: Making our shared values visible</p>	<p><b>Session D3</b></p> <p><b>Theme 2</b></p> <p><i>Panel Session</i> 1600-1730 <b>Beverley Oliver, Vijay Kumar, Peter Goodyear, Dawn Bennett, Bennett Merriman, Siobhan Lenihan</b> How will universities contribute to students' employability in 2020?</p>	<p><b>Session D4</b></p> <p><b>Theme 5</b></p> <p>1600-1630 <b>Karen Manarin</b> SoTL: Lost in Translation?</p> <p>1630-1700 <b>Deb Clarke</b> Acorns to oak trees: A range of SoTL initiatives from a single model of leadership</p> <p>1700-1730 <b>Caroline Cottman</b> Transforming teaching and learning: Using Photovoice narrative to ascertain changing practice</p>
Room Number	80.07.001U	80.03.15	80.08.010	80.05.012
1600-1730	<p><b>Session D9</b></p> <p><b>Theme 5</b></p> <p><i>Symposium</i> 1600-1730 <b>Adrian German, Joan Middendorf, David Pace, Ali Erkan, Erika Lee, Suzanne Menzel, John Duncan</b> Decoding in the STEM Disciplines: from Threshold Concepts to Bottlenecks</p>	<p><b>Session D10</b></p> <p><b>Theme 1</b></p> <p>1600-1630 <b>Valia Spiliotopoulos</b> Shared Leadership through an Interdisciplinary Professional Learning Community: Interweaving the Language and Culture of Business and Education to Improve Student learning</p> <p>1630-1700 <b>Joanne Stewart</b> Distributed leadership in a distributed community of practice: Enabling professional development through trust, support, and fun</p> <p>1700-1730 <b>Kristin Warr Pedersen</b> Designing an evaluation tool to assess the impact of communities of practice on peer professional learning and distributed leadership</p>	<p><b>Session D11</b></p> <p><b>Theme 2</b></p> <p><i>Symposium</i> 1600-1730 <b>Anne Taib, Nell Kimberley, Andrew Coleman, Peter Wagstaff, Paul Sugden</b> Becoming the oracle: Reflecting on emerging trends in pedagogy and practice to envisage change - academic and professional perspectives on blended learning and the flipped classroom</p>	<p><b>Session D12</b></p> <p><b>Theme 3</b></p> <p>1600-1630 <b>Ketevan Kupatadze</b> Framing Conversations About Diversity in the Language Classroom</p>

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session D5</b> <b>Theme 4</b> 1600-1630 <b>Basia Diug</b> Evaluating the impact of a short-term research internship on health care students self-efficacy 1630-1700 <b>Aysha Divan</b> Constructing Masters programmes in collaboration with external partners: course evaluation and innovative design 1700-1730 <b>Erin Mikulec</b> Nexus: Honors pre-service secondary teachers' understanding of teaching and learning through collaboration with students in an alternative educational setting</p>	<p><b>Session D6</b> <b>Theme 3</b> <i>Symposium</i> 1600-1730 <b>Patrick Crookes, Daniel Bernstein, Christine Brown</b> Beyond Bibliometrics - expanding the range of high quality, high credibility peer-review opportunities available to academics</p>	<p><b>Session D7</b> <b>Theme 2</b> 1600-1630 <b>Julie Walker</b> Transforming teaching and learning space in first year accounting using active learning pedagogies 1630-1700 <b>Arosha Weerakoon</b> Reaching and Teaching Tomorrow's Dental Professionals Today 1700-1730 <b>Judy Sng</b> PharmaCASES: Clinical Applications and Scenarios through Experiential Learning System in Pharmacology for medical practitioners</p>	<p><b>Session D8</b> <b>Theme 6</b> 1600-1630 <b>Andrea Webb</b> After the program: The challenge of being a SoTL leader at a research-intensive university in Canada 1630-1700 <b>Josephine Csete</b> Identifying SoTL activity across an institution: A bibliometric approach 1700-1730 <b>Anna Wilkinson</b> Engaging-the-disciplines: Navigating SoTL development in challenging environments</p>
80.02.017	80.09.06	80.10.013	80.07.06
<p><b>Session D13</b> <b>Theme 5</b> 1600-1630 <b>Vikki Pollard</b> Dissociating power relations: Using academics' stories of value tensions to develop new academic development methods 1630-1700 <b>Claude Savard</b> Transforming teachers' practice: What teachers say about the impact of a pedagogy course on their teaching 1700-1730 <b>Kathy Takayama</b> Preparing the future professoriate: The scholarship of mentorship as reflective praxis</p>	<p><b>Session D14</b> <b>Theme 1</b> 1600-1630 <b>Jennifer Rowe</b> Expansive learning and leadership laboratories - a model for engaging and developing emerging leaders of learning and teaching 1630-1700 <b>Natalie Simper</b> Leadership and Change Strategies in Teaching and Learning 1700-1730 <b>Carol Van Zile-Tamsen</b> Shared leadership and advocacy efforts to promote institutional change: a case study</p>	<p><b>Session D15</b> <b>Theme 2</b> 1600-1630 <b>Judith Seaboyer</b> Shamelessly rewarding reading: How technology-assisted assessment can facilitate student reading in the humanities 1630-1700 <b>Margaret Wegener</b> Students' pre-class preparation: Concise and interactive online modules that students use 1700-1730 <b>Brent Pilkey</b> The physical university and a Connected Curriculum for the future: The holistic built environment and research-based education</p>	<p><b>Session D16</b></p>

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## Plenary Keynote

### LOCAL LEVEL LEADERSHIP - CRUCIAL FOR SOTL?

Katarina Mårtensson<sup>1</sup>

*1 Lund University, Sweden*

Engaging in SoTL can be rewarding for both teachers and students, and can contribute to improved teaching and student learning. But teachers do not act in isolation. On the contrary they are part of social contexts where colleagues together over time develop recurrent practices, a shared repertoire of teaching and assessment methods, and implicit theories about teaching and learning (Trowler, 2008, 2009). Any teaching team, working group, or department could be said to constitute a microculture (Mårtensson, 2014, Roxå, 2014) that has developed their own set of such traditions in relation to teaching and learning. SoTL can therefore be considered an endeavour that can and should contribute to develop not only individual teachers and students' learning, but also such local level microcultures. For this to happen, the role of local level leadership must also be explored.

This keynote will present a case where SoTL is used strategically as a vehicle to institutionally cultivate the development of teaching and learning based on SoTL (Mårtensson et al, 2011). Results from empirical investigations into strong microcultures and will be presented. Leadership is concluded to be very varied from highly distributed and collegial to highly individual. Its results in terms of the creation of a constructive culture around developing teaching and student learning will be shown and analysed. The role of local level leadership (Mårtensson & Roxå, 2015) will also be problematized, in terms of need for support as well as tensions between internal and external mandates to lead.

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## Session A1

Paper

### REFLECTIONS ON THE EMERGENCE, EVOLUTION AND CURRENT STATUS OF A SCHOLARSHIP OF TEACHING AND LEARNING COMMUNITY OF PRACTICE

Lynne Roberts<sup>1</sup>, Peta Dzidic<sup>1</sup>, Emily Castell<sup>1</sup>, Peter Allen<sup>1</sup>, Michelle Quail<sup>1</sup>

*1 Curtin University*

In this paper, we present a critical case study analysing the emergence, evolution and current status of a Community of Practice (CoP) centred on the Scholarship of Teaching and Learning (SoTL) in higher education. A CoP is a group of individuals with common interests and passions who voluntarily dedicate their time to collaboratively build knowledge and share practice, with the overarching objectives of developing members capabilities and fostering innovation. The current CoP emerged in the context of an institution attempting to re-position itself as research intensive, where there are ongoing tensions between research and teaching, with prevailing perceptions that research is more valued than teaching, and disciplinary research is more valued than teaching and learning research. It also exists at a time when higher education institutions are increasingly streaming academics into research or teaching roles, which has resulted in a growing number of 'teaching-focussed' academics without formal time allowances for research activity, who are often discouraged or even prohibited from conducting any research other than 'SoTL'.

Eleven members of the CoP, representing a range of academic levels and roles, participated in a Futures Workshop, in which they were encouraged to discuss the history of the group (including external and internal factors that shaped its

development), and reflect on its purpose, leadership and possible futures. The resulting data were analysed using Causal Layered Analysis, and findings highlighted the importance of social context. Three key themes emerging from the workshop were members systemic exclusion from the wider research community, the exploration and contestation of dominant university culture and values, and perceptions that the values of academia are changing. Individual and collective experiences of exclusion and othering prompted a movement of defiance, fostering the development of the CoP which, over its first three years of existence, has achieved institutional recognition, access to resources, competitive research funding success, significant publication outputs, and, growth and stability in group membership. Multidisciplinary engagement and focus, the group's interpersonal style based on mutual respect and support, and flexibility through empathy have fostered these successes. Ultimately, we argue that the success of a CoP is not determined by tangible output alone. Rather, it is characterised by equity, collaboration, genuine participation and empowerment.

As part of this presentation we will invite members of the audience to share their experiences of SoTL CoPs, with the aim of exploring what works (and does not work) within and across contexts. The cross-fertilization of information provides the opportunity for all audience members, whether or not they are currently engaged in a SoTL CoP, to take away ideas for implementation within their own institutional settings.

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## Session A1

Paper

### RESEARCH ON WRITING INSTRUCTION LEADING SOTL

Carmen Werder<sup>1</sup>

*1 Western Washington University*

What initially engages faculty in the scholarship of teaching and learning? Certainly the ultimate expectation of going public with findings does not represent its first appeal. This paper explores how a commitment to the role of writing in learning can often lead the way to an ongoing engagement with SoTL. As James Applegate suggests in *Classroom Communication and Instructional Processes: Advances Through Meta-Analysis* (2006), 'communication is uniquely positioned to help higher education find its way to full engaging SoTL' (396). Scholars like Applegate and Barbara Mae Gayle have made a solid claim for this affinity between the study of speech communication and the study of teaching and learning, and others like Rebecca Pope-Ruark (2012, 2014) have also made a strong case for turning to the study of written communication as fertile ground for understanding better how to approach SoTL. The 2011-2013 Elon University Research Seminar on Critical Transitions: Writing and the Question of Transfer provided 45 composition scholars (including this author) a wonderful opportunity to ground cross-institutional writing studies in the study of learning generally and in the study of transfer in particular. The many resulting conference presentations and publications (several of them forthcoming) give testimony to that felicitous marriage.

The author traces an institutional story of how writing instruction and research on writing instruction have prompted the creation of a number of SoTL structures and events and, in the process, a cross-disciplinary SoTL community of practice. While this study tracks the evolution of a broader SoTL community in one institutional context, it provides evidence of how SoTL scholars, especially those working in professional development sites, might collaborate even more closely with their composition studies colleagues. The discussion outlines

an institutional model for a summer Backwards by Design writing instruction retreat and Writing Research Fellowships (faculty-student studies of writing instruction) that have led to many other SoTL related events and practices including an annual SoTL residency and ongoing SoTL writing groups that include student, staff, and faculty researchers. It draws on faculty testimonies from surveys and semi-structured interviews with faculty who have participated in the Writing Research Fellowship program and other professional development activities related to writing instruction to discern how that participation has influenced their approach to teaching as research. While multiple variables influence whether faculty adopt/embrace SoTL approaches and practices, data from these faculty surveys and interviews suggest that seeing connections between enhancing writing instruction leads to a natural appreciation for understanding the value of SoTL. In this way, a professional development program that deliberately connects faculty engaged with writing pedagogy may provide an inviting pathway to SoTL institutionally.

Participants will have an opportunity to talk about ways that SoTL practitioners across various disciplines in their institutions might take advantage of the natural affinities that exist between research on teaching writing and research on teaching and learning. They will also be invited to explore ways for how small communities of SoTL practice might coalesce within their institutions.

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## Session A2

### Roundtable

### LEADING THROUGH THE CENTER: ONE CETL'S CONTRIBUTIONS TO INSTITUTIONAL CHANGE

**Thomas Pusateri<sup>1</sup>, Diana Gregory<sup>1</sup>**

*1 Kennesaw State University, Kennesaw, Georgia, United States of America*

Participants in this roundtable will discover how centers for teaching and learning can and do serve as catalysts for institutional change. The facilitators are currently the Associate Director for the Scholarship of Teaching and Learning and a former Faculty Fellow for Creativity and Innovation at the Center for Excellence in Teaching and Learning (CETL) at a regional comprehensive learning-centered university in the United States. The facilitators will provide historical context and examples of how the CETL contributed substantively to strategic initiatives that have resulted in transformations in organizational structures and institutional climate supportive of student learning. Throughout the roundtable, the facilitators will invite participants to share experiences of creative and participatory leadership initiatives involving faculty development at their institutions, highlighting successes, challenges, and lessons learned. The facilitators will focus the conversation on recommendations from Hutchings, Huber, and Ciccone (2011) and explore how faculty development centers can promote evidence-based practices from the scholarship of teaching and learning to direct institutional change that involves multiple stakeholders and addresses emerging trends in higher education.

Historical context: Based on recommendations from faculty leadership teams in 2002, the administration restructured CETL to expand its ability to develop teaching-related programs and initiatives that enhance faculty instruction and student success, appointing a full-time CETL Director, full-time Associate Director, and half-time Faculty Fellows each of whom focuses on a strategic initiative related to teaching and student learning. These initiatives included e-Learning, Diversity in the Curriculum, Advancing Undergraduate Research, Community Engagement, Creativity and Innovation, and Community Engagement. CETL has grown its staff to include an Executive Director, three Associate Directors (one for Faculty Support, one for Scholarship of Teaching and Learning, and one for Graduate Student Support & Undergraduate Research/Creative Activity), four Faculty Fellows (two for Learning-Centered Teaching, one for Part-Time Faculty Support, and one for High-

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Impact Practices) and two Instructional Designers who support technology-enhanced learning. Throughout the years, the CETL staff has acted as facilitators for campus change, contributing to changes to organizational structures that began as Faculty Fellows or Associate Directors but have then grown into their own offices such as the Distance Learning Center, the Office of Diversity and Inclusion, and the Office of Institutional Effectiveness. This has allowed CETL to shift its focus on other emerging issues. CETL's staff collaborates with campus leaders to promote and document institutional effectiveness in student learning, some of which have led to external recognition for university accomplishments. For example, CETL staff members were principal authors of successful applications for the 2008 Council of Higher Education Accreditation' Award for Institutional Progress in Student Learning Outcomes, NAFSA's 2011 Senator Paul Simon Award for Campus Internationalization, and 2015 Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching. Current CETL staff members have sat on the governing boards of the Professional and Organizational Development Network in Higher Education, the International Consortium for Educational Development, the Southern Regional Faculty and Instructional Development Consortium, the National Council on Undergraduate Research, and the Society for the Teaching of Psychology.

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## Session A3

Roundtable

### BEYOND THE ACADEMIC ESSAY: AUTHENTIC ASSESSMENT IN THE UNIVERSITY CLASSROOM

Carol Miles<sup>1</sup>, Keith Foggett<sup>1</sup>

*1 University of Newcastle, Australia*

Perhaps one of the most universally applied assessment tools in universities is the academic essay. While a preponderance of research has addressed the effectiveness of the traditional 'essay' or 'term paper' assignment for the assessment of the development of students critical thinking and problem solving skills, little has been published about the general efficacy of the tool for measuring specific course learning outcomes. With the plethora of authentic assessment tools currently available, it is questionable whether the traditional essay provides the best means for measuring student academic achievement.

Written assessment tools often present insurmountable challenges for first year students who feel it necessary to focus on the writing and referencing process (previously unfamiliar to them) and not on course content. They often think of these activities as 'research' and see little relationship to their chosen areas of study (especially in the professions and sciences). These assessments also represent tremendous marking load for teaching academics. Is it worth it? Is academic writing really the primary skill all current university students need to learn?

For the purposes of this roundtable discussion, the term paper/academic essay is defined as a long piece of expository writing addressing either a specific or general topic that is required to be written in standard essay style and referenced academically in one of the myriad of referencing styles.

Addressing themes 2 and 3 of the conference, future assessment paradigms to engage a diverse student population will be the focus of discussion. We will present a brief review of evaluation research regarding the academic essay, and current thinking around how this may or may not be congruent with the engaged student activities desirable for the modern (often blended) classroom. Focus of the discussion will surround whether the skills developed and measured through students writing of essays are those overtly stated in specific

course outlines/syllabi, or whether the majority of the effort is directed toward some common generic skills (such as critical thinking) that university teachers feel responsible for developing regardless of the content of the course. Current research indicates that if this is the case, the essay may not be a particularly effective method of assessing evidence of competency. Roundtable facilitators are Professor Carol Miles, Director of the Centre for Teaching and Learning at the University of Newcastle whose expertise is in the area of psychometrics and educational measurement/university assessment, and Keith Foggett, Associate Director of Learning Development, responsible for providing student support that focusses on assisting students in developing academic writing skills to succeed at academic essays.

A number of examples of traditional essay assignments from a variety of disciplines will be provided, and participants will be asked to determine the learning outcomes that are actually being measured, the activities students will need to perform to successfully complete the assignment and the objectivity of the grading procedures. A selection of more authentic assessment tasks will be presented and participants will be asked to reconsider the validity of the essay assignment compared to other forms of assessment.

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## Session A4

Paper

### ALL JOURNALS ARE EQUAL, BUT SOME ARE MORE EQUAL THAN OTHERS: SPOILT FOR CHOICE OR JUST CONFUSED?

Patrick Crookes<sup>1,2,3</sup>, Fabienne Else<sup>4</sup>, Jen Lyons<sup>5</sup>, Lucia Tome<sup>5</sup>

*1 Faculty of Science, Medicine and Health, University of Wollongong*

*2 Faculty of Health & Social Sciences, University of Huddersfield*

*3 School of Nursing, University of Stavanger, Norway*

*4 Faculty of Science, Medicine and Health, University of Wollongong*

*5 University of Wollongong*

The proposed presentation will provide an overview of the processes followed to identify quality Learning and Teaching journals, then demonstrate a web-based portal which staff can access to explore details regarding a range of useful information about the journals covered. To explain:-

In recent times, we have seen the emergence of a plethora of new online academic journals, all claiming to have high standards and professional esteem. It seems that the academic profession has become spoilt for choice. With such quickly rising numbers it is difficult to assess which journals are of a high quality and which are not. This issue becomes even more problematic when one considers the growing pressure placed on academics, to publish in 'high quality' journals.

Since the emergence of Excellence in Research Australia (ERA) ratings of universities in Australia, there has been a push for scholars to publish in quality journals. This will surely extend to other countries with the increasing emphasis being put on (research focused) International Ranking systems and research evaluation exercises. But how is quality defined? From the assessment criteria of ERA's 2015 guidelines, 'quality' appears to be denoted by a journals indexation in one of the largest journal indexing bodies - Scopus. Some universities such as the University of Wollongong are following this path by requiring faculty to publish in journals indexed in either Scopus or Web of Science in order to be considered 'research active' (Marchant, 2013). But what does that mean for SOTL scholars? In creating the Wollongong Academy of Tertiary Teaching and



Learning Excellence (WATTLE), issues surrounding what constitutes a 'quality journal' in teaching and learning became apparent. The authors aim to enhance scholarly approaches taken by staff to teaching and learning and this includes creating clarity about Scholarship of Teaching and Learning (SOTL) outputs and how to generate them. When it became clear that clarity around SOTL outputs was sorely lacking, the Quality Journal Project was initiated.

This Quality Journal Project surveyed SOTL scholars internal and external to the university, to find out what journals they thought were of a high quality in teaching and learning and to extract some views on the current state of journals in the field. The named journals were then extracted and correlated with information from the University of Wollongong library to produce a resource outlining useful information for prospective authors, for over 100 scholar-recommended journals. The information includes JCR and SJR impact factors, index coverage in Web of Science and Scopus, as well as practical publication information including frequency, acceptance rates and review periods. It is hoped that this resource will assist academics to make sound, evidence-based decisions about where to publish their SoTL work. The project now continues in regard to discipline-specific journals which publish learning and teaching focused papers.

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#### Session A4

Paper

#### LEADING LEARNING AND THE SCHOLARSHIP OF CHANGE

Patrick Crookes<sup>1,2,3</sup>, Peter Draper<sup>4</sup>, Glenn Mitchell<sup>5</sup>, Ellie Crookes<sup>5</sup>

*1 University of Wollongong, Australia*

*2 University of Huddersfield, UK*

*3 University of Stavanger, Norway*

*4 University of Hull, UK*

*5 University of Wollongong, Australia*

The University of Wollongong is developing and broadening conceptions of what academic work is and how it is valued, as an institution. In essence we are attempting to develop ways of fulfilling the rhetoric which abounds about all academic work (not just research) being important and valued. Much work has been undertaken at UoW to enhance reward and recognition for teaching. One element of this has been the development and introduction of the Academic Performance Framework (APF) which provides an articulation of the stepped levels of expectation in terms of level of influence, impact and leadership in Learning and Teaching, Research and Governance and Service as an academic scales the ladder of promotion.

A key feature of the APF is its emphasis on the impact of the work of academics. As a result, the University needed to articulate more clearly for staff how they might follow a career path focusing on teaching and what evidence they might think about collecting and collating with respect to their learning and teaching activities. To this end, an 'impact catalogue' was generated, aimed at expanding conceptions of what constitutes impact not only at UOW but across higher education both nationally and internationally.

This led us on to the need to articulate an evidence-based taxonomy of learning and teaching-related activity which has now been shared with staff as it underpins reward and recognition processes; Continuing Professional Development (CPD); and increasingly, HDR policies and procedures at UoW. The taxonomy encompassing 'Scholarly teaching; SoTL ; and SoTL Leadership is based on a systematic review of the relevant literature, including work that explores how they have been

defined and discriminated from each other. One element of the proposed presentation will be an exemplification of the taxonomy and the evidence underpinning it.

The authors are not suggesting that this taxonomy is completely new. It is based on the research of Lee Shulman and his argument that scholarship is characterised by having been exposed to peer-review; as well as the work of Glassick, Huber and Maeroff (Scholarship Assessed, 1997). What we believe is 'new' and what ISSOTL members will find most interesting and useful, is the further work we have done to make clearer, what those practices are and what impacts might best be seen to exemplify scholarly teaching, SOTL and SOTL Leadership. Little has been written thus far regarding SOTL Leadership. Dr Draper has undertaken interesting work which will be shared in the presentation; along with the taxonomy; key components of the APF; and the impact catalogue.

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#### Session A5

Paper

#### GREAT UNEXPECTATIONS - A JOURNEY THROUGH STUDENT ENGAGEMENT

Earle Abrahamson<sup>1</sup>

*1 Senior Lecturer, University of East London*

Student engagement is a complex phenomenon often fraught with difficult descriptions and troubled spaces (Swaner, 2007). Researchers have tried to analyse the core elements of engagement in an attempt to differentiate engaged learners from their disengaged colleagues. The problem with student engagement is that the language of engagement means different things to different people. Barkley (2010), for example, considered the student engagement experience as one laced with passion and creativity. The journeys through student engagement differ significantly and provide an opportunity to ask difficult questions as opposed to finding a simple solution or single technique. Student engagement transcends the classroom and affords students the opportunity to become co-creators of their own learning and knowledge development (Bowen, 2005). This small scale SoTL study explored the use of differentiated and often unexpected teaching activities to engage learners with their learning content. The study sort, to understand the relationship between using unexpected learning activities and presentation techniques, (often with subtle humour cues), to engage a previously disengaged and disgruntled group of final year clinical sport therapy students. The group had experienced a higher than usual attrition rate. Faculty were concerned with the number of students leaving the programme but more importantly their individual and collective experiences whilst students on the programme. The programme was a newly validated one which had yet to see its first group of graduates. During a brief seminar series on trauma management, the group were exposed to classroom activities that triggered student engagement responses. The learning content was, at times, presented with humour and puns, which enabled the students to laugh and dispel their fears of learning difficult emergency management protocols. This was coupled with a carefully controlled tutor input dynamic. At one point in the class session, the tutor instructed a student in a nearby class to enter the class and collapse in front of the students. This created a panic, yet encouraged the students to apply their emergency skills learned. At the end of the seminar series, the tutor held a focus group meeting with the students to elicit feedback on specific elements of the class activities. The students' narratives and personal experiences revealed that the teaching approach was creative and innovative and encouraged them to be alert at all times as they were unaware

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what may happen in the classroom. One student reported that these morning lectures made a considerable difference in her life and brightened it so much that it scarcely seemed the same. Creating a learning climate wherein students can feel comfortable with their learning, await for an event to occur, or simply appreciate humour within a presentation, builds a platform for students to appreciate not only learning but more importantly learning application (Blumberg, 2009). The study was able to identify how students choose to learn and what criteria they base their learning experience upon. The findings from the study will now be used to consider a larger group of learners across different years of study to assess their experiences and expectations. The audience will have the opportunity to interact with the presenter through questions and answers and shared experiences. This presentation best aligns with the conference theme of diversity in the academy.

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## Session A5

Paper

### LEADING INSTITUTIONAL CHANGE THROUGH LEARNING AND TEACHING COMMUNITIES

**Tara Newman<sup>1</sup>**, Jacquie McDonald<sup>1</sup>, Helen Partridge<sup>1</sup>, Lesley Jolly<sup>2</sup>, Karen Sheppard<sup>2</sup>

*1 University of Southern Queensland*

*2 Strategic Partnerships, Research, Evaluation, Training, Community*

The potential for SoTL initiatives to influence practice has been an important issue explored throughout the literature since Boyer's early discussions on scholarship. While it is now generally accepted that individual inquiry and reflection into teaching and learning issues can positively impact one's practice, the interest in SoTL has shifted from individual scholarship to wider contexts. Academic developers and leaders have expressed a desire to better understand how SoTL initiatives can be successfully implemented and embedded at the institutional level as a strategy to not only influence individuals' practice, but contribute to a broader shift in cultural perspectives on teaching and learning.

This paper will discuss recent research on an institutional initiative utilizing SoTL as a strategy to simultaneously address staff professional development needs and quality enhancement of learning and teaching. The Learning and Teaching Community Grant Initiative was developed to promote/support learning and teaching initiatives, while investigating and resolving specific educational issues of particular importance to the institution. Key aims of the initiative include:

- the formation of academic communities focused on enhanced Scholarship of Teaching and Learning (Cox, 2004; Wenger, 2014); improved educational practice;
- the identification and support of emerging scholars at the institution; and
- broad impact on institutional value of SoTL activities.

In early 2015, three Learning and Teaching Communities were established to enable the University's academic and professional staff to collaborate on learning and teaching issues. The research focus is on the 'lived experience' (VanManen, 1990) of participants, using observation, interviews and focus group methodology. The project will conclude with a Most Significant Change (MSC) analysis in which participants will be asked to identify significant change the project made in their lives. They will then share those reflections, and decide as a group on what they count as most significant (Davies & Dart, 2005). This articulation of the process and outcomes to participants provides feedback and

builds transformative knowledge, in line with the philosophy of Learning Communities that underpins the initiative (Cox, 2004; Wenger 2014). Data collected is being analysed to provide formative and summative evaluation of the project to determine the implications for future Learning and Teaching Communities as institutional SoTL initiatives.

Preliminary findings of the investigation into the impact of this initiative will be shared. Evidence will be reported regarding:

- effective practices identified for using a SoTL community model as a professional development strategy; and
- indicators of change in the attitudes and behaviors of participants collectively and individually.

These findings will build upon previous work about the potential for learning communities. It is expected that the findings will have practical significance for those striving to enhance practice and promote an institutional culture that recognizes and values SoTL (Furco & Moely, 2012; Schwartz & Haynie, 2013).

To promote audience engagement, participants will have time to:

- reflect on their perspectives in small groups;
- share previous experiences with institutional SoTL initiatives (whole group); and
- participate in a Q&A session with presenters and other participants.

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## Session A7

Paper

### UNDERGRADUATE CONSTRUCTIONISM: CONCRETE LEARNING FOR FUTURE ENGINEERS

**Chris Browne<sup>1</sup>**, Tharun Rajan<sup>1</sup>, James Gan<sup>1</sup>, Hye La<sup>1</sup>, Kevin Buckmaster<sup>1</sup>

*1 Research School of Engineering, Australian National University*

Engineers are first and foremost problem solvers. The future engineer needs to be proficient with a broad range of problem-solving skills, in addition to the specialist knowledge currently taught in undergraduate engineering programs (King 2008). Further, the student engineer needs room to develop into creative, capable and convincing problem solvers. This need is not unique to engineering, and presents significant challenges for educators in many disciplines today and into the future. In response to these challenges, we present a hands-on demonstration of practical activities that were run in an undergraduate systems engineering course. These were codeveloped with research students to promote deep learning in a face-to-face environment, and were designed to promote active problem-solving. Each were embedded into classes within a similar framework of scaffolded priming and student-run tutorial facilitations. Scaffolded priming draws upon the 'flipped' classroom philosophy of self-service preparation (Sankey and Hunt 2013). This allows students to arrive at the face-to-face session with a basic understanding of the new content. A subset of students then work in groups to design and develop their own tutorials (Baker 2008), which they then deliver to the rest of their tutorial group as part of class assessment (Smith and Browne 2013). This empowers students to reach a deep understanding of course concepts through being the facilitators of the week's theory in a low-risk and collaborative environment. To encourage students towards designing active learning approaches, open-ended concrete learning activities are used to help facilitators assimilate new knowledge with knowledge from other weeks. This concrete learning builds on the constructionist approach described in Papert (1980). Facilitators are required to develop the resources

for these activities and integrate the activities into their tutorial facilitation. The case study activities cover the systems engineering topics of requirements analysis, functional flow, subsystem integration and testing & evaluation. Student learning is evaluated through a paper-based quiz and survey, which was completed at the end of each activity. The results suggest that hands-on activities in student-run tutorials are an effective way of enabling students to discover course learning outcomes for themselves; however, a critical reflection on the activities by tutors in the course shows that although the activities improve the overall quality, in some instances creativity has been stifled. The approaches of each case study are then generalised as a model for building effective learning environments for future problem-solvers.

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### Session A7

Paper

#### **INCORPORATING EXPERIENTIAL LEARNING IN THE CURRICULUM- THE SKILLS FUTURE INITIATIVE**

Ivy Chia May<sup>1</sup>

<sup>1</sup> SIM University

Universities and other institutions use real world case studies as pedagogical tool to bring problems and approaches from the business world to the classroom. Previous research on case-based instruction has suggested that case studies make the content easier to remember, make the class more enjoyable for students, and increase student attendance (Corey, 1998; Hammond, 2002; Herreid, 2005). Cases may be classified as tools that allow one to simulate managing a situation.

While all use case as a basis for teaching, not all use cases in the same way. Some would deliver it lecture style while others would have elements of role play within a classroom. We argue that such case teaching approach does not lend itself to effective learning as learning is done in an artificially contrived manner. It is also less effective in developing critical skills and knowledge to work in a dynamic business environment (McCarthy and McCarthy, 2006). We propose a case teaching approach which deploys life simulation approach. It requires students to react within an authentic environment setting where they have to react under pressure when confronted with challenging circumstances. Students are immersed in authentic situations that require their on-the-spot and quick interventions to address the real-world problems presented in the case in a fun and engaging way. This is also in line with Kolb's experiential learning theory which combines experience, perception, reflective observation and active experimentation (Kolb, 1984).

In the proposed business strategy approach, students in teams will receive a business case material which describes a 'live' company background, dilemma faced, and request for business solutions. Students play the role of consultant providing the business solution. Teams are given site visits to a particular company, access to interviews with senior management and staff, and are to compete to come up with the best proposals to address stated case issue within six months. They are expected to present their proposals towards the end of the project. In the process of working through the proposals and interacting with people from the industry, students acquire a deeper understanding of the industry and acquire different facets of business and marketing skills. Preliminary findings of the project will be shared with participants.

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### Session A8

Paper

#### **BOUNDARY CROSSING AND TROUBLESOMENESS: EXPERIENCES OF SCHOLARS IN A SOTL DEVELOPMENT PROGRAM**

Janice Miller-Young<sup>1</sup>, Michelle Yeo<sup>1</sup>, Karen Manarin<sup>1</sup>

<sup>1</sup> Mount Royal University

Engaging in the Scholarship of Teaching and Learning (SoTL) can have many benefits for faculty members. However it can also be challenging, particularly for those who are not experienced in teaching and learning-related research (e.g. Kelly et al., 2012; Simmons, et al., 2013). The SoTL Scholars Program at our Canadian undergraduate, teaching-focused University was designed to support an annual cohort of scholars to develop individual research projects to be conducted in their own course. The structure of the program has been described elsewhere (Authors, in press). Participants in the program from 2009-2013 were invited to participate in this study, which consisted of a survey and follow-up interviews inquiring into the influence of the program on these scholars teaching, scholarship, and career trajectories. During the interviews, many participants described feeling discomfort during their journey into SoTL. In this presentation we will analyze scholars experiences through the lens of threshold concepts, in particular the troublesome experience of being in a liminal space (Meyer and Land, 2003, 2005). In moving through this liminal space, one must let go of one's prevailing way of seeing and one's prior understanding. It is the affective nature of this transition which is the focus of this presentation. Quotes from the interviews will be presented to illustrate that scholars experienced discomfort which was associated with a number of thresholds articulated by Webb (2015): the nature of SoTL, conceptions of research, studentness, subjectivity, and boundary crossing. Session participants will be invited to join us

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in discussing implications of this research for facilitating and supporting faculty members on their journey into SoTL.

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## Session A8

Paper

### THE LOST ORIGINALITY OF LEADERSHIP

Robert Nelson<sup>1</sup>

*1 Monash University*

Good learning outcomes make good followers. Fatefully, we set up student success to fulfill the motif of following as opposed to leadership. For a student to succeed, he or she must follow the syllabus and its examples, follow the content and questions, follow the marking rubric and meet the intended learning outcomes.

The clarity and excellence of learning outcomes could be measured by the ease with which students follow them. It is all about following and not at all about leading, in the same way that alignment predicated on learning outcomes makes little room for genuine student-centredness.

Like student-centredness, leadership cannot easily be accommodated within the learning outcome of any unit, subject or module. Depending on the chosen definition, leadership is about taking the lead. The cornerstone of the concept is initiative, especially in a context that involves other people who may be of a different or half-hearted persuasion.

I argue, however, that following has only ever taken on a negative connotation since the development of the word 'leadership', which took place in the industrial period. Leadership today has an adjectival character, proposing qualities of a psychological kind that predispose people to assume control and take initiative, be enterprising and own responsibility. These uses belong to the twentieth-century vocabulary of management psychology whose cultures have struck deep roots in the Euro-American organizational psyche, affecting education across the anglophone world with astonishing ubiquity.

Beginning with the term 'outcome' (as in learning outcome or ILO) the paper questions the basis of stipulating in advance what a student will learn or what skills he or she will acquire. Suspecting that the closure of outcomes forecloses on student-centredness, imagination and leadership, the discussion ponders the rightness of this mainstay of alignment. The analysis suggests that the more a learning outcome accommodates concepts such as student-centredness, autonomy, imagination and leadership, the less it resembles an outcome but more a moral exhortation or personal encouragement or motivational spur: vague, platitudinous, awkwardly rhetorical and redundant.

Both leadership and student-centredness sit unhappily in an educational framework which is structured around competition for high grades. Through the same philological method, the paper examines the competitive economy of student success and reveals how the grid of constructive alignment is reactive and anxiety-driven rather than proactive, encouraging student independence and intellectual initiative.

With admixtures of observational description, the philological method has been used in educational contexts by Nelson and Dawson because of its peculiar aptness in handling subjective and intuitive content. The paper demonstrates how the historical backdrop of educational language helps us triangulate the otherwise evanescent and aspirational terminology that contemporary teaching and learning discourse takes for granted; and because they provide an alternative perspective on well-known concepts, the results of the inquiry are challenging and counterintuitive.

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## Session A9

Paper

### EXPLORING ASSESSMENT LITERACY IN HIGHER EDUCATION: ACADEMICS ACCOUNTS OF PERSONALISED, LOCALISED AND INSTITUTIONAL ASSESSMENT PRACTICES

Maree DinanThompson<sup>1</sup>

*1 James Cook University*

Literature: Assessment literacy has been pitched as key to building capacities for teachers and students and for this study, academics in higher education. In 1991, Stiggins suggested that assessment literacy is characterised by understanding how to design quality assessment tasks, scrutinizing assessment data and asking questions about what the assessment tells students' (p.535). More recently, Hay and Penney (2013) proposed assessment literacy as a framework for capacity building in assessment. Outlined below are the four components adapted for academics (Hay and Penney, 2013, p. 73):

\*Assessment comprehension focusing on knowledge and understanding of assessment expectations and conditions of efficacy;

\*Assessment application focusing on the conduct of assessment in terms of either teaching, implementation or student engagement;

\*Assessment interpretation focusing on making sense of and acting on the information that is collected through assessment practices, including traversing and negotiating the social relations of assessment;

\*Critical engagement with assessment focusing on awareness of the impact or consequences of assessment and challenging the naturalness' of assessment practices, performances and outcomes.

The framework brings together the technical capacities for conducting assessment, an understanding of sociocultural



influences and the consequences of assessment, and the academic's personal values, beliefs and routine practices (Hay and Penney, 2013: 73-74). This is a new concept for exploring assessment practices in higher education.

**Method:** This qualitative study draws on autoethnography to explore academics reflections about assessment design, enactment, review and change. Autoethnography is a form of self-study, the process is historically derived from concepts and notions of reflective practice' (Brown, 2011, p. 21). In this study autoethnography prompted both introspection and perception as:

an autobiographical genre of writing and research that displays multiple layers of consciousness, connecting the personal to the cultural. Stories are presented in a personal and academic voice framework (adapted from Sparkes, 2004 and McMahon and DinanThompson, 2008) where the personal voice (written in italics) is authentic, immediate and evocative and the academic voice provides critical reflection and analysis of social and cultural practices.

**Evidence:** Recounts from five academics are presented to identify and analysis the four assessment literacy elements and their interaction in higher education assessment practices. Personal beliefs about valued knowledge of subjects and assessment types and conditions influence application and interpretation. Critical engagement with assessment is emerging, and more evidenced in 'high-stakes' subjects. Localised activities, such as involvement in Assessment Meetings' that promote moderation, workshops and guidelines that promote fit-for-purpose' assessment (Race, 2006 ; DinanThompson, 2009) as well as opportunities for substantive conversations in assessment networks appeared significant. At the institutional level, assessment practices were influenced by policies and procedure both positively and negatively.

**Conclusion:** Autoethnographic accounts of academics assessment practices reveal that assessment design, enactment, review and change is personal, localised and an institutional activity. All academics demonstrated that engagement in substantive conversations in and about assessment are influential and call for reflective practice.

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## Session A10

Paper

### CONNECTING LEADERS IN LEARNING AND TEACHING THROUGH NETWORKED LEARNING

**Trish McCluskey<sup>1</sup>**

*1 Deakin University*

This paper outlines the evolution of a Professional Learning Network (PLN) in the complex landscape of an emerging and turbulent Tertiary Education sector in Australia. It highlights the need to re-calibrate the existing professional development paradigm from that of scheduled workshop activities to more responsive 'just in time, just for me' engagement that meets the needs of academic leaders at critical points in their leadership journey. The paper describes the design and evolution of a Learning and Teaching leaders network in a metropolitan university in Melbourne, and how they were engaged to participate, share and feed forward their experiences and challenges of 'becoming' leaders in learning and teaching. The paper highlights how the design, delivery and evaluation were developed, drawing on the 'wisdom of the crowd' and the theory of 'connectivism'. The emergent CPD model is also shared with emphasis on the affordances and functionality of located, social and multimedia milieu. The proposal incorporates an action research approach premised

on the principles of Connectivism which espouses the notion that 'Knowledge is distributed across a reciprocal network of connections, and that learning develops from the ability to construct and traverse those networks' (Siemmens, 2005 & Downes, 2007)

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## Session A10

Paper

### COMMUNITIES OF PRACTICE AS A MEDIATION FOR INSTITUTIONAL CHANGE

**Melanie Brown<sup>1</sup>**

*1 RMIT Vietnam*

Improving student experience is imperative in contemporary higher education due to the ever growing need for institutions to increase and maintain their market advantage in an increasingly competitive environment. Current approaches to innovation in Higher Education typically emphasize blended learning, flipped classrooms and flexible delivery, resulting in directives from leadership to offer a technology enhanced delivery of curriculum.

Teaching staff tasked with implementing these changes often require not only technical training, but development support that enables them to engage with teaching practices that they are unlikely to have ever experienced themselves as learners. The question arises as to how they experience the push for change from above, and any concurrent mechanisms put in place to support them.

Communities of Practice (CoPs) have emerged as fertile soil for initiating innovation, professional learning and supporting change, and are often positioned as emerging organically, in response to the needs and interests of participants (Wenger 1998; Wenger, McDermott and Snyder, 2002). In later work however, the importance of management support for and involvement in communities of practice is noted by Wenger (Wenger 2004).

The use of CoPs in higher education has been demonstrated to have positive impacts on teachers' levels of innovation in the face of learning & teaching challenges (Buckley 2012; Buckley & Du Toit 2010; Cox 2013; Green et al. 2013; Warhurst 2006). The transfer of the framework from the corporate to the academic milieu is not always smooth however given the differences between these contexts (Holt, Palmer & Challis 2011; Nagy & Burch 2009). This provides a starting point to investigate how institutions of higher learning can adopt the CoP framework in order to develop as learning organisations.

While not subverting the ideal of CoPs as a participant led environment, this presentation investigates how participation in an institutionally facilitated CoP impacted participants' responses to change initiated by institutional leaders and the extent to which a CoP approach was able to promote engagement and ownership of this change, and thus deeper investment in positive outcomes. Preliminary findings will be presented from a thematic analysis of interviews with CoP members focused on their perceptions of the value of participation. As the perception of the subject is central (Morrison 2012) the research project uses a phenomenological approach as a means to understand the commonalities among the experiences of the individual CoP participants (Creswell 2007).

Reflection on the challenges of inter-subjectivity for the researcher as participant-observer in the CoP will be offered. Interaction among and with the audience through structured discussion will focus on exploring comparable experiences.

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## Session A11

Paper

### CREATING VIRTUAL COMMUNITIES: ENGAGING STAFF AND STUDENTS IN HOLISTIC COURSE-LEVEL LEARNING ENVIRONMENTS

Adam Cardilini<sup>1</sup>, Joanne Smissen<sup>1</sup>, Siva Krishnan<sup>1</sup>, Malcolm Campbell<sup>1</sup>

<sup>1</sup> Deakin University

2. Future students, future pedagogies, future learning paradigms As Australia moves towards a structured model for assuring graduate capabilities for all university courses, it has become apparent that integrating over-arching course-level thinking and outcomes in complex curricula is challenging. Too often, university courses are assembled rather than design for purpose. Course cohesion can be easily undone with staffing changes and reallocation of course resources. Students as well as academics usually focus on units of study and assessment tasks within, and often are not aware or give limited attention to course emphasis and outcomes. Lessons from experience

and previous research indicate that assessment drives student learning and most students may still concentrate on the task at hand. A well-designed curriculum is not enough it must be promoted in multiple ways for students to develop an integrated understanding of their course. In this paper, we present a strategic project that was designed to promote virtual course communities by exploiting the potential of CloudDeakin, which is the Learning Management System used at Deakin University. The aim of our project was to design and develop virtual communities through CloudDeakin, provide course-level learning experiences, learning support and opportunities for interaction between students across various year levels as well as the team of teaching staff within a degree program. This project is part of a broader institutional project that focussed on assuring graduate capabilities through reimagining assessment and integrating learning in all aspect of course design. Here, we report the outcomes, challenges, success and learning from the implementation of our goal from both an academic and student perspectives.

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## Session A11

Paper

### YOU WANT US TO TAKE/TEACH OUTDOOR EDUCATION ONLINE?: STUDENT AND LECTURER PERCEPTIONS OF EXPERIENTIAL LEARNING AND TEACHING IN THE ONLINE SPACE

Janet Dymant<sup>1</sup>, Heidi Smith<sup>1</sup>, Allen Hill<sup>1</sup>, Jill Downing<sup>1</sup>

<sup>1</sup> Faculty of Education, University of Tasmania

Rationale/Questions: At the heart of outdoor education philosophy, theory, and pedagogical practice lies experiential learning (Ord & Leather, 2011). This commitment to the educative potential of experience is not, however, solely confined to outdoor learning environments or educators. From the early 20th century, Dewey (1938/1997) was extolling the virtues of experience in learning and teaching across all aspects of schooling. As a result of Dewey and others' thinking, experience and experiential learning have come to be part of many learning areas in higher education, including many professional degree programs such as medicine, nursing, teaching, and engineering. This paper explores how these traditionally experiential learning areas are being taught in the online space. This is particularly timely, given that online teaching and learning is becoming increasingly widespread across the higher education sector. The proliferation of online learning in higher education has meant that many lecturers/educators have had to creatively think of new and innovative ways to meet the important learning intentions that would normally be met through experiential learning pedagogies. This study reports on a research project that explores if and how experiential learning strategies can occur in the online space. The context for the study was a suite of outdoor education units that are taught online at an Australian university.

Methods: We sought to understand student and lecturer experiences of learning and teaching outdoor education courses online. We used a case study approach which employed semi-structured interviews (for students, N=8) and (auto) ethnographic interviewing methods (for lecturers, N=2). As suggested by Cohen, Manion and Morrison (2011), case studies 'provide a unique example of real people in real situations' (p.289). The use of case study in this instance informed both the research design and how we negotiated issues such as trustworthiness and authenticity in data interpretation and representation.

Results/Outcomes: We present the results of experiences of students and lecturers who studied and taught outdoor

education in the online space. The benefits, challenges, opportunities and tensions 'for both students and lecturers - of this mode of delivery are presented. Themes that emerged from the research study include: lecturer readiness and preparation, student/lecturer engagement, pedagogical strategies, supporting technologies, teacher identity, and professional learning requirements.

Implications: Whilst we recognise the very notion of teaching traditionally experiential learning areas online may be contested, oxymoronic, and perhaps even objectionable to some, this paper encourages educators in higher education to carefully and critically engage with conversations about both the challenges and affordances that online teaching and learning may offer. The findings of this paper should be of interest to those making the shift from the face-to-face space and into the online learning arena regardless of subject area, but in particular, to those who are teaching in areas that typically incorporate experiential learning approaches.

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### Session A13

Paper

#### **ESTABLISHING WAYS IN WHICH NURSE EDUCATORS SEEK TO MAKE THEIR TEACHING MEANINGFUL AND ENGAGING FOR NURSING STUDENTS**

**Kay Crookes<sup>1</sup>**, Patrick Crookes<sup>1</sup>

*1 University of Wollongong*

Teachers need to be able to facilitate students to engage in learning about things they may at the time, see as boring, unimportant or irrelevant. In practice disciplines such as nursing this is relatively common as and when the content being covered is not seen to be directly applicable to what the student perceives to be the reality of practice (Diekelmann 2004). A systematic literature search showed scant reference to 'meaningful and/or engaging teaching' and there is no agreed terminology used to express it or to facilitate finding material on it. However there is an international interest in the need for educators to move away from the more traditional passive, didactic approaches to teaching.

A study was undertaken to facilitate the collection and collation of 'tricks of the trade' of experienced nurse educators, in relation to meaningful and engaging teaching techniques. It is hoped that the sharing of local scholarship will help to change practice more broadly by facilitating 'Craft Transfer' (essentially the sharing of expertise) between educators in nursing and in other disciplines. There will be an opportunity to explore this assertion briefly during question-time in the session. As there is little available information on how nurse educators attempt to make their teaching as meaningful and engaging as possible for students, an exploratory qualitative study was undertaken as the first project in this work. The aim of the project was to establish 'how nurse educators seek to make their teaching meaningful and engaging for students'.

Thirteen nurse educators who responded to a 'call for interested parties' email sent out through nurse educator interest groups, were interviewed. Participants engaged in conversation in and around how they see meaningfulness and engagement being maximised in encounters with students, with the intent of a) coming to a degree of mutual understanding about the terms and b) to generate a vocabulary for such activity at least for this study and perhaps also for the sector. Having reached a common understanding, participants were then asked to talk about how they, as a nurse educator, seek to make their teaching meaningful and

engaging, and why they do it? Finally, they were asked to identify how they know that such techniques work. Data was collected via audio-recording of the interviews. Common terminology was identified and techniques seen to be effective for maximising the meaningfulness and engagement of teaching/learning, for students, were categorised thematically post facto. This presentation will take the audience briefly through this methodology before sharing the insights gained from the study and recommendations for further study aimed at achieving the overall aim to facilitate 'craft transfer' between nurse educators.

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### Session A13

Paper

#### **UNIVERSITY STAFF PERCEPTIONS OF AN INCLUSIVE CURRICULUM AND CAPACITY BUILDING PROGRAMME IMPLEMENTED FOR LOW SOCIO-ECONOMIC STATUS (SES) UNIVERSITY STUDENTS**

**Christina Kolar<sup>1</sup>**, Kathryn Von Treuer<sup>1</sup>

*1 School of Psychology, Deakin University*

University students from low socio-economic status (SES) backgrounds face unique barriers, potentially including increased family responsibilities, financial hardship, or decreased participation in enrichment activities and professional networking. The Higher Education Participation and Partnerships Programme (HEPPP) aims to encourage students from low SES backgrounds to attend and complete university.

One HEPPP initiative is the Inclusive Curriculum and Capacity Building (ICCB) programme. This programme focuses on a collaborative approach between academic and administrative staff for improved teaching, delivery, and online resources. The inclusive approach provides opportunities for all students, particularly low SES students. The programme fosters academic skills and literacies; digital literacy; and employability skills. There is also the opportunity for capacity building and collaborative leadership between academic staff through ongoing professional development activities and programme implementation.

The aims of this study were to qualitatively evaluate the ICCB programme using staff perceptions, and to explore the collaborative leadership and practices between staff involved in programme implementation. Results will inform future implementations and facilitate best practice, with particular focus on recruiting and engaging low SES students. Given that few studies measure staff perceptions of programme success, the present study conducted qualitative interviews with staff involved in the implementation of ICCB. They described how the program has improved university performance, staff collaborations and student development; what challenges and barriers exist to implementing such a university programme; and what practical applications and learnings the programme has contributed.

Participants were 13 University staff involved in various elements of the programme (unit chairs, library staff, language and learning advisors, careers staff, and Institute of Koorie Education (IKE) staff). Semi-structured interviews were recorded, transcribed and thematically analysed, resulting in six broad categories; 1. student learning; 2. staff benefits; 3 university benefits; 4. factors that determined success; 5. challenges; and 6. barriers and future implementation. These

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six categories consisted of 22 further specific themes.

Overall, staff perceptions of the programme indicated that the programme was successful in embedding university curricula with academic, digital, and employability skills and literacies within units containing high numbers of low SES enrolments, whilst also focusing on capacity building in staff. Staff perceived improvements in unit curricula, academic skills, digital literacies and employability skills. Perceived staff benefits included professional development, capacity building and achieving a sense of fulfilment. In addition, university benefits included increased funding opportunities, improved teaching practices, and increased research output. Practical implications included the identification of factors which were crucial to a successful programme implementation. These included attitudes and engagement of unit staff; a collaborative leadership approach between staff, including effective communication, forward planning, and mindfulness of staff workloads; increasing awareness and branding of ICCB; and continuous evaluation of programme impact.

The practical implications provide valuable insights into how initiatives for students, including students from a low SES background, can successfully be implemented and embedded into university curricula. The ICCB project appears to be a unique and comprehensive programme which could serve as a model of curriculum embedding for university students from low SES backgrounds to other universities and higher education providers.

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## Session A14

Paper

### **LEADERSHIP THROUGH FELLOWSHIP: PROFESSIONAL RECOGNITION AS A PATHWAY TO IMPROVING SCHOLARSHIP OF TEACHING AND LEARNING IN AUSTRALIAN UNIVERSITIES**

**Elizabeth Beckmann<sup>1</sup>**

*1 Centre for Higher Education, Learning & Teaching, Australian National University*

While a doctoral qualification is generally a trustworthy indicator of an academic's capacity to research, it is potentially a flawed indicator of that same academic's capacity to teach. Yet, in universities in Australia and elsewhere, the PhD remains the de facto criterion of an academic's credibility as a higher education teacher (Probert, 2014; Simon & Pleschová, 2013).

Since calls for 'a renewed focus on scholarship in teaching and a professionalisation of teaching practice' (Department of Education Science and Training, 2002) and believing that focusing on 'critical reflexive pedagogy' would help move university teachers from academic autonomy to 'accountability' (Fleming et al., 2004, 166) many Australian universities have instigated teaching development programs (Hicks et al., 2010). In addition, government-funded bodies (Australian Learning & Teaching Council 2004-2011; Office for Learning and Teaching (OLT) 2012-present) have made strenuous efforts to support research, and reward excellence, in university teaching. Many institutions are improving internal effectiveness in recognising and rewarding teaching (e.g. Transforming Practice Programme: OLT, 2014). Nevertheless, there remains much to do to ensure that the scholarship of teaching and learning (SOTL) is intrinsically career-relevant.

These issues have their counterpoint in academic leadership, where, even in education-focused portfolios, strong discipline-based research reputations appear more likely to lead to leadership roles than the equivalent reputations based on teaching and SOTL. Quinlan (2014) argues strongly that universities should adopt a more refined model of educational

leadership, that emphasises not only the process of leadership but also its content everything connected with student learning and its purpose that which Quinlan calls 'holistic student development'.

This paper explores the issue of SOTL and teaching leadership in the context of accredited professional recognition for university teachers. Informed by Kreber's (2013) model of the scholarship of teaching as an authentic and transformative practice, this paper will consider how formal recognition extending beyond individual institutions could both enhance the status of teaching, and encourage a broader and more diverse educational leadership model.

Drawing on outcomes from her Australian Government (OLT) National Teaching Fellowship, the author will review Australian activities and interest in the structured and refined approach to professional recognition mediated by the Higher Education Academy (HEA) and the Professional Standards Framework (PSF), whereby institutions accredited by the HEA frame their teaching professional development schemes within the PSF and, on the basis of experiential evidence, offer staff awards of Associate Fellow, Fellow, Senior Fellow or Principal Fellow of the HEA. This paper will show how such a recognition scheme, enacted in diverse ways by diverse institutions, could address what Palmer and Collins (2005, 25) describe as the major challenge, namely an approach to rewarding teaching contribution that applies to all staff and has sufficient flexibility to reward different levels. Using case studies from the Australian National University and collaborating institutions, the paper will discuss the potential for professional recognition to identify and nurture those who can lead others towards innovative, creative and engaging best practice learning experiences for students, and enhanced evidence-based teaching quality for institutions.

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## Session A14

Paper

### **BUILDING THE BRIDGE FROM STUDENT TO INSTRUCTOR: A CASE STUDY OF THE TEACHING ASSISTANT PREPARATION PROGRAM**

Luciano da Rosa dos Santos<sup>1</sup>, Jennifer Lock<sup>1</sup>

<sup>1</sup> University of Calgary

There is stiff competition for PhD graduates who are applying for academic positions. In their applications, they need to demonstrate competencies not only in conducting research and providing service, but also showcasing evidence of high quality teaching experience. Where within their doctoral program are they provided with opportunities to develop their higher education teaching capacity? If higher education institutions are not preparing doctoral students for teaching, are we failing in their preparation for contemporary academia?

Teaching assistantships play an important role in the development of teaching capacity among doctoral students. It is an opportunity to learn various strategies and skills about teaching and assessment (Park, 2004). However, there is a need for educational development strategies to be in place to facilitate this development (Boman, 2013; Hardro & Burris, 2012). Furthermore, such training programs must be tailored to the specific reality of each discipline (Gardner & Jones, 2011).

In addressing this challenge of building teaching capacity among doctoral students, a Faculty and the central educational development unit (EDU) of a Canadian University designed the Teaching Assistantship Preparation Program (TAPP). The program consisted of workshops offered by the EDU, working sessions tailored to the Faculty's context, and debriefing sessions where participants were invited to reflect upon how the knowledge developed during those sessions could be enacted in their practice as teaching assistants. All participants who completed the program received a certificate of participant.

A case study research design was implemented to assess the program. The following questions guided the inquiry: 1) What impact has TAPP had on developing the capacity of teaching assistants?; 2) What factors influenced the outcomes of TAPP?; and 3) How can TAPP be refined to better meet the needs of teaching assistants and future academics? Data were collected through individual interviews of doctoral students who participated in the program, as well as documents (e.g., passports documents, meeting minutes). Content analysis was implemented to create meaningful insights out of the raw data.

Although the study is currently being implemented (completion by June 2015), some preliminary findings are highlighted. First, while participation in the program can raise awareness of key issues of higher education teaching and learning, participants lamented the lack of opportunities for hands-on experimentation of topics covered. Also, a purposeful alignment between this preparation program and the upcoming teaching practice must be clearly articulated.

Such initial findings indicate that programs such as TAPP must not be considered as stand-alone initiatives, but rather as part of a laddering process for development of teaching capacity among graduate students, passing through training, mentorship, guided experience with teaching and then the full experience of teaching on their own. With considerations as these in mind, the audience of this session will be invited to engage in conversations in response to a series of questions that explores how to develop the capacity of doctoral students to be teaching assistants and then to be instructors. From the

initial conversation, participants will engage in designing educational development strategies tailored to their specific realities.

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## Session A15

Paper

### **FLIPPED LEARNING: COMPLETING THE FEEDBACK LOOP WITH ASSESSMENT**

Kimberly De La Harpe<sup>1</sup>, Gregor Novak<sup>1</sup>

<sup>1</sup> United States Air Force Academy

The expectation that students come to class having completed some form of pre-class preparation is common in general physics undergraduate courses and in most other courses. The form of pre-class preparation varies from assigned readings to viewing on-line lectures; all with the goal of introducing students to material before class, so they have some level of understanding before entering the classroom. Flipped learning takes this approach further by requiring a level of learning before entering the classroom, thus freeing in-class time to focus on further development of skills and knowledge through interactive, student-centered activities. Although much of this flipping process focuses on pre-class material and in-class activities, we argue that an important component to successful flipping is post-class assessments.

At the United States Air Force Academy (USAFA), we are developing comprehensive flipped learning modules that consist of three-interlocked components: pre-class activities combining traditional reading assignments with worked-examples, in-class activities that engage students and build on pre-class materials, and post-class practice that provides feedback and assesses student understanding. In this talk, we will provide an overview on how homework has been traditionally used in general physics courses at USAFA. We will present data that suggests that student aptitudes impact how much students learn from doing traditional homework sets (Kontur 2015). Then, we will discuss changes we have made and ways to better use homework as an assessment tool for students.

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## Session A15

Paper

### **GROWING THE FLIPPED CLASSROOM - INSPIRING TEACHERS AND LEARNERS**

Kerry Hood<sup>1</sup>, Jennifer Newton<sup>1</sup>, Robyn Cant<sup>1</sup>, Loretta Garvey<sup>1</sup>, Georgina Willetts<sup>1</sup>, Jamie Wheelahan<sup>1</sup>, Glen Croy<sup>1</sup>

<sup>1</sup> Monash University

Background This research investigates the experiences of staff who adopted and adapted an active learning approach 'the flipped classroom'. The traditional didactic lecture and teacher-led tutorial prevails in higher education, despite evidence suggesting there are more effective ways for students to learn<sup>1,2</sup>, and to prepare students for practice<sup>3</sup>. The academic staff in this study transformed traditional teacher-led classrooms to a contemporary, student centred approach to learning in a large metropolitan university over a two-year period. The flipped model adopted in this study comprised a sequential learning structure of preparation, exploration, application, and reflection. A flexible learning environment was



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created to enable students to work together to contextualise, explain and analyse concepts. Early evaluation findings of the model demonstrated improved students' self-efficacy, and high levels of student satisfaction and engagement. These findings energised and encouraged staff to expand this model of learning into other units of study.

**Aim** To explore the experiences of academic staff as they engaged in the process of transformation and how the paradigm of the flipped approach was interpreted and enacted. **Method** Adopting a qualitative approach, Brookfield's Four Lenses<sup>4</sup> (autobiography (self-review), student's eyes, peer review and the scholarly literature) guided a process of critical reflection by the unit teachers. Teachers (n=4) completed reflective journaling and engaged in reflective conversations facilitated by an external expert. Peer review and supervision was provided from within the teaching team and by mentors external to the team. Student perceptions of the learning experience were gathered and student feedback (n=41) informed the evolution of the model.

**Discussion** Introduction of an educational innovation presents key challenges and opportunities for staff involved while attempting to sustain an inspiring learning environment. The data gathered from this project has informed an indicative framework for engaging others in the flipped classroom approach, contingent on the differing roles that various members of the teaching team hold. The discussion will focus on the indicative framework, and audience engagement will be facilitated through critical propositions on the flipped classroom.

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## Session A16

Paper

### RE-CONCEPTUALISING PLAGIARISM: ENGAGING STUDENTS IN QUALITY SCHOLARSHIP

**Lee Adam<sup>1</sup>**, Rachel Spronken-Smith<sup>1</sup>, Vivienne Anderson<sup>1</sup>

*1 University of Otago, Dunedin, New Zealand*

Plagiarism is a topic of increasing concern in higher education. It is commonly identified by its textual appearance in students' written assignments (Howard, 1999) and is historically positioned as deliberate and punishable dishonest practice (Howard, 1999). Recent research has highlighted that it is a more complex phenomenon, and suggested that instances of so-called plagiarism may reflect students' lack of understanding about how to present an authorial voice (e.g., Angéil-Carter, 2000) or lack of understanding about the nature of scholarship (e.g., Howard, 1999). However, little research has examined these from students' perspectives in order to suggest possible solutions.

In this paper I report on a doctoral study in which 21 undergraduate students were interviewed regarding their understandings of plagiarism, alongside their views on learning, assessment, and the purpose of a university education. Using a discourse analytic approach, I examine the ways in which students framed plagiarism in relation to the discourses they drew on when discussing broader academic conventions. The students predominantly framed plagiarism as a moral or policy issue, they understood the consequence of plagiarising to be punishment, and they equated plagiarism avoidance with 'correct referencing'. The students reported that they did not see how learning to reference was relevant to their future employment, and expressed a view of citation as a means to avoid punishment rather than as a means to develop an argument in academic writing, or provide a basis on which to build new knowledge. In addition, the students indicated that they were confused regarding what was expected of them in academic writing tasks; in particular, if they were expected to reference everything they wrote, or if they could also present their own ideas.

In this presentation I begin by outlining my research methodology and key research findings. I then invite delegates to consider the students' responses and reflect on how we might re-conceptualise academic writing in general, and plagiarism in particular, in ways that engage students and highlight the relevance to them of scholarly practices. Specifically, I ask delegates to reflect on dominant conceptions of plagiarism as a textual feature within the finished product of a student's assignment. I ask how our views of plagiarism might change if we respond to students' writing as a process rather than as a product. I conclude by suggesting an alternative way of talking about 'plagiarism' that moves beyond punitive discourses and assumptions of student dishonesty and allows for educative responses when 'matching text' appears in students' writing.

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## Session A16

Paper

### LEADING SOTL: THE CASE FOR COLLABORATIVE APPROACHES

**Dawn Bennett<sup>1</sup>**

*1 Curtin University, Perth*

A growing number of higher education graduates negotiate highly individual self-initiated and self-managed portfolio careers that transcend the boundaries of employers, clients and task orientations, and the traditional, online and digital environments. They move into roles that did not exist when their studies began, and they face a period of identity uncertainty as they attempt to establish their careers. As such, students need to develop their identity as graduates (rather than students) through knowledge production within local contexts. In the absence of dedicated specialists and curricular time, this development needs to occur within existing classes under the guidance of existing educators. For many educators this is new and frightening territory.

This paper reports from a scholarship of teaching and learning (SoTL) study located within a final-year capstone unit. The unit saw professional writing and publishing students develop an ePortfolio, undertake an industry internship, engage with peers

and lecturers through an online blog, and take a step back to explore their experiences from the perspective of possible future lives and work.

With educator and peer support, students challenged and negotiated their career identities and began to recognise their capacities and needs. They built newly understood perceptions of work and career into their ePortfolios, discussed their professional development through the blog and began to independently gather evidence of competencies from their studies and their workplaces. However, this success was the result of dual expertise in the form of collaborative teaching by the discipline expert professional writing and a second educator whose expertise was in identity and career development. In this instance, collaborative teaching enabled students to meet the disciplinary (writing and internship) demands of the unit alongside development of professional identities with respect to their disposition and capacity to engage as future professionals.

This paper argues that many SoTL initiatives benefit from, indeed are enabled by, collaborative teaching initiatives. The paper positions the issue of increased accountability for graduate employment outcomes as a powerful rationale to illustrate the benefits of formalising such arrangements, such that collaborative practice becomes commonplace.

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## Session B1

Paper

### COLLABORATING WITH STUDENTS TO CREATE AN ON-LINE PEER-REVIEW OF EDUCATIONAL PRACTICE SYSTEM

Hannah Davidson<sup>1</sup>, **Rory Chatterton**<sup>1</sup>, Shannon Kotey<sup>1</sup>, **Samuel Warne**<sup>1</sup>, Filip Maravic<sup>1</sup>, **Christine Brown**<sup>1</sup>, Patrick Crookes<sup>1,2,3</sup>

*1 University of Wollongong, Australia*

*2 University of Huddersfield, UK*

*3 University of Stavanger, Norway*

This paper describes a collaborative project involving students enrolled in an undergraduate programme at UOW and academic staff with leadership roles in peer reviewing activities at the university. It is intended that the final deliverable will be an on-line system to coordinate and facilitate the peer-review of educational practice.

In the paper we (students and academics) will present the process and proposed outcome(s) of the project, including: the identification and scoping of the gap(s) between existing systems and planned requirements; the critical need to involve student voice in this process; and the benefits of students as co-constructors of this peer review of educational practice, in terms of both process and content of reviews and the technological solutions supporting them. The presentation will also discuss the intended benefits of the successful implementation of such a system, at UOW and beyond.

We believe the paper will be of interest to people setting up similar systems as well as those looking at ways to meaningfully include the student voice in activities such as this.

## Session B1

Paper

### GUIDANCE FOR LEADERS: ADAPTING THE PEER ASSISTED TEACHING SCHEME (PATS) FOR QUALITY IMPROVEMENT, QUALITY ASSURANCE AND SCHOLARLY OUTCOMES IN TEACHING

**Jo-Anne Kelder**<sup>1</sup>, Andrea Carr<sup>1</sup>, Caroline Cottman<sup>2</sup>, Teresa de Fazio<sup>3</sup>, Tracy Douglas<sup>1</sup>, Melanie Greenwood<sup>1</sup>, Liam Phelan<sup>4</sup>, Justin Walls<sup>1</sup>, Anne-Marie Williams<sup>1</sup>, Lynette Zeeng<sup>5</sup>

*1 University of Tasmania*

*2 University of the Sunshine Coast*

*3 Victoria University*

*4 University of Newcastle*

*5 Swinburne University of Technology*

*6 Monash University*

**Introduction:** The Peer Assisted Teaching Scheme (PATS) is professional development program for academics that provides a structured framework for reinvigorating units and courses and focuses on units and their teachers. PATS was initially developed at Monash University, as a Faculty strategy to improve students' learning experience by identifying units for targeted remediation, based on low satisfaction student evaluation reports. This driver influenced the initial design of the program, structured to provide an individual teacher with professional development opportunities and with a mentor and a defined process: planning improvement to their unit, implementing the change, and analysing peer and student feedback to measure outcomes. The PATS process has clearly defined activities (for example goal setting, peer observation of teaching, professional development workshops) and a semester-based timeframe. The purpose of a PATS program is quality improvement (QI) of a single unit; people who participate are the individual academic responsible for the unit, supported by a peer partnership with various forms of mentoring (including peer-to-peer). PATS has been disseminated through an Office for Learning and Teaching (OLT) Senior Teaching Fellowship and, in 2015, an OLT extension grant funded a project titled, Adapting and Extending PATS: variations on purpose, people and process was established to collate case studies of implementations of PATS variations from four partner universities.

**Method:** This paper presents a framework for varying the PATS program from the original design without compromising its integrity. The framework is based on analysis of the PATS program in relation to cases of PATS adopted within Monash University and other institutions. Variations of PATS have been analysed to identify the defining features, or core elements, of PATS and the dimensions of variation. The 3P3V matrix articulates three primary dimensions of variation identified in the analysis: Purpose, People and Process, and three variations (3V) for each 'P' dimension. The matrix was tested as a structure for case description and a template developed as a tool to design or describe a PATS variation.

**Results:** The essence of what makes PATS 'work' for teachers is captured in the framework and it provides a method for designing a PATS implementation that takes into account local context; overcomes barriers; takes advantage of opportunities and priorities, and can be measured for impact and effectiveness. A PATS program is intended to encourage critical-reflective practice and provide a social context in which academics can interrogate their teaching practice, engage in scholarship, and identify opportunities for improvement in curriculum, teaching and student learning. The framework embeds SoTL by adopting a multi-theoretical approach. The primary lenses used to analyse the social processes and outcomes of PATS variations are: 1) mentoring; 2) agency/identity and 3) distributive leadership. The use of each

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lens is dependent on the scale of the PATS implementation driven by the particular purpose framing the use of the variation.

Conclusion: The paper concludes with a general discussion on the challenges of 'leadership': how PATS is (or can be) implemented in an institution and the recommendations that have been distilled from the collective experience of the project partners.

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## Session B1

Paper

### INVESTIGATING THE USE OF FORMATIVE AND PEER ASSESSMENT IN THE SCIENTIFIC DISCIPLINE: ARE THEY EFFECTIVE LEARNING RESOURCES?

Cassandra Saunders<sup>1</sup>

*1 University of Tasmania*

Literature: In many undergraduate science degrees, knowledge attainment and concept application are often assessed through scientific reports. These reports provide students with opportunities to engage in scientific practices by interpreting evidence to construct and reconstruct their own knowledge of the subject matter. However, despite their prevalence as an assessment tool in the scientific discipline, academic staff often assume that students already possess the necessary synthesis and essay-writing skills needed to produce quality scientific reports, which is often not the case. While the use of formative and peer assessment in higher education to enhance student learning is not new, there has been limited research investigating their combined use to enhance scientific report writing skills. The purpose of the present study was to investigate the effectiveness of both formative and peer assessment to: a) develop and practice scientific writing skills and b) deepen student learning.

Methods: This study was undertaken in a first-year science unit (n=84 students) at the University of Tasmania. Prior to submission of the first scientific report, all students were invited to submit a draft report, from which formative feedback was provided along with an opportunity for students to ask questions related to the feedback. Students were also provided with an opportunity to peer assess an exemplar scientific report and make judgements about it using a similar grading and criteria sheet against which their own work was assessed. On completion of the unit, all students were invited to complete a survey to gauge their perceptions on the value and effectiveness of both the formative and peer assessment activities for enhancing their learning and scientific writing skills (n=62; 74% response rate). A combination of quantitative and qualitative methods was employed to analyse the data obtained.

Evidence: 92% of students increased their grade point by at least 1 (e.g. from a pass to a credit) for their summative assessment. Moreover, the average grade for all four scientific reports for the unit significantly increased compared to the average result for the previous year's cohort (p=0.05). Students reported that the formative and peer assessment activities provided: 1) feedback that was highly useful when writing subsequent reports; 2) an opportunity for critical thinking about one's own work; 3) a clearer understanding of what is expected and how work is assessed, and; 4) an opportunity to improve the quality of work submitted. The formative and peer assessment activities were identified as effective learning resources by students (92% and 77%, respectively). 92% of students indicated that they would use, or had already used, the skills that they had learnt from these learning opportunities in other units.

Conclusions: This study provides definitive evidence that both formative and peer assessment in the science discipline are highly effective learning resources to: 1) develop and enhance students' scientific report writing skills, and; 2) deepen student learning by encouraging critical reflection of their own work.

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## Session B2

Panel Session

### LEADING THE ACADEMY: COLLABORATING, INNOVATING AND CREATIVELY ENGAGING ALL STAKEHOLDERS

Sandra Jones<sup>1</sup>, Di Weddell<sup>2</sup>, Leo Goedegebuure<sup>3</sup>, Himasha Fonseka<sup>4</sup>, Sinead Colee<sup>5</sup>, Katerina Mårtensson<sup>6</sup>

*1 RMIT University*

*2 Office for Learning & Teaching*

*3 LH Martin Institute*

*4 RMIT student union*

*5 Monash student association*

*6 Lund University*

The objective of the Panel is to draw on recent developments in theory and practice on shared/distributed and collective approaches to leadership in higher education to explore the question of what universities and other higher education institutions can do to develop and sustain cultures of collaboration and engagement in learning and teaching.

The rationale for the panel session is based in recent research into, and experience of shared, distributed and collective leadership across public, private and not-for-profit sectors in the UK, US, Australia and elsewhere. Within Higher Education (HE) it has been suggested that such perspectives might offer an alternative to the discourse of managerialism that has become increasingly prevalent within the sector and as a means for reconnecting academics with a sense of collegiality, citizenship and community (Gosling, Bolden & Petrov, 2009).

The idea that effective leadership requires the involvement of a far wider set of actors than senior organisational leaders alone is leading to broader conceptualisations of the 'work of leadership' in HE (Davis & Jones 2014) and draws attention to the underlying motivations, values, beliefs and influences that may help to harness the creative energies of all who work in this sector. The distribution of leadership beyond the senior leadership team requires, amongst other things, a shift in thinking about the allocation of responsibility, resources, power and influence that brings into question many common assumptions about how groups and organisations function. Why then have more collaborative approaches to leadership been so slow to be

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## Session B3

Paper

### LEVERAGING LEARNING ANALYTICS FOR FUTURE PEDAGOGIES AND SCHOLARSHIP: THE ACADEMIC PERSPECTIVE

Jurg Bronnimann<sup>1</sup>, Henk Huijser<sup>1</sup>, David Heath<sup>2</sup>, Deborah West<sup>2</sup>

*1 Batchelor Institute of Indigenous Tertiary Education*

*2 Charles Darwin University*

While we are experiencing a period of rapid change and disruption to higher education, learning analytics can be seen as perhaps the most disruptive of all. However, this disruption is in its early stages and there is still much scope to take control over what learning analytics can potentially offer in terms of pedagogical change and improvement, as well as scholarship. To

capitalise on the potential that learning analytics offers, and to leverage its uses, it is crucial to understand the tools and be able to integrate and analyse data from a wide range of sources for maximum effect. In this paper, we report on findings of an OLT-funded project entitled Learning Analytics: Assisting Universities with Student Retention. While this project was primarily focused on retention as a potential outcome of learning analytics, its application could be wider and relate to the broader concept of student success. Student success allows for a focus on pedagogy and the use of learning analytics for the improvement of learning and teaching with a firm evidence base.

Learning analytics is most commonly defined as the 'measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs' (Siemens & Long, 2011) and has emerged in recent times as a topic of great interest in the global higher education space. As it stands, the above definition could be taken to cover the majority of educational research, but it is typically coupled with two assumptions: that learning analytics makes use of pre-existing, machine-readable data, and that its techniques can be used to handle big data, large sets of data that would not be practicable to deal with manually (Ferguson, 2012).

This paper will report on two specific elements of the project's data collection:

1. An academic level survey that focused on teaching and other academic staff (353 participants), focusing on their progress, aspirations and support needs where learning analytics are concerned; 2. A series of follow-up interviews with academic level survey participants (23 participants) designed to expand on the implications of different activities and experiences with learning analytics to date

A key overall finding of the project was that academic staff can articulate clear pedagogical questions around learning analytics, yet there is still apprehension around what learning analytics is (academics still tend to think about it in terms of small rather than big data), what it will be used for, and what the role for academic staff will be with learning analytics. Furthermore, tensions exist between 'business' needs, wants and limitations (e.g. costs) and 'educational' needs and wants (e.g. academic freedom, and pedagogical innovation).

Audience members will be actively engaged via interactive questions that will stimulate them to compare the study's findings against their own institutional contexts.

Overall this paper concludes that clear pedagogical questions are crucial if we are to leverage learning analytics' potential for future pedagogies and scholarship, and suggests potential ways to explore pedagogical questions with big data methods.

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## Session B3

Paper

### LEARNING ANALYTICS AND SOTL: AN IMPERFECT DISCIPLINARY APPARATUS

John Egan<sup>1</sup>

*1 Learning Technology Unit, Faculty of Medical and Health Sciences*

Learning analytics is an ascendant concept in the realm of higher education, particularly with respect to technology-enabled and technology-enhanced learning. Tertiary institutions continue to deploy increasingly sophisticated technological systems: both those explicitly used to facilitate teaching and learning and those that provide administrative support through mechanisms such as student information and identity management systems. However, there is scant acknowledgement that much of the data being analyzed are not consistently produced across (or within) institutions. In specific and substantive ways an increasing emphasis on learning analytics has the potential to overly scrutinize and penalize those whom endeavor to innovate tertiary teaching and learning practice: educators who extensively leverage technology to facilitate teaching and learning through blended and online modes of delivery.

The reams of data collected in such systems can easily become seductive to those who seek an evidence basis for a range of teaching and learning quality issues in higher education: such data can form part of an evidence base for scholarship of teaching and learning (SoTL) research. This presumes, however, that the copious amounts of data aggregated in such systems constitutes quality, reliable data. For persons with the research competencies to mine such data sets—data sets which are heterogenous, voluminous, raw and unprocessed—this presents a challenge: many hours of data scrubbing.

Drawing upon Michel Foucault's writings on the intersections of power and knowledge (Foucault, 1980; 1990a; 1990b; Foucault & Gordon, 1980), this paper interrogates the current discourse around learning analytics in higher education, specifically related to its use for SoTL purposes. It argues that the inherently differentiated application of learning analytics needs to be problematized, lest those whose innovative and leading edge practice as educators is unfairly scrutinized and disciplined.

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## Session B3

Paper

### INTEGRATING LEARNING ANALYTICS WITH PEER MENTORING IN FIRST YEAR UNDERGRADUATE COURSES

Steve Leichtweis<sup>1</sup>, Damon Ellis<sup>1</sup>, Kirsten Locke<sup>1</sup>, Nicoletta Rata<sup>1</sup>, Michael Willimott<sup>1</sup>, Catherine Rawlinson<sup>1</sup>, Jason Stephens<sup>1</sup>

*1 Faculty of Education and Social Work, University of Auckland*

This presentation explores the potential of incorporating learning analytics into the design and implementation of two compulsory first year courses in conjunction with a peer mentoring programme in the Bachelor of Education programme at the University of Auckland, NZ. With an overall ambition to deepen student engagement, improve access, success and retention of traditionally vulnerable students, and to improve student retention overall, the Faculty introduced a strong peer mentoring programme to support students in their first year. This peer mentoring programme incorporated an innovative approach in collaboration with the learning design team at the Faculty by combining an analysis of student online



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interaction through the use of learning analytics, with conventional peer mentoring methods. The research project that has emerged from this initiative encompasses two questions:

1. In what ways might the integration of learning analytics and student mentoring affect or enhance the efficacy of a peer-mentoring programme of this nature.
2. What impacts might this combination of digitally informed mentoring deepen student engagement and increase retention,

Drawing on the liberatory philosophy of Paulo Freire (1970), we utilise an action research methodology to explore the extent to which the combination of peer mentoring and learning analytics opens a space in which student voice, self-determination, and agency can develop and emerge. The presentation discusses the conceptual framework and theory of change underpinning our approach, in which student self-determination and agency are essential components to empower all students to become more dialogic and active agents of change in the context of their first year study.

Previous research into the efficacy of peer mentoring programmes has highlighted the importance of sustained and targeted intervention (Tinto, 2006). However, to date, research in the field of learning analytics has primarily focused on understanding and leveraging student interactions in online learning environments (Gašević, Dawson, & Siemens, 2015) without connection to the importance of student feedback (Hattie & Timperley, 2007) and peer mentoring (Tinto, 2006). The innovation of this research is the combination of two approaches: peer mentoring and learning analytics, in order to improve on the opportunities that each approach would provide individually. The key focus in combining these two approaches is the provision of targeted 'just in time' interventions (Wilson & Lizzio, 2008) as gauged from student online activity, and the inclusion of peer mentoring as a 'shared guidance' mechanism for intervention that bypasses the problems produced by traditional teacher-student power differentials (Heirdsfield, Walker, & Walsh, 2008). Using the data we have gathered at this point of the project, the presentation looks at the implications of this combined approach to future conceptions of deeper and more meaningful student engagement and informed intervention strategies that instigate positive change.

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#### Session B4

Paper

#### BEING RESHAPED INTO SOTL: TEACHING ACADEMICS, THE REFORM AGENDA AND IMPACT ON SOTL ENGAGEMENT

Helen Flavell<sup>1</sup>, Lynne Roberts<sup>1</sup>, Georgina Fyfe<sup>1</sup>

<sup>1</sup> Curtin University

Australia, like other countries, has experienced significant higher education reform including the rise of the entrepreneurial university (Winter & O'Donohue, 2012). Within this context, academic identity has undergone major shifts resulting in the delineation and specialisation of academic roles including considerable overlap between professional and academic functions (Hanson, 2009; Whitechurch, 2008). As part of the reform agenda and efficiency measures, more academics are being 'reshaped' into teaching only positions in Australia with the expectation that they are actively engaged in SoTL (Probert, January, 2013). SoTL can be daunting for discipline specialists new to educational research; they need to navigate high teaching loads, unfamiliarity with SoTL and relevant research methods, isolation, identity issues and university discourses that privilege research over teaching (Haigh, 2010; Marquis, Healy, & Vine, 2014; Skelton, 2012). Anecdotal evidence from an Australian university has suggested that some academics find the process of reshaping disempowering and devaluing and require a range of supports to positively manage the associated identity work (Fyfe, Flavell, & Pedigo, 2015). Although academic identity is a focus of research (Skelton, 2012; Clegg, 2008), there has been limited research on the impact on staff moving from teaching/research positions into teaching only academic roles (Probert, January, 2013). How might the 'reshaping' process impact on teaching academics' willingness and ability to engage in SoTL and, therefore, SoTL's potential impact on practice? How prepared are academic staff to be adaptive to changes in identity and role? How does this impact on their capacity for resilience in a changed and changing university context, and what forms of professional development can best empower them? Significantly, academic resistance to change is well documented (Deneen & Boud, 2013) and high levels of teaching academic disenfranchisement has also been noted (Bush (2013) cited in Rowland & Myatt, 2014). This paper outlines the results of a qualitative study that aimed to explore the impact of the wide-spread introduction of teaching academic positions on the capacity of staff to engage in SoTL. Using the work of Clegg (2008) and Lief et al. (2012) this study conceptualises academic identity as a process influenced by how one is perceived and recognised as part of the broader community to examine what forces of identity work are at play following the introduction of teaching only academic positions. Semi-structured interviews were conducted with ten teaching academics across an Australian university which had undergone significant workforce reshaping. Thematic analysis using the procedures developed by Braun and Clarke (2006) were used to analyse the data. Recommendations for future research as well as policy and professional development will be suggested based on the findings and literature. Attendees will be given with the opportunity to engage in a reflection on their academic identity and draw comparisons with the emergent identities of the study cohort as well as the strategies they adopted to enhance agency and resilience.



## Session B4

Paper

### BOOK CLUB AS A MEANS OF LEADING CHANGE THROUGH SHARING RESEARCH IN COMMUNITIES OF PRACTICE

Kerry Howells<sup>1</sup>

*1 University of Tasmania*

Although we may have a certain audience in mind when sharing our scholarship of learning and teaching, the traditional means of publishing in academic journals may restrict our ability to reach this audience, or indeed lead to sustainable change within our institution and beyond. Other means of dissemination such as professional development workshops are called into question when the underlying framework is one of the university expert who comes in as an outsider to present pre-determined pedagogy or content. The traditional focus on delivery and evaluation is outmoded if it is not balanced with outcomes that generate authentic learning (Webster-Wright 2009). Another issue is the one-off nature of such workshops where the longevity of transformation or application of the ideas presented can legitimately be called into question.

In the quest to explore more contemporary and effective ways of leading change through SOTL, a book club was initiated as part of a university-funded fellowship. The overarching aim of the book club was to explore challenges and best practice in regards to the relational aspects of student engagement, and to do so in a way that invited leadership from each member of the group. The book chosen for this purpose was *Gratitude in Education: A Radical View* - a work that represents over a decade of research into the relevance of gratitude to effective teaching pedagogy and enhanced student engagement (Howells, 2012).

The process of this book club adheres to recommendations for best practice within professional development research 'that is that it continues over a period of time and is positioned within a community that promotes learning (Darling-Hammond, 1997; Webster-Wright, 2009). There were three different book clubs comprising of a total of 30 participants, both academic and general staff at the University of Tasmania, coming from a range of different faculties and different levels of teaching experience. Participants met once a month over a three-month period, to study, take action, and reflect as a community of practice.

This paper reports on survey and focus group data that was collected at the end of the book club and analysed through the lens of Etienne Wenger's (1999) social theory of learning. According to Wenger's four identified dimensions, participants reported a positive impact on their sense of i) community, where the relational aspects of their work were strengthened and they found a home to discuss challenges relating to this; ii) identity, where participants reported feeling united around shared values, aims, passion to make a difference to student engagement and the culture at the university; iii) meaning, where participants reported on the process of the book club as a liberating and empowering means of professional development and furthering their own SOTL; iv) practice, where book club was reported to be a welcomed opportunity for people to share what they were already doing and the practices that they tried out, with great support from each other. All participants reported a positive change in their practice, and many reported being able to lead further change in their own faculty.

## Session B4

Paper

### TRANSFORMING INSTITUTION-WIDE GLOBAL ENGAGEMENT THROUGH STRATEGIC INTERNATIONALIZATION GRANTS

Thomas Pusateri<sup>1</sup>, Lance Askildson<sup>1</sup>

*1 Kennesaw State University, Kennesaw, Georgia, United States of America*

The Division of Global Affairs (DGA) at Kennesaw State University (KSU, located in Kennesaw, Georgia, United States) implemented its Strategic Internationalization Grant Initiative in 2014, which is an internal grant competition designed to advance KSU's 2014-2017 Strategic Plan for Internationalization through targeted seed-funding (US\$150,000 per annum) of innovative global engagement activities. During this session, the presenters will discuss the history, rationale, and development of KSU's Strategic Plan for Internationalization and the Strategic Internationalization Grant Initiative, both of which involved broad input from across campus spearheaded by the University Faculty Committee on Global Engagement. The Vice Provost for Global Affairs chairs this committee, which is comprised of representatives from each College, the DGA, and the Center for Excellence in Teaching and Learning.

To disseminate information on the grant competition, the DGA developed a Request for Proposals site (<http://dga.kennesaw.edu/content/sig>) that includes a link to the Strategic Plan for Internationalization, describes the application process and criteria for the awards, and provides information on past projects that have received funding. KSU faculty members submit proposals online that address any one of five thematic areas addressed in the Strategic Plan: 1) global learning (e.g., internationalizing the curriculum, innovative education abroad opportunities); 2) international research and collaboration; 3) international community engagement; 4) international student support; and 5) transformative campus internationalization. Fifteen projects received funding in the inaugural year ranging from US\$3,000 to US\$45,000. The project goals of recipients of this funding included (a) development of resources to support interdisciplinary teaching and assessment of intercultural competence across campus, (b) establishment of learning communities for international students to facilitate student proficiency in English and acculturation to the campus, (c) community engagement in a contemporary Mayan village whose leaders requested collaborative support from faculty and students in KSU's archeology program to develop a heritage and Yucatec language preservation program, and (d) research on the extent to which student teachers who participated in a semester-long student teaching experience abroad integrate their experiences into their teaching when they return to the United States. During the funding year, each recipient submits a quarterly report that is reviewed by staff at the DGA who assesses progress on project goals and determines whether to maintain or discontinue funding.

The presenters will discuss how the University Faculty Committee on Global Engagement improved the criteria and application processes from the inaugural year to the present competition to provide greater accessibility and campus-wide impact of the grant initiative. For example, this year's funding competition included several open meetings to discuss the awards criteria and submission process, and each applicant was invited to deliver a brief presentation in an open forum followed by questions from the review committee. The presenters will also invite audience discussion on how to support institutional transformation on strategic initiatives

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through administrative leadership that invites broad-based input and support from campus communities.

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## Session B5

Symposium

### ASSESSING UNDERGRADUATE RESEARCH: WHAT WE CAN LEARN FROM ASSESSMENT AT MULTIPLE LEVELS

**Kelly McConaughay<sup>1</sup>, Carol Bender<sup>2</sup>, Angela Brew<sup>3</sup>, Ami Ahern-Rindell<sup>4</sup>**

*1 Council on Undergraduate Research; Bradley University, USA*

*2 Council on Undergraduate Research; Australasian Conference of Undergraduate Research*

*3 Australasian Conference of Undergraduate Research; Macquarie University, Australia*

*4 President, Council on Undergraduate Research; University of Portland, USA*

Undergraduate research is widely recognized as a high-impact practice that benefits students, faculty, and institutions in myriad ways. Learning and programmatic outcomes span multiple levels of organization, ranging from the individual student at the core, to the undergraduate research curriculum or program providing the experience, and finally to the larger institutional context that supports the undergraduate research program enterprise. Fully evaluating the efficacy of undergraduate research programs requires attention at all of these levels. Understanding student learning gains, how different research experiences/curricular structures affect those learning gains, and how institutional structures support our collective work require very different evaluative tools. In this session, academic scholars of undergraduate research will highlight assessment tools designed to help evaluators perform holistic assessment of undergraduate research programs. Each speaker will present a general overview about what we can learn about the efficacy of undergraduate research programs through one of three distinct lenses (focused on student learning outcomes, focused on curricular design and structure, focused on institutional support systems), followed by an in-depth example from their own scholarship of how one such tool has informed their own undergraduate research practice. Audience members will be invited to participate in a discussion of the benefits and limitations of current assessment tools, and to add to our conceptual model of using multiple lenses for a holistic evaluation of the undergraduate research enterprise.

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### EXAMPLES OF TOOLS TO ASSESS UNDERGRADUATE RESEARCH: SURE, CURE, URSSA

**Carol Bender<sup>1</sup>**

*1 University of Arizona*

Over the past 15 years, as more institutions have embraced the value of undergraduate research, there has been an increased focus on the development of tools that measure what students learn from research involvement. This is driven by the desire to learn what works best in the design and implementation of undergraduate research experiences, whether through research-based courses or apprenticeships, as well as a need to report to funding sources about the gains students achieve through participation.

Three instruments have been developed, tested, validated, and made widely available at no cost to those interested in assessing students gains. All are web-based, anonymous, and rely on self-report data. These three instruments are: the Survey of Undergraduate Research Experiences (SURE); the Classroom Undergraduate Research Experience (CURE); and

the Undergraduate Research Student Self-Assessment (URSSA). SURE and CURE were developed by Dr. David Lopatto at Grinnell College with funding from the Howard Hughes Medical Institute

(<https://www.grinnell.edu/academics/areas/psychology/assessment/sure-iii-survey>;

<https://www.grinnell.edu/academics/areas/psychology/assessment/cure-survey>). URSSA was based on work done by Elaine Seymore and Nancy Hewitt, and developed with funding from the National Science Foundation. URSSA is operated by the team of Anne-Barrie Hunter, Tim Weston, Heather Thiry, and Sandra Laursen, at the University of Colorado (<http://www.colorado.edu/eer/research/undergradtools.html>).

While SURE, CURE, and URSSA are similar, there are differences among them. Sample survey instruments can be found at the URLs provided above.

Self-report data using one of these instruments are one component of a comprehensive plan to evaluate undergraduate research outcomes. Undergraduate research program directors and research class instructors should examine their learning goals and desired outcomes and then develop a strategy for assessing how well these outcomes are achieved. All three of these instruments, SURE, CURE, and URSSA, allow the user to add items that tailor the instrument(s) to individual program and class needs.

At the University of Arizona we have used the SURE survey, in combination with other data, to help us assess students learning gains in our large apprentice style undergraduate research program in the life sciences (the Undergraduate Biology Research Program). The SURE data allow us to compare our students self reported learning gains with the self-reported learning gains by students in undergraduate research programs at institutions like ours (research universities) and at all institutions using the SURE survey (including colleges, universities, and national laboratories). This enables us to identify areas needing more attention in our program (i.e. science writing was one area identified as needing additional attention), and provides us with information on student-reported learning gains to share with funding agencies. These results are accompanied by reports of students post graduate activities, as well as information about publications and presentations that arise from students work. Most recently we have used the SURE survey as a means of assessing students self reported disciplinary gains in our research abroad programs (Prozkoumat! and BRAVO!) compared with students in domestic undergraduate research programs. Findings from this use of SURE will be reported.

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### EVALUATIVE FRAMEWORKS FOR CURRICULAR DESIGN AND ASSESSMENT OF UNDERGRADUATE RESEARCH EXPERIENCES

**Angela Brew<sup>1</sup>**

*1 Macquarie University*

A number of frameworks now exist for both developing and evaluating curricula where students engage in undergraduate research and/or inquiry-based experiences. Some are general frameworks that include elements of research and inquiry and may require translation in different disciplines. Others are more specific. This presentation will outline some key frameworks and examine examples of how they can and are being used in the assessment of inquiry and research-based curricula.

Among the general frameworks is the Australian Qualifications Framework (AQF). This framework distinguishes different major levels of qualification and provides overall standards required to be achieved at different levels of education. Australian institutions are now required to ensure that learning

outcomes and assessment of Bachelors programs achieve Levels 7 and 8 of the Australian qualifications framework (<http://www.aqf.edu.au>).

In America, the Association of American Colleges and Universities (AAC&U) has devised a set of criteria known as VALUE (Valid Assessment of Learning in Undergraduate Education) Rubrics. These were developed from the most frequently identified characteristics or criteria of learning for each of 16 learning outcomes. They are designed to be used at the institutional-level in discussions of student learning outcomes across all disciplines. Core expectations are specified with the idea that they are translated into the language of individual campuses, disciplines, and courses. Established through a collaborative process involving many institutions, they have since become widely used (<http://www.aacu.org/value/rubrics>).

At the discipline level, the Australian Learning and Teaching Council (ALTC) discipline scholars established threshold academic standards statements for a range of disciplines. The purpose of this was to ensure common minimum standards across the system in any given discipline ([http://www.griffith.edu.au/\\_\\_data/assets/pdf\\_file/0004/334084/ALTC-Academic-Standards-Final-Report.pdf](http://www.griffith.edu.au/__data/assets/pdf_file/0004/334084/ALTC-Academic-Standards-Final-Report.pdf)).

Perhaps more specifically, in Australia, the Research Skills Development Framework developed at the University of Adelaide, provides a way of mapping the progressive development of students research skills across a unit of study, course or program. It specifies and scaffolds the steps in a developmental sequence in terms of increasing levels of autonomy. It also draws attention to the different facets of inquiry that students need to experience at different levels of autonomy. The framework has been extensively used both in the design of curricula and in the assessment of students work (<http://www.adelaide.edu.au/rsd/>).

Frameworks all do different work in the development and assessment of curricula. They focus variously on requirements at different levels, outcomes, areas and standards to be attained. All are needed in different ways and at different times. By focusing on examples of the use of these frameworks in developing and assessing research-based undergraduate education, this presentation will suggest ways in which a fusion of different approaches can enhance practice. Participants will be invited to suggest and to discuss further frameworks that they are using in the assessment and evaluation of undergraduate research experiences.

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## USING CURS CHARACTERISTICS OF EXCELLENCE IN UNDERGRADUATE RESEARCH (COEUR) FOR ASSESSMENT PURPOSES FROM AN INSTITUTIONAL PERSPECTIVE

Amelia Ahern-Rindell<sup>1,2</sup>

*1 Council on Undergraduate Research*

*2 University of Portland*

Many institutions of higher education have embraced the high-impact practice of undergraduate research on their campuses recognizing how it benefits students and faculty while aligning well with their mission statements and strategic plans. Like any other campus-wide program, undergraduate research must be assessed to collect benchmark data, illuminate gaps, and determine successes. The validity and value of an assessment, whether it is summative or formative, is only as good as the questions asked that help to frame the process. An assessment tool that accurately identifies the strengths and weaknesses of an undergraduate research program is essential to help create and maintain high-quality experiences that are accessible to a diverse population of students and has broad disciplinary

involvement. The assessment information obtained is critical to informing an institution's overall decision-making process and specifically to the allocation of its limited funds. The Council on Undergraduate Research, CUR has authored a document referred to as COEUR, Characteristics of Excellence in Undergraduate Research that provides global criteria and standards that can be used as the basis for preparing an institution-specific assessment instrument ([http://www.cur.org/assets/1/23/COEUR\\_final.pdf](http://www.cur.org/assets/1/23/COEUR_final.pdf)). The COEUR guidelines categorize 12 areas that characterize an exemplary undergraduate research program detailing how they help support and sustain an effective research environment. These evaluation components closely mirror the higher-education institutional structure and include: campus mission and culture, administrative support, research infrastructure, professional development opportunities, recognition, external funding, dissemination, student-centered issues, research-supportive curricula, summer research program, assessment activities, and strategic planning. The COEUR document can be used as: a road map/blueprint to initiate a campus-wide UR program, perform a self-study to determine what your existing program is missing or can do better with, provide the framework to inform a program review or accreditation activities, or highlight innovative or unique aspects of your program that can help with fund-raising, marketing, and community outreach. Regardless of the developmental stage of your undergraduate research program, COEUR can provide a frame of reference to propel your institution to the next level and increase its positive outcomes while accelerating its timeline for success. During this part of the symposium, we will solicit audience input on how you have used, or plan to use COEUR to assess your undergraduate research programs and advance your institutional goals.

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## Session B6

Paper

### LESSENING LEARNING SHOCK: ENHANCING UNIVERSITY TRANSITION AND TERTIARY PREPAREDNESS FOR NON-TRADITIONAL PATHWAY STUDENTS

Rebecca Eaton<sup>1</sup>, Peta-Anne Zimmerman<sup>2</sup>, Nicholas Buys<sup>3</sup>

*1 Griffith University, Griffith Health Group*

*2 Griffith University, School of Nursing and Midwifery, Menzies Health Institute*

*3 Griffith University, Griffith Health Group, Menzies Health Institute*

Background: Contemporary higher education must meet the needs of an increasingly diverse student cohort who face significant academic challenges. For example, students entering university learning environments from non-traditional pathways (NTP), often into the second year of degree programs, commonly find the transition experience stressful and anxiety provoking. These students also often report feeling ill-equipped to meet the academic expectations of higher education and experience "learning shock" on commencement.

Previous research (Ertl, Hayward, & Holscher, 2010) indicates significant differences, in relation to expectations and preparedness, between students entering university via traditional routes and those coming in through NTP, the most notable being the need for NTP students to have greater support to aid their transition. Indeed, past research reported that NTP nursing students felt a bridging program to orient and educate them on how they can best succeed would alleviate anxiety upon entering university (Hutchinson, Mitchell, & St John, 2011).

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**Aim:** Grounded within Lizzio's (2006) Five Senses of Success framework, this project examined the effectiveness of a Transition and Tertiary Preparedness (TTP) Program targeting NTP students entering the second year of a Bachelor of Nursing program. The TTP program is designed to facilitate early engagement, inclusiveness, participation, and academic success among students entering university from diverse pathways. It integrates a dynamic mix of learning approaches (in-person and web-based) shown to promote readiness and build capability among NTP students commencing university (Boelen & Kenny, 2009). More broadly, the TTP program aims to enhance academic skills and confidence, key factors contributing to unpreparedness for university-level study and delayed learning among pathway entry students (Ertl et al., 2010).

**Methods:** In line with Wilson (2009), a systems orientation approach was taken to ensure shared ownership and contribution to provide a solid foundation for NTP student success. The TTP Program involved intervention with students in three phases:

**Phase I: Pre-semester Intensive Academic Preparation Workshop** A two-day pre-semester program based on academic development workshops, designed with the specific NTP student work and study demands (Catterall & Davis, 2012) in mind.

**Phase II: Commencing Pathway Student Orientation Day** A one-day program aimed at developing the five senses of success (Lizzio, 2006), fostering social relationships, and developing an understanding of the demands of university study (Ralph, Birks, Chapman, Muldoon, & McPherson, 2013).

**Phase III: Weekly Academic Skills and Development Workshops** Weekly one-hour sessions, during on-campus teaching weeks, aligned with assessment tasks across the semester.

**Evidence:** The evaluation of the TTP program will conclude in June 2015 following the completion of Phase III. However, Phase I and Phase II evaluations demonstrated enhancement in the senses of resourcefulness, connectedness, capability, purpose, and identity of commencing NTP students involved in the program. Ongoing evaluation will include quantifiable improvement in NTP student retention rates.

**Conclusion:** The TTP project has been proven to be a sustainable program for the early engagement, performance, and retention of NTP students within the Bachelor of Nursing. This program has been deliberately designed for easy adaptation to facilitate the transition of non-nursing students commencing their first year at university, regardless of year level at entry.

through contextualised, scaffolded learning experiences designed to support students' success as learners and future professionals. Based on an initial needs analysis undertaken in 2009, the CLP has four meta-goals: (1) encouraging student aspirations and building their capacity for university study; (2) increasing students' confidence and preparedness for workplace learning; (3) building staff confidence and capabilities for assisting CALD students with their studies, and (4) promoting student engagement with the community as future professionals. These meta-goals provide an overarching framework for four inter-related strategies: Language and Literacy, Workplace integration, Staff development and Community outreach. Integrated within the four strategies are five key areas for student engagement. The Program draws upon the four pillars of intercultural education identified by the International Commission on Education for the Twenty-first Century<sup>1</sup> (learning to know; learning to do; learning to live together; learning to be) and is underpinned by an action research framework (Reason & Bradbury, 2008). Engagement in the program has been substantial with approximately 10,000 students participating in one or more CLP activities over the 2010-2014 period.

The CLP's impact on the student experience in terms of motivating and inspiring students to learn is substantiated by a range of quantitative and qualitative data from 2010 to 2014. As an example, over the period 2011-2012, the average written assessment result in a 3rd year Bachelor of Nursing unit for international students attending the CLP 'Understanding Assessment' workshops was 61%, which exceeded that of non-CLP attenders (54.3%) and the unit cohort as a whole (56.8%). This result was sustained in 2013-2014 with average written assessment results of 68.7% (CLP participants), 60.9% (non CLP attenders) and 63.6% (entire cohort) respectively. These results are supported by commentary from academic and clinical staff that validates the positive impact of the program on students and staff. Our reflections on the CLP journey to date strongly emphasise the importance of contextualisation, authenticity and a focus on strengths, rather than deficits, in designing learning experiences that will engage and motivate students to persist in working toward their goals. Our experiences also highlight the value that can be added by embedding the program activities within the relevant curricula through sustained collaborative relationships with the relevant academic staff. Together with the needs-based nature of the program, we believe that these factors help the CLP to provide CALD students with a means to experience the 'joy of learning' (Wang, 2009), and act as a strong catalyst for success.

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## Session B6

Paper

### **THE CONNECTIONS FOR LEARNING PROGRAM: PROMOTING SUCCESS FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS**

**Robyn Nash<sup>1</sup>, Rena Frohman<sup>1</sup>, Pam Lemcke<sup>1</sup>**

*1 Queensland University of Technology*

Culturally and linguistically diverse (CALD) students can face significant challenges in achieving their personal and professional goals. This paper reports on the Connections for Learning Program (CLP) which is a collaborative, co-curricular initiative that supports undergraduate and postgraduate CALD students in the Faculty of Health at QUT.

The CLP comprises a suite of student-focussed strategies and capacity-building initiatives that address three focal areas of student need - Academic, Professional and Socio-cultural -

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## Session B6

Paper

### **ACADEMIC SKILL NEEDS AND COMPETENCY OF FIRST YEAR HEALTH SCIENCE STUDENTS WITH DIVERSE ENTRY PROFILES: VIEWS OF EDUCATORS**

**Rosanne Coutts<sup>1</sup>, Joanne Munn<sup>1</sup>, Janice Knopke<sup>1</sup>, Airdre Grant<sup>1</sup>, Liz Bartlett<sup>1</sup>**

*1 Southern Cross University*

**Background:** Increased accessibility has changed the demographic of students entering higher education thus resulting in a range of academic skill. For the health sciences, evidence identifies that many students commence with academic skill deficits, yet there is limited research on what university educators believe are the specific academic skill requirements. With a focus on educator expectation, this study aimed to investigate perceptions about academic skills commonly required for a multidisciplinary cohort of first year



health science students. The setting was a regional Australian university where typically students have diverse prior learning and entry pathways.

**Method:** An online survey, of first year health science educators, was implemented. Participants completed open and closed (Likert scale) responses focused on specific academic skills needed for their unit of study, the importance of these and their perceived level of student skill competency. Additionally, participants recorded academic skill development strategies that were currently embedded and their perceived helpfulness.

**Results:** Thirty three first year educators responded. A diverse range of curricula were represented from foundation and applied sciences, research, communication skills, psychology, and professional based foundation subjects. For the majority, academic integrity skills were rated as important but student ability was frequently rated as poor. Academic writing skills were considered highly important however students were also typically rated as poor. Reading and understanding skills were considered important with varying skill competence ratings (generally poorer for higher order skills). Findings for numeracy were inconsistent, possibly reflecting the nature of content in individual units. An exception to this was understanding statistics and interpreting tables and figures where these skills were frequently deemed important, however student ability was rated poor or below in 50 % or more of responses. In contrast to other skills, digital literacy was rated adequate or above in the large majority of cases. In terms of embedding academic skills, 59% reported implementing these into their units, with 95% identifying that these were helpful.

**Conclusions:** Findings showed that a broad range of academic skills are deemed important in first year health sciences, yet the overall educator perception of student skill competency was mostly poor. While there are strategies to embed academic skills, for example writing and numeracy, many educators do not adopt such approaches. The literature identifies best practice for facilitating academic success, particularly for students with diverse backgrounds. This includes bridging the gap of expectation between educators and students as well as providing curriculum based inclusive strategies that facilitate academic skills development. The findings from this study provide insight that helps to clarify the expectations educators have of students in terms of what skills are deemed important, as well as give direction for what skills need to be targeted with embedded support strategies. The impact of educator expectation was clearly evident in this group of health disciplines. There is a need for this to be balanced with a considered approach to student academic skill development whilst also being mindful of the accreditation driven, content heavy nature of health science curricula and not just adding content.

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## Session B7

Paper

### INTERDISCIPLINARY TEAMS FOR ENGAGING IN EMPLOYABILITY SKILLS

**Margaret Hamilton<sup>1</sup>**, Usha Iyer-Raniga<sup>1</sup>, Joan Richardson<sup>1</sup>

<sup>1</sup> RMIT University

Tertiary education is challenging for both students and academics in this rapidly changing world. In this paper, we explain our project, which employed multidisciplinary teams of university students working together on a project with different outcomes for each team and different expectations for each member involved. We explain our process for this initiative and our use of technology. We discuss our

expectations of the pedagogy, and the reality of the outcomes for the students and academic staff involved, as well as the implications for the future.

The methodology underlying our pedagogy for this interdisciplinary project is challenge based learning [ref1], a multidisciplinary approach to teaching and learning that encourages students to leverage the technology they use in their daily lives to solve real-world problems. Challenge based learning (CBL) is collaborative and asks students to work with other students, teachers, and their communities to develop deeper knowledge of the subjects they are studying [ref2]. Students are encouraged to accept and solve challenges, take action, share their experience, and enter into a wider discussion about the important issues they identify.

The aim of this project is to research the factors critical for the sustainability of tertiary educational buildings, including offices and classrooms. This includes ongoing monitoring to identify the factors leading to overall satisfaction of the students and staff of such buildings. As a baseline for this research, we selected the newest and most sustainable building in our University which was built with the highest 5-star green rating and has been open and available to all in our university for the past year [ref3 DV project]. The building, known contains lecture theatres, lectorial rooms, study and common areas and staff offices. The building has lifts, escalators and stairs located internally for people moving between the eleven levels and was built primarily to provide new teaching and learning spaces for everyone in the university.

We formed a team consisting of three academics from the Schools of Property, Construction and Project Management (PCPM), Computer Science and IT (CSIT), and Business IT and Logistics (BITL), who each use the building for very different purposes, and three student teams from CSIT, PCPM and BITL. The project started in semester 2, 2014.

Each school has different objectives and different learning outcomes for their courses and students due to different discipline focus. We will discuss the issues within the teams, with understanding the requirements of the project and what data is required, how it can be collected and analysed and what conclusions were drawn from the surveys and physical measurements of thermal comfort. Finally we will present our lessons learned, and the pedagogical implications for future endeavours for engaging students in developing employability skills through sustainable building projects and multidisciplinary teams.

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## Session B7

Paper

### FIGHTING FOR RESOURCES: SCAFFOLDING UNDERGRADUATES' LIBRARY RESEARCH WITH A TROJAN WAR ROLE-PLAYING GAME

**Aaron Long<sup>1</sup>**

<sup>1</sup> The University of Kansas

As scholars of teaching and learning contemplate the future it is natural to consider the influences that new technologies will have on course design and implementation. But as so many campuses seek to build revenue with MOOCs and other online courses, or as instructors trade lectures for flipped/hybrid models, in short, in a learning environment that runs an ever greater risk of exposing students to technology-fatigue, course designs that encourage active learning without new technologies may become even more important. This realization, coupled with the success of learning through game theory, raises an important question: how successful is learning through games that aren't dependent on new technologies, or



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on technological interfaces at all?

This paper examines student reactions to library research done as part of an in-class role-playing game (RPG) in which students re-enacted the Trojan War as part of an English literature course at the University of Kansas called *Wings as Weapons from The Iliad to Iron Man*. Drawing on *Going Deep: Designing and Teaching Courses to Challenge and Engage Students*, an April 2014 talk by Peter Felten at KU's Center for Teaching Excellence, I designed the RPG to generate interest in the longest and what I believed to be the most difficult text on the syllabus. The game, *The Trojan War*, scaffolded an imaginative interaction with Homer's *The Iliad*, culminating in library research in which students identified and acquired course-related books and articles. Through a series of five 'battles' played over the course of five class days, students (a) identified a list of twenty characters from *The Iliad* as either Greeks or Trojans, (b) designed Trojan War scenery for the classroom based on a close reading of the text, (c) constructed costumes to help other students identify the name of the character they were role-playing, (d) generated keywords to use for research in the library's databases and card catalogue, and (e) acquired course-related books and articles from the library's stacks and databases.

Findings indicate that the RPG was most successful when students participated in all five 'battles'. Analysis of student scores on the annotated bibliography produced by the research process scaffolded by the RPG indicates that only students who participated in all five of the game's 'battles' scored in the A to C+ range, and only 8.6% of this group earned letter grade F. However, students who missed 1 or more sessions scored no higher than a C on the annotated bibliography, and 60% of this group earned letter grade F. Also, of the students who missed 1 or more sessions, 20% did not turn in the annotated bibliography. Qualitative data indicates that the role-playing game produced a positive outlook on using the library, prompted library use for research among students who had not visited the library before, and built collaborative learning relationships between student-players. Student-voice feedback indicated that despite 1700+ pages of assigned reading and 20+ pages of assigned writing for the semester, the course was 'fun', 'interactive', and students 'enjoyed the Trojan War' (the RPG).

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## Session B7

Paper

### **FUTURE PEDAGOGICAL DESIGN FOR A UNIVERSITY-INDUSTRY COLLABORATIVE DOCTORAL PROGRAM**

**Sylvia Mackie<sup>1</sup>**, Onnida Thongpravati<sup>1</sup>

*1 Swinburne University of Technology*

This paper investigates what the future may hold for PhD students in terms of how they understand and negotiate the different kinds of training they need in interdisciplinary and university-industry collaborative settings. The past decade has seen an increase in integrated doctoral curricula and university-industry collaborative training that has the aim of enhancing employability. However, little investigation has been done into:

- design decisions informing collaborative doctoral curricula
- ways that pedagogies underpinning such training combinations may interact to complement and/or reinforce each other in the context of the program as a whole
- ways that students interact with the complexities of such programs.

Accordingly, our project responds to this research gap by investigating how a group of PhD students negotiate their training needs in the context of a new doctoral program in

technology innovation at the ARC Training Centre in Biodevices, Swinburne University of Technology. This centre provides industry-oriented research training in engineering biodevices and diagnostics with a focus on developing skills in research, design thinking, entrepreneurship and innovation. The investigation aims to understand more about the training needs of students when they are placed in such new and, in particular, integrative, doctoral programs and to improve the support they are offered in such contexts.

The study uses an Activity Theory framework to describe interactive and nested activities and to capture the complexities of the particular doctoral learning environment from the perspectives of instructors and students.

Phase 1 of this study involves a conceptualisation of the mixed pedagogical framework underlying the new doctoral program in graphic form. This schema represents how the following aspects of the program systematically interact:

- \* pedagogies derived from more traditional doctoral research
- \* industry-related training/supervision
- \* training in product design/entrepreneurship
- \* training in other transferrable skills

The visual conceptualization of this 'system' also captures the following aspects of the learning design:

- \* the points at which specific skills are introduced over the course of the program and scaffolding procedures associated with this
- \* process pedagogies by means of which skills are staged or re-iterated
- \* feedback mechanisms that are integrated with other aspects of the program

This conceptualization will be used in Phase 2 of the study to design evaluation of the program in that, in the Activity Theory model, the integrative curriculum represents the 'instrument' by which students in the program negotiate their pedagogic requirements in order to move towards their educational and research goals.

Initial findings suggest that the program's doctoral candidates need to envision their learning requirements in new ways and on a number of fronts and to acquire a range of advanced research and communication skills, as they continue to negotiate with their supervisor/s and instructors in light of both their evolving research goals and the range of developmental opportunities provided by the program. It is expected that the study will offer implications for the design and delivery of doctoral education program and add to the body of knowledge in the field of education and training, program evaluation and participation evaluation.

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## Session B8

Symposium

### **THE MONASH HIGHER EDUCATION RESEARCH PROGRAM**

**Joy Whitton<sup>1</sup>**, **Meredith Hughes<sup>1</sup>**, **Imelda Williams<sup>1</sup>**, **Erica Brady<sup>1</sup>**, **Chris Thompson<sup>1</sup>**, **Priscilla Johanesen<sup>1</sup>**, **Scott Wordley<sup>1</sup>**

*1 Monash University*

This presentation will be of particular interest to staff from institutions with education focused academic roles as well as those interested in promoting institutional quality through learning and teaching research. In 2013-2014 the Office of Vice Provost at Monash University ran a development program for 20 education focused academics from a range of faculties on research in teaching and learning, consisting of education seminars, a mentor scheme and a self-initiated research

project. The participants were highly skilled in their own discipline and recognised for their outstanding teaching, but the discipline of education was new to them. The symposium on the Higher Education Research Program will include presentations on the purpose and structure of the Program, and participants will speak about the formal education program, their learning experience, lessons learned, challenges, and the contribution their research can make to what we know about current students and their learning at one institution.

The HER Program was informed by principles which included a social-cultural perspective on the professional identity of academic teachers; ownership of suitable changes by them; dispersed leadership and a link between scholarship and public engagement (Arendt's idea of action) (Martensson et al 2011; Kreber 2013; Bennett et al 2008; Radloff 2013 (Personal Communication)).

Precedents for programs of this kind were scarce. Various models for the program were considered by the academic developers for the design of the program including the 'Carnegie Scholars' program (Hutchings 2000) which combined a concern for practical, quality improvement, evaluation-type research such as 'what works?' and 'who for?' with public engagement questions such as 'what is to be done?' and 'why do it?'. Other considerations that emerged in the literature were suitable duration and collaboration with others (Schleicher 2011).

The literature suggested that successful academic mentoring programs were characterised by a number of factors which guided the design of the group mentor program: clarity of purpose; methods for selecting, matching and preparing mentors and mentees; mentor training; regularity of meetings to nurture relationship building, and evaluation of program effectiveness; financial support (Lumpkin 2011; Bell and Treleaven 2010; Kift 2011). It also suggested that a network of peer support was valued for the social and human side of the challenge, specifically it broke the isolation experienced by some new researchers (Johnston and McCormack 1997) - something which focus groups of education focused staff had indicated was true in our institution.

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## EXPERIENCE OF THE MENTORING SCHEME

**Meredith Hughes<sup>1</sup>**

*1 Monash University*

An integral part of the Higher Education Research program was the mentoring scheme. Groups of four to five participants (mentees) were formed and matched with a mentor who was an experienced senior education focused researcher. The expectation for these mentoring groups was that they would meet once a month as a group with their mentor for discussions regarding the mentees research projects. The mentoring scheme aimed to provide participants with peer support and help them to begin building their community of education researchers. The mentoring scheme was also designed to support the progress of mentees research projects by helping them apply the knowledge learnt in the first 2 days of the course while also building on that knowledge through the help and guidance of the mentor as well as from discussions with other mentees of the group. My own personal experience of the mentoring scheme did indeed meet the above aims and proved to be an extremely valuable part of the HER program. My mentee group consisted of 5 HER participants from diverse education disciplines, who were also located on 3 different Monash campuses. Setting up whole group meetings proved challenging so face to face meetings would occasionally be held with just 2-3 mentees and our

mentor. Additionally, the group kept in contact by email to share progress, questions and help. Being involved in the mentoring scheme and having access to a really great mentor to discuss my research with enabled me to focus my research approach. Additionally, group mentoring provided many benefits that a one on one mentoring approach would not have achieved. Being part of the group meetings exposed mentees to one another's projects and the mentors advice which was a great learning opportunity. The group also helped to build my network of education focused researchers and provided both support, encouragement and motivation to succeed through sharing the highs and lows of the experience with other HER participants.

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## IMPACT OF HER PROGRAM PARTICIPATION ON IDENTITY OF EDUCATION FOCUSED STAFF

**Erica Brady<sup>1</sup>**

*1 Monash University*

It will be of no surprise to anyone that academics have a number of (often conflicting) roles, many of which do not fit into the traditional 40:40:20 ratio of research:teaching:service that is promulgated in enterprise bargaining agreements and performance management systems around Australia. For staff who are 'education' or 'teaching' focused the problems of role confusion are compounded due to the various interpretations of the term both intra and inter institutionally. For example Probert (2014) notes the term can mean both 'failed academic awaiting performance review' and 'respected leader of curriculum reform'. We of course view ourselves as the latter; however our roles and therefore identity span more than curriculum reform.

Given the context, identifying as a teacher is obvious and is often how academics in an EF role are perceived by their colleagues. However in addition to being excellent at teaching in a core discipline area, we may also be an innovator in terms of a particular pedagogy or technology that spans disciplines. We may have a formal role in educational leadership (administration), undertake discipline based research, supervise research students, and, as part of the HER program, move actively into SoTL.

The challenge is to manage the multiple identities and change the internal and external perceptions of what it means to be education focused. EF staff are in their comfort zone when teaching. Teaching (unlike research) provides immediate gratification and instant feedback. Excellent teaching is time hungry and staff with higher teaching loads have little respite from the administrative demands of the teaching calendar.

Participation in the HER program created the respite necessary to move from a 'doer' to a 'thinker'. Whilst research publications are one outcome of SoTL, reflective practice and dissemination of experience are equally important and can represent stages in the HER journey. Benefits of the program in terms of identity are that it legitimised the role of EF staff within the university by providing support and recognition from the highest levels. By broadening the perception of what it means to be education focused and explicating the contributions that can be made to SoTL by EF staff, pathways for career progression were identified. This subsequently reinforced the significance of these academics in the university context.

Belinda Probert, Why scholarship matters in higher education, Australian Government Office for Learning and Teaching, May 2014

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## PROJECT EXEMPLAR: THE USE OF SOCIAL MEDIA TO ENHANCE STUDENT ENGAGEMENT

Priscilla Johanesen<sup>1</sup>

*1 Monash University*

As part of the Higher Education Research Program our research project focused on the use of social media in a third year undergraduate unit. Facebook, traditionally used as an online social networking space is increasingly being used by students and educators to support teaching in higher education. However, many educators still cautiously approach its use, with some educators feeling uncomfortable teaching and having student contact via that medium. This project investigated how social media, Facebook, was utilized by students and instructors while undertaking a joint project, which forms the major assessment task for a third year undergraduate Microbiology unit. The results of this study show that while there is still some trepidation by instructors in the use of social technologies in teaching, students actively embrace the online environment, finding Facebook useful for collaborating, communicating and obtaining feedback. Overall, this project highlighted how social media can be used in teaching to engage students and assist them to become collegial and collaborative learners.

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## Session B9

Symposium

### COMMUNITIES OF DECODING: USING THE DECODING THE DISCIPLINES PARADIGM TO CREATE FACULTY LEARNING COMMUNITIES ON THREE CONTINENTS

David Pace<sup>1</sup>, Janice Miller-Young<sup>2</sup>, Michelle Yeo<sup>2</sup>, Manie Moolman<sup>3</sup>, Jennifer Clark<sup>4</sup>, Adrian Jones<sup>5</sup>, Anette Wilkinson<sup>3</sup>, Deirdre van Jaarsveldt<sup>3</sup>

*1 Indiana University*

*2 Mount Royal University*

*3 University of the Free State*

*4 University of New England, NSW*

*5 La Trobe University*

Decoding the Disciplines is being used to increase learning in at least nine countries on four continents, and the model has been enriched, as scholars of teaching and learning have adapted the paradigm to the needs of their institutions. This session will begin with a very brief introduction to the Decoding model, followed by presentations showing how teams in Canada, South Africa, and Australia are putting Decoding to use on their campuses:

David Pace (Indiana University), co-founder of Decoding, will briefly describe the paradigm and its development.

Dr's Janice Miller-Young and Michelle Yeo at Mount Royal University will provide examples and evidence of the various ways in which the Decoding framework is being used on their campus. Since 2013 a faculty learning community at Mount Royal has used Decoding for professional development, curriculum design, and research purposes. They will explore some of the common themes that have emerged from these projects, connect the learning to practical applications for teachers in higher education, and make recommendations for further work.

Dr Manie Moolman (Teaching and Learning Director: of the Faculty of Law), Prof. Annette Wilkinson (Professor Researcher, at the Centre for Teaching and Learning), and Dr Deirdre van Jaarsveldt, Lecturer Researcher, from the University of the Free State, South Africa will describe the Decoding Learning in Law project. This 17-member learning community has focused on a

crucial bottleneck to learning in their discipline — reading case law and applying the law to a set of facts - and has used an 'adapted' version of the Decoding model that specifically provides for group participation and interaction within a specific discipline. They will provide evidence and reflect on the implementation and will explain that the Decoding model is not only efficient in solving bottlenecks, but that it can also be used as a means for deep reflection and professional development; curriculum design; and the identification of other bottlenecks that could hinder student learning in the faculty.

Adrian Jones (La Trobe University) and Jennifer Clark (University of New England) will describe how Australian-based scholars have used 'Decoding' to kick start cross-university conversations about the curriculum priorities for the first-year of tertiary study in five Humanities and Social Sciences disciplines. Each national Threshold Learning Outcome was addressed, and a good practice guide was drawn up, all focused on the crucial first-year. History is discussed as a case study.

Participants will discuss how Decoding can be put to use on their campuses:

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)

Decoding the Disciplines Website —

<http://decodingthedisциплиnes.org/> Interim website for the 'In the Beginning' project funded by the [Australian] Office of Learning and Teaching:

<http://www.firstyearlearningthresholds.edu.au/>. Especially the 'History' button, and then 'Developing Students' Skills'.

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## Session B10

Paper

### A COLLABORATIVE CROSS-DISCIPLINARY MODEL OF LEADERSHIP DEVELOPMENT FOR EDUCATION FOCUSED ACADEMICS

Karen Burke Da Silva<sup>1</sup>, Edward Palmer<sup>2</sup>, Sarah List<sup>3</sup>

*1 Flinders University*

*2 University of Adelaide*

*3 University of South Australia*

For the majority of academics, the opportunity to develop leadership skills comes through research-based activities such as conducting research projects, applying for grants, writing and editing journal articles, and supervising higher degree students. A clear pathway is provided throughout an academic career and is typified through mentor development by more senior research academics.

Here we discuss the development of leaders in teaching and education focused positions that are becoming increasingly part of the academic profiles within Australian universities (Probert, 2013). Differing from the classic approach to leadership development through research pathways, most teaching focused academics enter positions without formal experience or qualifications, as many have made a career change to focus on educational activities rather than on their discipline specialty. Without a structured approach these academics may not know of the pathways or have developed the skills to achieve leadership roles or senior academic positions. We therefore need to ask, 'Where are our future

leaders of teaching and learning going to come from?’

We seek to discuss opportunities to build leadership capacity in education focused academic staff. Using an existing cross-disciplinary Communities of Practice (CoPs) framework, the Higher Education Research Group of Adelaide (HERGA) is a model on how to develop leadership capacity. Interviews with community members who have taken on leadership roles will provide both qualitative and quantitative data to support the success of this program. Examination of CoP activities will allow for evidence-based analysis and the potential for building leadership programs such as this in other institutions.

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### Session B10

Paper

#### LEADING WIDESPREAD CHANGE THROUGH COLLABORATIVE INQUIRY

**Andrea Greenhoot<sup>1</sup>**

*1 University of Kansas*

This presentation will describe an effort to promote widespread adoption of evidence-based teaching practices and improved student learning at the University of Kansas through a university-wide intellectual community, the 21st Century Course Redesign Consortium or ‘C21’. In the last few years the university has invested in several initiatives and resources to support faculty efforts to transform undergraduate courses around student-centered approaches. For instance, several departments have recently hired postdoctoral teaching fellows who partner with faculty to transform large foundational courses, and there are now multiple resources and specialists to help faculty members produce online materials and take advantage of a range of new interactive learning activities. C21 integrates these and other resources to amplify their impact beyond what each of them might have in isolation. It brings together faculty from diverse departments across campus, postdoctoral teaching fellows, a small but critical mass of campus leaders in course redesign, course design and technology specialists, graduate students, and undergraduate students, all of whom bring different knowledge, experiences and perspectives to the course transformation process. The goals are to support and expand opportunities for inquiry and reflection on teaching, and to promote a new shared vision of high-quality teaching at the university.

Our approach to the activities of C21 draws on the literature on faculty learning communities and also builds on a successful team course design project implemented at the university a few years ago. Undergraduate students are included to share the student voice on transformed courses and to provide an avenue to influence the student culture around learning. The group meets regularly 10 to 12 times each year for workshops or discussions around a focused topic that encourage members to collaborate and utilize resources that can simplify, support or document their work. Although C21 draws on some well-established programs, the scale is quite unlike any previous program on our campus. Membership has grown from about 40 faculty, staff and students to over 100, representing over 20 different academic departments, and between 30 and 50 participants attend each meeting. The size and diversity of C21 made it a unique and exciting challenge, but these characteristics also appear to yield some of the greatest benefits. Discussion will focus on the strategies we have used to implement this intellectual community, the gains we have made in promoting faculty use of high quality, evidence-based teaching practices, and the evidence that these changes are producing upgrades in student learning.

### Session B10

Paper

#### SOWING THE SEEDS: DEVELOPING SUSTAINABLE PRACTICES THROUGH SHARED PERSPECTIVES, STRATEGIES AND AN INTER-INSTITUTIONAL COLLABORATIVE COMMUNITY

**Gwendolyn Lawrie<sup>1</sup>**, Madeleine Schultz<sup>2</sup>, Glennys O’Brien<sup>3</sup>, Simon Bedford<sup>3</sup>, Roy Tasker<sup>4</sup>, Christopher Thompson<sup>5</sup>, Anthony Wright<sup>6</sup>, Mark Williams<sup>4</sup>

*1 School of Chemistry & Molecular Biosciences, The University of Queensland*

*2 Science and Engineering Faculty, Queensland University of Technology*

*3 School of Chemistry, University of Wollongong, Wollongong*

*4 School of Chemistry, University of Western Sydney*

*5 School of Chemistry, Monash University*

*6 School of Education, The University of Queensland*

**Rationale:** The first-year transition is recognized as an important aspect of tertiary studies and there have been many published recommendations for changes in both pedagogies and principles of practice to enhance student engagement and retention as part of the first-year experience. Large, first year science classes are typically diverse cohorts of students in terms of their prior experiences, academic abilities and career aspirations making student engagement and assessment of their learning outcomes challenging.

**Aims:** As part of a two-year, nationally funded project, nine academics who lead first-year chemistry programs across five Australian institutions, representing three states, have collaborated to develop a combination of diagnostic instruments, mechanisms for delivery of formative feedback, and a range of strategies for delivering face-to-face and self-regulated online study modules in each context. Their aim was to transform instructional and assessment practices for diverse STEM cohorts of students as they entered their tertiary education. The processes of working towards a common goal highlighted the importance of shared perspectives, experiences and strategies amongst the academics providing the opportunity to identify multiple routes to a common destination. Through their collaboration, a community of practice emerged as academics worked to effectively deliver formative feedback and to support student learning in the parallel contexts.

**Methods, Framework & Models** The processes, conversations and relationships that the academics engaged in throughout the project, along with related outcomes, have been evaluated across three semesters - data includes records of project meetings, reflections and actions. This qualitative data has been analysed to characterise and establish the existence of a community of practice using this as an underpinning theoretical framework. Alignment of project activities and individual roles with ‘distributed leadership’ as a model for sustainable change has also been explored, with several common elements evident.

**Reflective critique:** The team’s successes and ongoing challenges will be recognised as part of this presentation, supported by recommendations for practice and individual reflections. The experience of participating in this collaborative project was a transformational for every team member each identifying changes in practice that would be sustained.

**Audience Engagement:** The audience will be invited to engage in a discussion of whether ‘top-down’, ‘bottom-up’ and ‘middle-out’ strategies represent the optimal catalyst for institutional change.



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## Session B11

### THE PEDAGOGICAL USE OF DIGITAL TECHNOLOGY IN HIGHER EDUCATION

Trine Fosslund<sup>1</sup>

*1 UiT The Arctic University of Tromsø, Center for teaching, Learning and Technology*

The use of digital technology is no longer a core business only for universities with distance education as a mission; it has also been integrated into the student learning experience by predominantly campus-based universities within different educational settings (Fosslund 2015). Technology has changed teachers' practice (see for example Kirkwood 2013, Fosslund 2015), and technology has emerged as a particular competence needed for teaching and learning. It is often taken for granted that technologies can 'enhance learning' (Kirkwood and Price 2014, p. 6). However, how we use digital technology to facilitate the students learning is an empirical question. In this study, the aim is to investigate how digital innovators, teachers that have extended experiences on the use of digital technology in their teaching, approach the use of digital technology, when I ask; How do digital innovators use digital technology to facilitate students learning and formation processes within higher education?

Methods: used Based on findings from in-depth interviews with 22 'digital innovators' (skilled teachers with long experience in use of digital technology), this paper discusses the use of digital technology in Norwegian higher education. The study also rely on findings from a Norwegian survey on 1070 teachers' use of digital technology in higher education.

Evidence: Evidence informed principles for effective pedagogies (David 2013) is used when analysing the digital innovators stories. The aim is to investigate how the digital innovators approach fit into these principles, and how their experiences can enhance universities educational development and strategies on this matter The findings addresses new challenges and possibilities for better quality learning when it comes to the teachers' use of digital technology to facilitate the students teaching and learning processes, both at a macro and individual level. The study has identified four different models where the use of digital technology is used to enhance the students teaching and learning processes.

Conclusion: The study has explored the use of digital technology, how digital innovators facilitate the students learning processes in a Norwegian higher educational context. The important findings is not concerning the technology in itself. The study has revealed several interesting practices on how the use of digital technology can be facilitated to enhance the students learning processes in line with the knowledge, skills and general competences that are expected in their digital futures.

David, M. (2009). *Effective Teaching and Learning in UK Higher Education A commentary by the Teaching and Learning Programme*. London TLRP, ESRC.

Fosslund, T. (2015a) *Digitale læringsformer i høyere utdanning*. Oslo, Universitetsforlaget.

Fosslund, T. (2015b) *Moving beyond learning in Net-based Higher Education*. I: *Academic Bildung in Net-based Higher Education: Moving beyond learning*. Routledge.

Kirkwood, A. and L. Price (2013), *British Journal of Educational Technology*, Volume 44, Issue 4, pages 536-543, July 2013

## Session B11

Paper

### A CREATIVITY MOOC FOR THE 21ST CENTURY STUDENT

Kym Fraser<sup>1</sup>, Yoni Ryan<sup>2</sup>

*1 Swinburne University of Technology*

*2 Queensland University of Technology*

Questions and rationale: This paper addresses the overarching theme of 'the scholarship of change', and the sub-theme 'Future Students, future pedagogies, future learning paradigms'. It outlines the findings of a 2014 pilot of an Australian Creativity 'mini-MOOC', based on Open Education Resources principles and designed to be student-led at the postgraduate level. Massive open online courses were predicted to disrupt historical models of higher education (Straumsheim, 2014). Academics and media commentators were calling for new learning skills for the post-industrial knowledge economy (Robinson, 2011; Bridgstock & Cunningham, 2014), above all, for innovative thinking, creativity and disciplinary agility in combining deep domain knowledge with a range of generic skills: 21st Century employability skills, including the ability to self and peer assess and provide feedback (Liu & Carless, 2006). The question underpinning our pilot was: Could 'Creativity' be 'taught' and assessed as a standalone, short optional program for postgraduates?

Framework: We used the 'good practice' OUUK design framework of a collaborative team consisting of learning designer, educational developers, and content experts, and a rigorous evaluation framework throughout via: the Reference Group including business representatives; paid student evaluators; pre- and post-student surveys; an external evaluator; and meetings of the project team; taking an action research approach to design, evaluation and development, with the final revision of materials based on student and program director comments from the pilot.

Outcomes: We found that Creativity can be taught and assessed in a short program, as measured by student endorsement of their learning achievement via pre-and post surveys, and student peer and self-assessment assignments. Students strongly believed that peer and self-assessment was valid and reliable, as long as they were provided with a rigorous rubric to guide their assessment of learning outcomes. Given that most MOOC enrollees are postgraduates, we argue that at this level, there is far more scope for peer and self-assessment in pedagogies for the 21st Century. We are unaware of any studies emanating from the flagship MOOC providers regarding assessment validity, although many such programs rely on peer assessment. The Creativity MOOC was designed such that students could enrol independently or the program could be customised by program directors and embedded in their disciplinary program.

Reflective critique: Notwithstanding the relative 'success' of the pilot, in terms of student achievements and value, we believe the MOOC would be best embedded in accredited Master's level courses, in order that program directors can tailor the MOOC specifically and are seen to value and develop Creativity in their disciplines/professions. We are convinced that peer and self-assessment should feature more prominently in assessment regimes for postgraduates, and that the large MOOC providers could be encouraged to focus attention on evaluating such assessment for validating student learning outcomes.

Audience engagement: Our oral presentation will query the audience to reflect on their own teaching regarding this crucial skill.

## Session B11

Paper

### ADDRESSING THE ONLINE LEARNING NEEDS OF NON-TRADITIONAL STUDENTS

Lynette Goldberg<sup>1</sup>, Andrea Carr<sup>1</sup>, Alison Canty<sup>1</sup>, Kate-Ellen Elliott<sup>1</sup>, Fran McInerney<sup>1</sup>

*1 University of Tasmania*

The 'future students' are an important non-traditional cohort - adults who provide care to people with dementia. Typically, these adults are of mature age with limited educational backgrounds that obstruct opportunities for advancement in the workplace. Studies show these adult learners are internally motivated, self-directed, goal-oriented and practical. Often, they are dealing with multiple roles, including working full- or part-time, including night-shifts, and being a parent, spouse or partner. These roles bring both rich life experiences and challenges to the learning situation. Additional challenges center in the psychological demand of 'learning to learn' at a university level and having available and accessible technology to participate effectively in online learning.

Literature: Information on 'future pedagogies' compares androgogical theory to pedagogical theory and summarises the literature documenting the needs of mature students for learning effectively. Information on 'future learning paradigms' focuses on published strategies to facilitate effective online learning for non-traditional students.

Methods: To illustrate these three components, we present data to demonstrate the impact of a unique, fully online Bachelor of Dementia Care (BDC) degree. This degree, offered by the University of Tasmania (Australia), is open to any student but has been developed specifically to support and advance the learning of adults who are working with people with dementia. Evidence-based and institutionally-supported online learning offers a valuable educational opportunity for non-traditional students. The three-year degree began in 2012. The first graduates will complete the program at the end of 2015.

Evidence: We detail the successful learning of a cohort of 65 students, most of whom were paid carers for adults with dementia. Thirty-one students had previous university experience; 34 did not. Across 15 units in these students' first and second years of study, all 65 students passed all units. There were three units with significant differences between students who had studied at university and those who had not. Students with university experience achieved higher scores in two first year units, Introduction to Ageing, the Brain, and Dementia, and Principles of Supportive Care for People with Dementia, and one second year unit, Preventative and Therapeutic Approaches to Care. Important variables including the experience of the instructors, the ways in which students were actively engaged in the learning process, the assessments and rubrics used across the units, and the number of markers involved, were evaluated to investigate reasons for the findings of difference and no difference between the two groups of students. At the end of their second year, all students were asked, 'How might the care you deliver to people with dementia change as a result of what you have learned?' Responses were collated into a text document and analysed using the qualitative computational linguistics program, Leximancer. Four ranked themes emerged: improved care (29%), increased understanding (28%), increased knowledge (23%), and increased confidence (20%), reflecting the positive effect of learning in the BDC program.

Conclusion: All 65 students passed all 15 online units demonstrating that, for this student cohort, the online learning about dementia was effective and the degree is appropriately

designed with scaffolded learning to support non-traditional students with limited educational backgrounds.

Audience Engagement: Throughout this session attendees will be encouraged to participate in a critical evaluation of the presented findings and to suggest ways in which online learning can be enhanced for non-traditional students.

## Session B12

Paper

### DEVELOPING THE COMPETENCIES REQUIRED TO SUCCESSFULLY NAVIGATE LOCAL COMMUNITIES AND A GLOBALISED WORLD: AFFECTIVE GRADUATE ATTRIBUTES

Anna Rowe<sup>1</sup>, Theresa Winchester-Seeto<sup>1</sup>, Agnes Bosanquet<sup>1</sup>

*1 Learning and Teaching Centre, Macquarie University*

Graduate attribute statements articulate a university's vision of the future students they seek to develop. Over the last 20 years, university students have increasingly been expected to develop emotional and interpersonal capabilities. A large body of theory and evidence links emotions and some of the skills and personal qualities aspired to in graduate attribute statements, e.g. communication, collaboration. Emotions serve particular interpersonal functions, with social interactions the most common cause of emotions (Hareli & Parkinson, 2008). This presentation builds on previous work (Bosanquet et al., 2014; Winchester-Seeto et al., 2012) to address the under researched area of emotions and learning in SoTL, by examining graduate statements from 39 Australian universities for evidence of affective attributes. Questions considered include: What emotional attributes are espoused? What kinds of learning, knowledge, skills and personal qualities are they associated with? How is the development of emotional capabilities associated with preparing current and future students for navigating their communities and the globalised world?

Graduate attribute statements were collected and collated, with affective attributes coded and grouped based on a grounded theory approach (Glaser & Strauss, 1977). Thirty percent of universities explicitly articulate emotional attributes, with confidence and curiosity the most frequently mentioned. However, there are a larger number of 'implicit' attributes where emotions are implied, and underpin the skills and behaviours expected of students, e.g. self-directed learning, team work, reflection. Our previous findings demonstrate that attribute statements show varying levels of engagement, from passive and active through to critical (Bosanquet et al., 2014). Many affective attributes are 'active', with a smaller number of 'passive' and 'critical' ones.

Teaching approaches to promote and facilitate the development, and assessment of, affective attributes are not well understood by academics (Grootenboer, 2010), and traditional classroom-based education may be inadequate to achieve these goals. With this in mind, the session will provide opportunities for critical reflection and discussion around questions such as: how can universities ensure students are prepared for evolving paradigms in learning and beyond within the context of local communities and a globalised world? And, how well are academics equipped to develop students' emotional as well as cognitive capabilities?

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## Session B12

Paper

### DIFFERENT VIEWPOINTS: COMPARING GRADUATE ATTRIBUTES FROM TAIWAN AND AUSTRALIA

Theresa Winchester-Seeto<sup>1</sup>, Ming-chia Lin<sup>2</sup>, Anna Rowe<sup>1</sup>, Agnes Bosanquet<sup>1</sup>, Eric S Lin<sup>2</sup>

<sup>1</sup> Macquarie University

<sup>2</sup> National Tsing Hua University, Taiwan

Australian universities are increasingly attempting to develop student's capacities to flourish in a globalised world and in their own communities (Bosanquet et al., 2014). Simultaneously classrooms are becoming more diverse. Responding to this necessitates an understanding of the cultures and contexts in which people live, work and are educated across the globe, and factors influencing Higher Education (HE). This presentation outlines a case study comparing graduate attribute statements from universities in Taiwan and Australia, to provide insights into the similarities and differences.

Graduate attributes are a public articulation of a university's vision of the students they seek to develop, and provide insight into the intended curriculum (Marsh & Willis, 2007; Winchester-Seeto et al., 2012). To date there is no research investigating graduate attributes across different countries, and this unique study builds on previous work by the authors (Bosanquet et al, 2012; Winchester-Seeto et al., 2012; Lin et al., 2014).

Lists of graduate attributes were collated from 12 Australian and 12 Taiwanese universities, chosen to represent the breadth of HE institutions in each country. Attributes were grouped into themes using a constant comparative method (Cohen et al., 2011) and a word frequency analysis was used to compare language.

Overall there are many similarities e.g. the two most frequently cited attributes in both countries is communication and critical thinking. There are, however, a number of distinct differences e.g. Australia has no direct equivalent of the Taiwanese 'Aesthetics and taste' or 'Humanistic literacy', whilst Taiwan has no direct correlate of 'working autonomously'. The language used also reveals different emphases, e.g. a 'spirit of service' in Taiwan, but 'contribute to the community' in Australia. Attributes from Taiwan seem to emphasise the kind of person a graduate should be, whereas Australia focusses on what a graduate can do. This subtle difference between 'being' and 'doing' seems to be culturally influenced.

This session provides opportunities for critical reflection and discussion with the audience around questions such as: What influences graduate attribute lists? How culturally based are

the attribute lists? How much does context affect what we expect from our graduates?

Bosanquet, A., Winchester-Seeto, T., & Rowe, A. (2012). Social inclusion, graduate attributes and higher education curriculum. *Journal of Academic Language & Learning*, 6(12), 73-87.

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Marsh, C.J., & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues*. Upper Saddle River, NJ: Merrill Prentice Hall.

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## Session B12

Paper

### FACILITATING LEARNING ABOUT NAVIGATING DIVERSITY THROUGH DIFFICULT DIALOGUES

Deirdre E. Van Jaarsveldt<sup>1</sup>, Annemarie Joubert<sup>2</sup>

<sup>1</sup> Centre for Teaching and Learning, University of the Free State, South Africa

<sup>2</sup> School of Nursing, University of the Free State, South Africa

The Difficult Dialogues project is an international initiative that is dedicated to promoting respectful, transformative dialogue on controversial topics and complex social issues in higher education. At the University of the Free State, South Africa, the project is coordinated by the Centre for Teaching and Learning (CTL).

The university is dedicated to advancing both academic achievement and social success. Consequently, various strategic initiatives have been implemented to promote inclusiveness on campus. Yet, in spite of these efforts, intergroup conflict arose amongst the first year nursing students during 2013. Towards the end of the academic year, the conflict had escalated to the extent that the academic performance of the entire group was disrupted. Feedback received from the class in the form of written reflections indicated that there was racial tension and misunderstanding within the group and the School of Nursing decided to consult with CTL to facilitate a Difficult Dialogues session.

This paper describes the design and presentation of a contextualised session programme to facilitate student learning about navigating diversity and responding to conflict in a constructive way. It was important, for example, to create a hospitable environment where the students could relax and experience a sense of belonging. Mutual respect was demonstrated throughout and a sense of self-determination was encouraged by clarifying mutual expectations and having the students compile ground rules for discussion at the beginning of the session. Activities were purposefully selected to encourage a team spirit, collaboration and equal participation. The topics of discussion related to discovering the humanity of fellow-students and learning to respond to conflict in a constructive way.

The rich data of a qualitative inquiry conducted via the Critical

Incident Questionnaire are triangulated with literature and additional student feedback to describe to what extent the session contributed towards student learning in this regard. A number of participants indicated that they had learnt to respect diversity and had realised that they could co-operate as a team in spite of individual differences. As additional evidence, the students listed specific skills that could aid them in navigating diversity and conflict in future. This case raises questions about the sufficiency of institutional endeavours to create a sense of belonging for all. It is also asked what the role and responsibility of teachers are in addressing issues of diversity in the classroom on a continuous basis.

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## Session B13

Paper

### **EMBEDDING PROGRAM EVALUATION RESEARCH INTO THE IMPLEMENTATION OF AN INNOVATIVE NEW FIRST YEAR PROGRAM FOR INTERNATIONAL STUDENTS**

Joanne Fox<sup>1,2,4</sup>, **Ashley Welsh<sup>1,4</sup>**, Brian Wilson<sup>1,4</sup>, Sandra Zappa-Hollman<sup>1,3,4</sup>

1 UBC Vantage College

2 Michael Smith Laboratories and Department of Microbiology and Immunology

3 Language and Literacy Education

4 University of British Columbia

Launched at the University of British Columbia (UBC) in September 2014, UBC Vantage College provides an innovative interdisciplinary program for first-year international students who wish to begin their University degree while at the same time completing an intensive Academic English Program. Within this program (Vantage One), students complete academic courses (in Arts, Engineering, Management, or Science) that follow an integrated language and content approach (Coyle, Hood, & Marsh, 2010; Crandall & Kaufman, 2002). Each content course (i.e. Chemistry, Political Science) is linked with an academic English tutorial that aims to enhance students' comprehension and awareness of the concepts, genres and registers in the respective fields of study. This structure fosters collaborations among faculty who together, design and implement innovative curriculum and pedagogy that enriches student learning. Students' scholarly practices are further enhanced through two core courses that include multidisciplinary lectures, project-based learning, and mentorship from a faculty member. Overall, Vantage One strives to help students to succeed in a North American academic environment and to successfully transition into their second year of studies.

This paper presentation will report on the program evaluation being conducted since September 2014 and briefly describe the Vantage One program. Our research draws on Maki's (2010) framework that describes assessment as an iterative process of identifying outcomes, gathering and interpreting evidence, disseminating the findings, and implementing appropriate changes. This framework allows us to assess how our teaching practices and academic/social programming within Vantage One influences students' experience and learning. Multiple complementary data types have been collected via pre and post student surveys, faculty reflections, interviews and focus groups with students, faculty, teaching assistants and staff, and via student-generated work.

The results from our program evaluation inform course- and program-level revisions. For instance, our survey results revealed students' desires for increased interaction in English with their peers/instructors, their difficulty in coping with the

demands of first-year at UBC, and an appreciation for interactive opportunities to improve their writing and communication skills. These findings were shared with administration, staff, and faculty to improve their understanding of students' perspectives and sparked faculty/staff collaborations to enhance current curriculum, pedagogy, and programming. Initial data analysis also led to the creation of a student-facing report that was presented to students to highlight the key survey results and potential resources to foster students' academic success and personal well-being.

Taken together, the setting at UBC Vantage College provides an opportunity to use scholarly approaches to better understand: how international students learn; how we can enrich the student experience by adopting approaches that help students with academic, language and cultural transitions; and how we can spread promising practices. Throughout our presentation we will ask audience members to discuss, reflect upon, and compare the program evaluation and teaching practices occurring at UBC Vantage College and at their own institutions. The net objective of this process is to capture, share and transform the theory practice cycle for students and faculty alike, within Vantage College, across the UBC campuses, and internationally.

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## Session B13

Paper

### **STUDENT STORIES CANNOT BE COUNTED, A DISCUSSION OF NARRATIVE AS A MEANS OF RESISTING THE MEASUREMENT OF STUDENT EXPERIENCE**

**Claire Hamshire<sup>1</sup>**, Rachel Forsyth<sup>1</sup>, Kirsten Jack<sup>1</sup>, Christopher Wibberley<sup>1</sup>

1 Manchester Metropolitan University

Students are widely regarded as important stakeholders in universities and their feedback is valued (Alderman et al. 2012). However, there are multiple discourses around students' higher education experiences and the students' own voices can become lost beneath powerful, academic and professional discourses supported by evidence and statistics. Measurements and indicators are presented and disseminated, reviewed and judged, and ultimately used to set policy and procedure; but little of the individual, emotional experience of being a student is evident. National surveys such as those used within the UK (National Student Survey) and Australia (Course Experience Questionnaire) can have significant influence (Yorke 2009) but questionnaires can lack validity and reliability and data used inadequately or inappropriately (Alderman et al. 2012).

A somewhat narrow 'academic' interpretation of undergraduate students' experiences can be gained and working with this dominant narrative can lead us to believe that students' experiences can be satisfactorily assessed and measured. Yet, statistics and percentages fail to convey the way in which students' higher education experiences are learning journeys which shift and change throughout their studies and have little resonance with actual experience.



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There is a need to explore how students' experiences change over time, to gain an in-depth insight into their learning and a more comprehensive understanding of their circumstances over the three-year time frame of their undergraduate studies. Narrative inquiry, with a focus on stories of experiences can provide an alternative to surveys; permitting students to narrate their stories over time, to locate their voices as their experiences develop and allow us to identify what factors influence student engagement and their learning trajectories during their experiences of being a student.

This session explores the potential for the use of narrative inquiry within research on students' experiences. It was developed over time and settings between academics from different disciplines all of whom are involved in qualitative research and focuses on our concern that we are counting and measuring a lot of the aspects of students' experiences; but are not getting sufficiently close to the messy complex stuff that is at the heart of what influences students' higher education studies.

Using narrative fragments from a three-year longitudinal study with Physiotherapy students to offer an insight into the process we will illustrate how a narrative approach can be used. Whilst it is not practical to try to capture each student's journey through a course, it is appropriate to try to use narrative inquiry judiciously to equip colleagues with a sense of the variety of individual experiences. To engage the audience we will present a selection of students' narratives developed into illustrated stories and explore how these findings are used within a personal tutorial system which uses open questions to encourage students to reflect on their experiences, and to share their achievements and difficulties with university study.

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## Session B14

Paper

### WEBINARS AS A VENUE FOR ENGAGEMENT IN PROFESSIONAL LEARNING FOR BUSY ACADEMICS

**Mathew Hillier**<sup>1</sup>, Karen Sheppard<sup>1</sup>

*1 University of Queensland*

This paper seeks to address declining engagement with traditional face-to-face faculty professional development on the part of university academics. An argument is presented that webinars as a means of disseminating innovations in teaching and learning are conducive to engaging academics in professional learning, in what might be considered the beginnings of a 'web of enhanced practice' (Scott, 2009).

University academics, as are professionals, highly qualified, have a large degree of autonomy, traverse global and local contexts regularly, deal with multiple levels of judgement to navigate the competing demands of a 'messy' (Ackoff 1974), complex educational system (Barnett 1999). Further characteristics of professionals as learners shared by academics are that they are increasingly time poor, making 'time the unit of currency' (Robinson 2014), they are goal oriented in seeking solutions to specific problems, are often intrinsically motivated and are frequently 'self-referential as a group'. From the

perspective of an academic seeking professional learning opportunities several questions arise: How is that going to happen? When am I going to find the time? Why and what will it mean to me? And a final query, who am I going to do that with?

The general decline in the attendance of academics at traditional, centralised face-to-face training sessions on-campus highlights that serving the needs of these busy learners is increasingly problematic, yet is essential to the work of academic development units. One solution is to utilise contemporary delivery mechanisms such as webinars, with their online format, their utility, convenience and their potential to bring geographically dispersed participants together in a virtual space (Stephenson & Downing 2012).

The Transforming Assessment monthly webinar series, now in its sixth year and 60th session, aims to engage academics in learning about innovations in technology-enhanced assessment. Interaction between audience members and the presenter is via audio, images, text and video. Data from two separate evaluation surveys collected from 116 webinar attendees and 450 end-session feedback surveys were analysed for emergent themes. The affordances that serve the needs of learning professionals include being 'time efficient', 'place independent', 'global in reach', and providing 'two way communication within the audience'. The presenters also share a common language and understanding with the audience. Overall, we found that regular participants appreciated the utility of the webinar medium and that the webinars were a preferred mode of accessing professional learning opportunities for many.

These findings are significant for teaching and learning support units who are under increasing scrutiny to show a return on investment in light of declining engagement with traditional face-to-face workshops. The presenters will provide practical and theoretical understandings of how these webinars work as a solution that better meets the needs of busy academics as professional learners.

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## Session B14

Paper

### THE WORK OF THE UNITED KINGDOM ASSOCIATION OF NATIONAL TEACHING FELLOWS

**Simon Lancaster**<sup>1</sup>

*1 Association of National Teaching Fellows*

The UK National Teaching Fellowship Scheme recognises excellence in teaching in UK Higher Education. UK National Teaching Fellows are members of the Association of National Teaching Fellows (ANTF) which operates as a community of practitioners working in partnership with the Higher Education Academy, UK, to enhance and embed the work of National Teaching Fellows on learning and teaching.

The session will consider the ways in which the ANTF supports SoTL and its role in the development of new and different ways of learning and teaching in the UK. We will showcase the

unique and diverse work of UK National Teaching Fellows from across a range of disciplines. We will share innovative ideas, experiences, activities and projects that evidence how SoTL can inform, support and advance learning and teaching in higher education. Examples will include SoTL and pedagogic practice from members of the ANTF that we anticipate colleagues will be able to adopt and adapt within their own learning and teaching work.

We anticipate broad appeal to HE lecturers, managers, Heads of Learning and Teaching, pedagogic scholars and researchers. It will also appeal to those who have an interest in developing further their understanding of the process, role and activities of Teaching Fellowships, the UK Higher Education Academy National Teaching Fellowship Scheme and National Teaching Fellows.

The session will illustrate the value and rewards of learning and teaching that is informed, supported and evidenced by SoTL. We aim to provide colleagues with an inspirational, interactive, informative and entertaining consideration of the importance of SoTL in UK HE. The session will encourage networking and the consideration of transnational collaborative activities. We aim to help, inform and hopefully inspire colleagues to develop their own networks and seek closer integration with the UK ANTF. Supported by the Association of National Teaching Fellows

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## Session B14

Paper

### THE ASSOCIATE DEAN (STUDENTS) ROLE: DOES IT WORK FOR STUDENTS AND INSTITUTIONS?

Jill Lawrence<sup>1</sup>, Lyn Brodie<sup>1</sup>, Jennifer McDonnell<sup>1</sup>

<sup>1</sup> University of Southern Queensland

As universities seek to increase enrolments across a wider cohort traditional approaches to student learning and support are no longer sufficient to ensure retention and progression. This fact and the propensity for restructuring in global and Australian higher education contexts has led to a plethora of new structures and roles. This paper will address the conference theme Leading Learning and the Scholarship of Change and more specifically 'Leadership in the academy' by exploring the position the Associate Dean (Students) role in institutions and their place in shaping student expectations as well as institutional and staff interactions with students.

The Associate Dean (Students) is a diversion from the now more established roles of Associate Dean (Academic), (Education) and (Learning and Teaching). While this is a relatively recent phenomenon in Australia the Students role is established in the United States though in a slightly different form. In the United States it is a cross between student management, student life (or affairs) and academic responsibilities. In Australia it is often focused on the student experience and differentiated from learning and teaching (teaching experience and quality) and academic (accreditation) roles. This paper documents the rise of the new 'Students' role and explores whether it is gaining credibility and stature (and status). It questions whether the role is an extension of the more traditional ombudsman role or a 'catch all' for the multiple issues facing the diversity of students now participating in higher education, and therefore in its institutions. Should the role be that of student advocacy or one more related to managing student expectations in a complex and multifaceted institution?

The paper further discusses the lack of definition for the role. For example, is the focus of the role operational, covering day-to-day processes and procedures and ensuring consistency

across institutions? Or is the focus one that is more strategic and proactive, crossing divides, divisions, sections, Faculties and schools to support students and staff in an economically-driven and rapidly changing higher education sector? The paper thus questions if, in supporting students the role is also one of supporting staff? Confrontational students, academic integrity, academic standing and at risk processes, the diverse student cohort, the student experience and transition, and students' rights and responsibilities (or professionalism) are increasingly issues which staff deal with on a day to day basis. Higher education is now big business but does this mean that the student is the client buying a service and is the client 'always right'? In order to interrogate these questions a pilot qualitative research study was conducted. The findings show that supporting staff to support students in both strategic planning and operational processes the Associate Dean (Students) role is a vital and complex role in today's rapidly changing academic landscape. It can greatly assist in developing and implementing procedures and processes to assist staff, both academic and professional, respond positively and proactively to the shifting student expectations in a growing consumer focused market.

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## Session B15

Paper

### COMPREHENSIVE FLIPPED LEARNING AND INDUCTIVE PEDAGOGIES

Gregor Novak<sup>1</sup>, Kimberly De La Harpe<sup>1</sup>

<sup>1</sup> United States Air Force Academy

The Flipped Learning Network website, flippedlearning.org, defines flipped learning thus: 'Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. The key ideas are: a) designing students out-of-class activities to promote exploration and independent constructing of knowledge and b) designing in-class activities to promote guided group discussion, critical thinking and creative problem solving. Out-of-class work involves pre-class exploration before the lesson and post-class formative assessment in preparation for the summative assessment at the end of the learning module. In-class activities consist of small group discussions, peer instruction and interactive demonstrations. All of these are closely linked to the pre-class work and to the post-class practice assignments.

At the United Air Force Academy we have been experimenting with these ideas since the mid-nineties. In 1996, in collaboration with IUPUI, we developed Just-in-Time Teaching (Novak 2011), later described as one of the inductive pedagogies (Prince 2007). JiTT, as it became to be known, and now used across the disciplines, presents the student with pre-class assignments, due just hours before the lesson, to prepare the class for interactive activities, guided by the instructor and informed by responses to the pre-class assignment. JiTT can be combined with other inductive teaching methods, e.g. Discovery Learning and Case-based Teaching.

We have continued to expand and integrate the repertory of learning activities with the ultimate goal of a template for a comprehensive flipped learning lesson module. We are incorporating Worked Examples (Chi 1989) pedagogy into the JiTT modules. This is yet another flip in the learning process. Before being presented with a formal theory, students analyze an application of the theory, presented as an example of an expert solution of a real world problem. Students are

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prompted to explain to themselves the steps taken by the expert. This approach has a long research history and boasts many success stories. We have developed web-based tools that facilitate sharing of information. An example is our image submission tool. The student can take a picture of a page of his/her work and email it to a JITT server, where it is tagged and store in a database. No technology other than a mobile phone is involved. In this presentation we will share our resources, tools and experiences.

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## Session B15

Paper

### **FUTURE FLIP OR FUTURE FLOP?: FLIPPING LARGE UNDERGRADUATE MATHEMATICS LECTURES**

**Julia Novak<sup>1</sup>**, Tanya Evans<sup>1</sup>, Barbara Kensington-Miller<sup>1</sup>

*1 The University of Auckland*

**Questions and Rationale:** Driven by the advances of emerging technologies, the higher education sector is forced to move with the times and look for ways to generate profit and become sustainable in a technological era. New technologies are guiding the expectations of the students and questioning the need for, and the value of, face-to-face lectures. As higher education providers it is probably unwise to pretend that we can avoid being affected by the big changes knocking on our door. At the very least we should be embracing the new opportunities that on-line learning affords and should be riding the wave of change to be able to compete with other education providers. It is in our best interests to evolve our teaching practices, to combine online learning and face-to-face education, producing a blended learning environment that exploits the best of both worlds.

**Theory/Methods/Framework/Models:** In this session we present a case study of flipped classroom experiments run as part of a large undergraduate Mathematics course at the University of Auckland, New Zealand. More explicitly, the course chosen for the case study was a standard Mathematics stage II service course, covering material on Calculus, Linear Algebra and Ordinary Differential Equations. The experiments were designed around the theory of Bloom's taxonomy (Bloom, 1965) and active learning (Abeysekera & Dawson, 2014; Prince, 2004), which we combined with a team teaching technique and guided political style debate. Our framework has the ability to be easily incorporated into university courses with a standard lecture structure, and can be used for a one-off flipped lecture, or several flipped lectures spread throughout. The value of using this model in face-to-face lectures, particularly in large undergraduate courses, is the emphasis it places on student learning. By incorporating blended learning with an active learning experience, we are able to increase both student participation and engagement.

**Outcomes:** We will report on the data collected as part of our flipped lecture experiments, from both the students' and the lecturers' perspectives. The data was gathered from lecturers observations, results from questionnaires and outcomes from

focus groups. With this data, we highlight how the use of the model enriches the learning experience of students. In particular, we demonstrate how it can be incorporated into STEM subjects that are traditionally taught in the transmission style, where learning is passive.

**Reflective Critique:** As pure mathematicians we have enjoyed experimenting with the flipped classroom and seeing first-hand how changes in our teaching can significantly affect learning. We will discuss the benefits and limitations of our approach, including the insights that we have gained which now inform our teaching practice in large undergraduate mathematics classes.

**Audience Engagement:** After presenting our model of blended-learning and flipped classrooms, we will leverage the expertise of the audience in order to diversify our approach.

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## Session B15

Paper

### **ENGAGING STUDENTS THROUGH, AND IN, THE FLIPPED CLASSROOM: ARE WE THERE YET?**

**Annalise O'Callaghan<sup>1</sup>**, Helen Flavell<sup>1</sup>, Claire Morrisby<sup>1</sup>

*1 Curtin University, Faculty of Health Sciences*

If the level of activity and interest is anything to go by it is clear that quite a few people in higher education are 'flipping out' over the flipped classroom (Schwartz, 2014). Although the flipped classroom is not new the popular terminology was coined by teachers in secondary education and has rapidly expanded to include some MOOCs (Watters, 2012; Wilson, 2013). Typically, the flipped or inverted classroom requires students to do activities utilising elearning prior to attending face-to-face sessions where the tutor facilitates applied activities and discussion (Davis, 2013; Schwartz, 2014). In other words, in a world where information is readily available through the internet (McWilliam, 2009) tertiary teachers add value through facilitating deep learning with the greater cognitive load addressed face-to-face (Abeysekera & Dawson, 2015; Davis, 2013). A reduction to higher education funding, increases in student numbers and the impact of technology are key drivers for the flipped classroom. Advocates for the flipped classroom argue that it is informed by constructivist learning; the flipped classroom supports active rather than passive teacher-controlled learning (typified by the traditional didactic lecture/tutorial structure) through students observing, interacting and interpreting during the face-to-face component of the course (Pierce & Fox, 2012). Despite the enthusiasm for flipped learning some observers are more cautious (Watters, 2012). For example, a recent paper by Abeysekera & Dawson (2015) argues that whilst the flipped classroom has the potential to provide both extrinsic and intrinsic motivation for students-thereby engaging them-there is a lack of evidence to support its wide-scale implementation. Indeed, elsewhere in the literature one of the key stumbling blocks to an effective flipped classroom is students' failure to come prepared for the face-to-face sessions thereby suggesting a lack of engagement (Abeysekera & Dawson,

2015; Harreid & Schiller, 2013; Milman, 2012; Mok, 2014). This paper will present quantitative and qualitative data from a research project that aimed to determine: whether a large interprofessional flipped first year course engaged students in their learning, what elements of the course design supported engagement, and what changes would increase engagement. An analysis of course learning analytics, data from the university student feedback survey, student attendance, data from a validated measure (Flipped Classroom Student Engagement Questionnaire 2.2 [Kynn, Talyor & Cole, 2015]) as well as data gathered through a focus group with tutors will be discussed. Comparison data, from last year when the course was not flipped, will be considered where appropriate. Preliminary data analysis suggests that student engagement (evidenced by attendance and preparation) has not declined. However, there are elements of the learning design that need attending to. Attendees will participate in an interactive challenge test on their knowledge of flipped learning using classroom 'clickers'. Attendees will also be given an opportunity to reflect and discuss how the information presented can be used to provide an engaging learning experience for their own students.

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### Session B16

Paper

#### **COLLABORATIVE CURRICULAR (RE)CONSTRUCTION (C3): ENGAGING STUDENTS IN THE PROCESS OF COURSE RE-DESIGN**

Gintaras Duda<sup>1</sup>, **Mary Ann Danielson**<sup>2</sup>

*1 Department of Physics, Creighton University*

*2 Office for Academic Excellence and Assessment, Creighton University*

Active learning. Student-centric learning. Students as SoTL partners. Higher education's view of and attitude towards students has evolved over the past few decades; despite this evolutionary view of students as active learners who should be empowered with a voice in their educational experiences, faculty are often so focused on "getting stuff done" (i.e., covering 15 chapters in 15 weeks; assigning papers; writing exams), they don't pay attention to their students, who are the most valuable resources in a classroom. As Dennis White says, "Asking students about their education is so simple that whether we are teachers, parents, researcher, or policymakers-we inevitably forget to do it."

This paper will present the results of a project that engaged nine faculty members paired with their former students in a process of backward course design; the initiative was called Collaborative Curricular (re)Construction, or more simply, C3. We worked with two cohorts of faculty-student participants, all of whom attended or taught at Creighton University (a private, co-educational Jesuit and Catholic University, located in Omaha, NE, USA) during the 2013-2014 and 2014-2015 academic years. Faculty were invited by the authors to participate in the project, and participants represented a diverse set of schools and programs, including business, law, nursing, pharmacy, biology, chemistry, education, and music. The individual courses that were re-designed included theory, skills-based, and laboratory-based curricula and/or settings, and ranged from introductory to professional school-level courses.

Building on the work of Cook-Sather, Bovill, and Felten, we investigated three primary questions: 1) how did students evolve as learners, 2) how did faculty change, and 3) how did the courses change as a result of participation in the C3 workgroup. This paper will present the results of surveys of participants, focus groups, and one-on-one interviews that

provide evidence for the effectiveness of this approach along three dimensions: 1) student participants approached learning in subsequent courses differently, 2) faculty were profoundly impacted by this experience and changed many aspects of their teaching and the way they designed courses as a result, and 3) in several cases data shows that student mastery of course learning objectives in subsequent semesters increased due to changes implemented by the faculty-student team.

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### Session B16

Paper

#### **ENGAGING STUDENTS IN CREATING LEARNING FUTURES**

**Jo McKenzie**<sup>1</sup>, Alexandra Crosby<sup>2</sup>

*1 Institute for Interactive Media and Learning, UTS*

*2 Faculty of Design, Architecture and Building, UTS*

Introduction and literature: In the rapidly changing university learning and teaching context, it is important for students to have a voice in their future learning environments. Student views about the use of technologies for learning have been sought through surveys such as ECAR in the US and others in Australia (Russell, Malfroy, Gosper & McKenzie, 2014). What emerges is an ongoing desire for face-to-face experiences combined with increasing use of digital technologies, with students wanting access to materials and information and more availability and flexibility of different learning technologies (Russell et al, 2014).

While these surveys provide valuable current perspectives, different approaches can draw on students' views about possible futures for university learning. This paper is based on data from an OLT project Valuing Student Voices When Exploring, Creating and Planning for the Future of Australian Higher Education (see Buzwell & Williams, 2014). The project aimed to engage students in generating ideas for possible and preferred higher education futures.

Methods: Students were engaged in a range of creative workshops, adapted from those used in the CALF project in the UK (Romenska et. al., 2011) and the OLT lead institution. Workshops included world café style processes and reflective sculpture, combined with futuring practices and imaginative collaborative scenario design. Workshop debriefing asked students to reflect on what was emerging, disappearing and challenging about the scenarios and what it would take to thrive in them. Further insights were gained from students' reflective blogging, vox pops and breakfast conversations. Overall, around 120 students participated in these processes.

Evidence: Data was collected through observations of the workshop facilitator, audio recording of group discussions, and models, drawings and debriefing notes generated by students during the workshops. The data was then analysed thematically.

Conclusions: Emerging themes suggest that students are concerned about future funding and employment but also about broader issues such as climate and sustainability. Their preferred future learning environments are personal, social and connected, with technology used by choice rather than taken for granted. They seek personal learning experiences that are customised, immersive, diverse, sensory and independent, but also sought social engagement face-to-face on campus, in teams, networks and with the community. Connectedness was important, with students seeking global, interdisciplinary and experiential connection, along with connections with industry and the professions. The findings can inform strategic decision making about future university learning environments.

References



# Abstracts Wednesday 28 October 2015

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## Session B16

Paper

### TRANSFORMATIVE LISTENING AND TRANSFORMATIVE SERVICE-LEARNING

Donella Caspersz<sup>1</sup>, Caroline Baillie<sup>1</sup>, Chantal Bourgault Du Cordray<sup>1</sup>, Doina Olaru<sup>1</sup>, Denese Playford<sup>1</sup>, Ania Stasinska<sup>1</sup>, Leigh Smith<sup>1</sup>

<sup>1</sup> UWA

We present a conceptualisation that explores how listening enhances the

transformative potential of service-learning (SL) in the higher education sector. SL is a form of experiential learning in which graduates apply their academic knowledge to create social change in communities (Kenworthy-U'Ren, 2008).

We used JSTOR and Academic Premier to select 25 articles that were analysed using Leximancer to explore the meaning of SL using the four Rs (Godfrey et al., 2005): reality, reflection, reciprocity, responsibility. We found (Caspersz et al., 2012) that reality is when students apply academic content to real-world issues; reflection engages critical thinking about how service professionally and personally develops students; reciprocity is when community and students mutually gain from service, while responsibility encourages social responsibility for students to redress social issues. Thus SL benefits students' formal learning (Furco, 2002; Toncar et al, 2006), and potentially engages students in transformative learning (Mezirow, 2009) that facilitates a shift to worldviews, embrace other perspectives and be inclusive in their future practice (Carrington et al., 2015).

We argue that transformative listening fosters transformative learning and thus transformative SL. Transformative listening differs from evaluative and interpretive listening. The former is when someone responds immediately to another's suggestion about its accuracy, while interpretive listening provides feedback to the speaker (Coles, 2008). Transformative listening involves 'the mindful collection of data to identify inherent characteristics of a community' (Aslam et al., 2013, p 36), but importantly "includes a willingness to alter ideas in a discussion, to engage in dialogue, to entertain other points of view, and hold them as valid, independent of whether they are accepted or not" (Coles, 2008, p 24), thus changing the status quo of knowledge, assumptions and even behavior to reflect new and innovative strategies through "care-full" listening (Shalif, 2005). Transformative listening is attuned to the embedded context of speech (Swaffar & Bacon, 1993), and links with the "coping and resilience skills, resistances to problems, exceptions to the problem-saturated story, and absent but implicit hopes, values, skills and knowledge" that

implicitly make 'known' the spoken word though not explicitly enunciated (Shalif, 2005, p 37).

We subsequently propose: (P1) that transformative listening engages listeners to potentially foster transformative SL for the service recipient and student.

While the importance of listening in SL is acknowledged (Nyden et al., 2005; Katz, DuBois & Widgerson, 2014); the complexity of listening leads to neglect in

research (Rowley-Jolivet, 2002) or theorising listening (Thompson et al., 2011) as a learning pathway to transformative SL. Our research (Caspersz & Stasinska, 2015) highlights that external and internal filters (Pearce et al., 1995; Thompson et al., 2004) - physical space, timing, class size, nature and frequency of everyday relations (Pecchione & Halone, 2000), and sharing common knowledge to form a 'listening community' (Low & Sonntag, 2013) - influence transformative listening.

We therefore suggest that to be effective in fostering transformative SL, we need strategies that 'teach' transformative listening. After presenting our conceptualisation, our paper concludes with discussing these.

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## Invited Speaker

### LEADING THE DEVELOPMENT AND ASSESSMENT GRADUATES WHO ARE WORK READY PLUS

Geoff Scott<sup>1</sup>

<sup>1</sup> University of Western Sydney

In this invited lecture Emeritus Professor Geoff Scott will bring together 3 decades' research and practice within and beyond Australia as a senior leader on effective change management and leadership for Learning and Teaching in higher education. A particular focus will be on his current national senior teaching fellowship on leading change in assuring the quality and relevance of achievement standards and their valid assessment in higher education. The integrating themes for the session are: 'good ideas with no ideas on how to implement them are wasted ideas'; and 'change doesn't just happen but must be led, and deftly'.

During the talk Professor Scott will refer to the findings of two large international research projects undertaken for Australia's Office for Learning and Teaching – *Learning Leaders in Times of Change*; and *Turnaround Leadership for Sustainability in Higher Education*; along with his 2009 award winning book for Jossey Bass with Michael Fullan: *Turnaround Leadership for Higher Education*.

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## Session C1

Paper

### LEVERAGING WRITING AS A SOCIAL PRACTICE: A COMMUNITY OF PRACTICE APPROACH TO SUPPORT SCHOLARLY TEACHING AWARD APPLICATIONS

Helen McLean<sup>1</sup>, Rosemary Chang<sup>1</sup>

<sup>1</sup> RMIT University

This paper reports on an action research project by two academic developers (McLean & Chang) supporting applicants for teaching awards in a large public university. The project contributes to the conference theme of leading SoTL in disciplines and across the institution; we are actively engaging 22 teaching staff in the broad disciplines of humanities, social sciences, education, art, and design across the institution.

Competitive teaching awards are commonly offered by

Australian universities to teaching staff and teams. National awards to recognise teaching excellence and contributions to student learning are awarded by the Office of Learning and Teaching. Support for staff to develop teaching award applications is often through one-to-one consultancy and feedback on drafts.

Questions and Rationale: On review, we have recognised that a one-to-one approach can emphasise written output at the expense of enabling teaching staff to deepen their reflection and scholarly understandings. We are exploring how teaching staff might be enabled to deepen their understanding and articulation of their teaching practice as they develop teaching award applications. What developmental approaches could facilitate this? How might we lead institutional cultural change that enables scholarly engagement in this area?

Methods & Theory: We used action research methods because these enable action, learning and research (Carr & Kemmis 1986). We drew on Wenger's (1998) community of practice approach to support participants' to strengthen scholarly knowledge of their teaching practice. We used theories of writing as a social practice (e.g. Lillis & Curry, 2010; Aitchison & Cuerin, 2014) to frame activities where applicants convey their enhanced knowledge and meaning-making about teaching practice.

We offered three sequential workshops and three 'writing + thinking' spaces. The workshops invited participants to engage with theoretical frameworks for articulating and evidencing their practice in the teaching award genre through scaffolded reflection and dialogue, plus writing activities and sharing drafts for comment. They specifically addressed: reflection on practice, genre, evidence and impact, applicant's unique voice, humanising the reader and reviewing drafts. The w+t spaces created time for maintaining momentum and self-directed learning for the application development process. We also provided individual/team consultations.

Our data from the first iteration includes reflective journaling (captured in collaboration); documentary artefacts; records of participant interactions; and feedback from participants.

Outcomes: Our outcomes include a much refined version of the developmental workshop approach. We have gained nuanced insights into the complex drivers that motivate participants to prepare an application—and our leadership roles in this context.

Reflective Critique: Our reflective critique includes the dichotomy of the supportive and gatekeeping roles that academic developers play in developing participants' scholarly knowledge and understanding of their practice in the application process. Also there is value in the teaching awards application process being presented with an extended vision to provide staff with skills and knowledge for leadership in future SOTL activities in the disciplines and across the institution.

Audience Engagement: The audience will think-pair-share about their own instance of giving feedback to another about a text, and an aspect of social practice that influenced that text. In the example of teaching award applications aspects of social practice include scholarly conventions, disciplinary and professional discourse and selecting examples of evidence and impact.

## Session C1

Paper

### DEVELOPING A COMMUNITY OF PRACTICE IN SCHOLARSHIP OF TEACHING & LEARNING FOR NURSE ACADEMICS

Marion Tower<sup>1</sup>

<sup>1</sup> School of Nursing, Midwifery & Social Work, ITaLI, University of Qld

There is a critical shortage of nurse academics, which the International Council of Nurses has highlighted as a priority for resolution (Gerolamo & Roemer, 2011). Many nurses leave academia because of the need for higher degrees, financial constraints, lack of clear roles and responsibilities, nature of the academic environment, the transition experience, high expectations and overwhelming workload. Additionally, many feel challenged to alter their traditional views of education and receive limited feedback about their effectiveness as teachers (Lewallen et al. 2003; McDermid, Peters, Jackson & Daly, 2012).

The majority of new nurse academics are experienced practitioners but have limited experience in delivering formal education (McArthur-Rouse, 2008). Most learn by 'picking it up' or learn 'on the job' in an environment that offers limited support (Garrow and Tawse 2009; McArthur-Rouse, 2008). They often experience role conflict and feelings of isolation due to the ambiguity and complexity of the academic role in an environment they believe does not value previous knowledge and experience (Gazza 2009, Garrow and Tawse 2009; Kenny, Pontin & Moore, 2004).

Nursing has lacked the opportunity to develop a breadth and depth to scholarship of teaching and learning (SoTL) (Bradshaw, 2001). Added to this is the pressure to teach, be research active and maintain an explicit clinical role in order to be 'clinically competent' (Andrew & Wilkie, 2007). Actualising scholarship of teaching is challenging for nurse academics who work in an environment that rewards traditional research (Glanville & Houde, 2001). However, importantly, accrediting organizations, both professional and government, are emphasizing the importance of demonstrating quality in teaching and learning (Smesny et al., 2007).

There is ample literature that supports the construction of academic communities such as communities of practice (CoP) as appropriate professional development forums for practice disciplines (Ramsden, 2008; Smith, 2000). The potential value of a SoTL CoP for nursing is that it can provide an open and supportive environment in which to provide professional development, mentorship, build academic capacity, and provide a career pathway for nursing academics.

In 2015 the School of Nursing, Midwifery & Social Work at University of Queensland recruited twelve new nursing academics (all but three of whom are new to academia). This paper will present the strategy used to develop a CoP around: a) developing excellence in teaching practice; b) measuring quality in teaching and learning; and c) measuring impact of teaching and learning practices. The CoP is underpinned by the work of Boyer (1990) and Glassick (2000) to frame scholarship and is guided by the work of Wenger (2000), utilising a lifecycle process of: inquire, design, prototype, launch, grow, sustain (Cambridge, Kaplan & Suter, 2005).

This paper will present the implementation and evaluation of the first four phases of the establishment of a nursing CoP - inquire, design, prototype, launch. Evaluation will be completed using the Cycle of Value Creation and will present the results from Cycles 1 (immediate value) and 2 (potential value and knowledge capital)(Wenger, Trayner and de Laat (2011).

# Abstracts Wednesday 28 October 2015

## Session C2

Roundtable

### TECTONIC PLATES? FOSTERING SITUATED LEADERSHIP IN A DIGITAL AGE

**Dominique Parrish<sup>1</sup>, Patrick Crookes<sup>1</sup>, Joanne Joyce-McCoach<sup>1</sup>, Merilyn Childs<sup>1</sup>**

*1 University of Wollongong*

The lived experience of the roundtable facilitators is that leading innovation situates one at the intersection of noisy tectonic plates: a centralised impulse towards regulation; and a situated impulse towards de-alignment and resistance. Encouraging innovative teaching practices, particularly technology enhanced learning, is challenging SOTL leaders to employ creative strategies to foster self-reflection and practice transformation.

An eTeaching Capability Framework (eTCF) developed by the facilitators will be presented. The eTCF sought to: change the practices of academics; foster Faculty-wide individual/team-based innovation; nurture SoTL; and at the same time align faculty practice with increasingly centralised regulation. The eTCF is an illustration of how local scholarship can be used to change practice more broadly. Many such frameworks exist, typically applied top-down via reporting and benchmarking exercises. In our case, the intention was to use the eTCF as a springboard for advancing technology enhanced learning, through the facilitation of distributive leadership within a faculty at the University of Wollongong.

In this tectonic space, there is a need for individual and organisational development that pursues a 'new normal', new pedagogies and the transformation of practice (Dräger et al 2014; Fullan 2014). A distributive leadership approach to SoTL enables situated agency and problem posing/solving that mediates the contradictory nature of change endemic in the sector (Parrish & Lefoe 2008). Micro-leadership and micro-influencing are central to creativity/disruption (essential in a digital age), and can be leveraged when nurtured by the institution's vision and strategies (Childs et al 2013). However, the ethos of distributive leadership and the need for situated innovation can be in high tension with centralised and universal design of curricula, a situation made more complex by the casualisation of the higher education labour force. The eTCF will be discussed in terms of how distributive leadership can be harnessed to promote sustainable and significant change as well as identify strategies to meaningfully recognise this form of leadership in the academy.

The eTCF will be interrogated to ascertain: whether it is a useful tool for evolving teaching practices encompassing digital technologies; and the associated challenges that could be faced by leaders at both the local and institutional level.

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## Session C3

Roundtable

### CO-DESIGNING PEER LEARNING EXPERIENCES FOR STUDENT IN MULTIPLE TRANSNATIONAL LOCATIONS

**Ngan Collins<sup>1</sup>, Nattavud Pimpa<sup>1</sup>, Sandra Jones<sup>1</sup>, Andrew Scown<sup>1</sup>**

*1 RMIT University*

The objective of this Round Table is to explore the challenges and potential for academic and professional staff teams located in transnational locations to co-design and co-create student learning experiences aimed at increasing student cultural competence, global communication skills, and intercultural understanding.

The rationale for this Round Table is founded in a number of concepts

- i) need to develop student cultural competence and intercultural understanding as an employability skill
- ii) opportunity presented by interactive communication technology to link students located in transnational locations to share their cultural understanding
- iii) value of student peer-to-peer learning
- iv) emerging importance of student leadership capability
- v) importance of feedback to improve cross-cultural competence
- vi) need to engage all learning and teaching experts (academic and professional) from all relevant transnational locations in the co-design and co-creation of student learning experiences

While each of these concepts is integrated, the focus of this Round Table is on the last of these that is, what lessons are there for scholarship of learning and teaching, particularly that related to the professional development of staff, that can be learnt from the experience of co-creating learning activities? This question recognises the complexity of designing realistic learning opportunities for students in a digitally rich world of global education. It identifies the importance of progressing past simple knowledge dissemination from teacher to students to engage students in realistic real-world problems, their solution and future possibilities. It recognises the wealth of experience that students from different locations can share through peer-to-peer activities. In addition, it emphasises the importance of learning design that recognises the need to identifying patterns for future collaboration based on the experience of past practice.

Recent research into the contribution of a distributed (shared) approach to leadership in learning and teaching design and development has identified the value, and relevance, of a broader concept of the work of leadership in higher education. This recognises the leadership contribution of many experts rather than the traditional leader-centric approach that has been identified as being particularly important in higher education given the knowledge contributed by all participants. Examples of communities of practice, between academics and professional staff and between academics and community/industry professionals are emerging. However, the issue of how to identify patterns for co-designing and co-creating learning experiences, particularly in engaging staff and students located in several transnational locations, is as yet underexplored. This Round Table aims to open up such a discourse.

Base on the lived experience of RMIT Global Learning by Design Project, the Round Table will use an activity designed from the recent experience of the presenters as the basis to engage participants in further reflection and discourse. The expected outcome of the Round Table is a rich co-designed pattern for inter-academic/professional and inter-transnational engagement that will have broader impact than simply disseminating information on recent case study examples.

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## Session C4

Paper

### IMPACTING TEACHING GOALS USING SOTL: A CASE STUDY FROM A REGIONAL UNIVERSITY IN THE UNITED STATES

**Kelley Shaffer**<sup>1</sup>, James Gentry<sup>1</sup>, Javier Garza<sup>1</sup>, Donald G. McGahan<sup>1</sup>

*1 Tarleton State University*

Increasing faculty engagement in the Scholarship of Teaching and Learning (SoTL) benefits students. It also enriches scholarly research activities of faculty scholars by offering tangible insights about impact on learners, due to any number of a host of treatments to learners. This study asked if faculty scholars participating in a SoTL program offered at a regional university in the United States impacted the scholars' teaching goals. While there is a plethora of literature available that addresses the impact on scholars teaching methods and classroom research, few publications address SoTL's impact on teaching goals. To answer this question the scholars completed Angelo and Cross' (1993) Teaching Goals Inventory (TGI) pre and post-participation in the program. The instrument contains fifty-one Likert scale questions grouped into six clusters: (1) Higher-Order Thinking Skills, (2) Basic Academic Success Skills, (3) Discipline-Specific Knowledge and Skills, (4) Liberal Arts and Academic Values, (5) Work and Career Preparation, and (6) Personal Development (Angelo & Cross, p. 22). Twelve scholars participate in the cohort-based program. Subjecting the data to Wilcoxon signed-rank test, the data revealed a statistically significant median increase occurred between faculty scholars' pre/post TGI median ranking scores indicating a positive change in teaching goals. We contend that this change is due to the faculty scholars' participation in the SoTL program. We further posit that the impact of supporting programs to foster SoTL is as positive for academic institutions as SoTL is important for learners. Faculty scholar quotes provide evidence of how goals and practice have changed as a result of participation. The researchers plan to continue tracking the teaching goals of future cohorts of scholars to increase the participant pool size and determine if the results of this study are an anomaly or if SoTL continues to positively impact the teaching goals of scholars.

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## Session C4

Paper

### INCREASING THE IMPACT OF SOTL: SUPPORTING CHANGES IN PRACTICE THROUGH SOTL TRANSFER

**Brad Wuetherick**<sup>1</sup>, Jessie Moore<sup>2</sup>, Peter Felten<sup>2</sup>

*1 Dalhousie University*

*2 Elon University*

It has been 25 years since Boyer's Scholarship Reconsidered (1990) first articulated a call to focus on the scholarship of teaching. And over the subsequent two and a half decades,

we have seen a significant increase in both the quantity and quality of scholarship exploring teaching and learning in higher education. Influential scholars, however, continue to argue that the scholarship on teaching and learning has had little impact on the day-to-day practices of many in higher education (Pocklington and Tupper 2002; Bok 2006; Wieman, Perkins, and Gilbert 2010; Arum and Roksa 2011). Many of these authors use language about universities 'failing' their students or 'underachieving' and 'adrift' as institutions of higher learning. Indeed, two Presidents of Canadian universities, recently argued that higher education institutions must radically rethink the teaching and learning process, and how we support change in teaching practices, in order to truly transform undergraduate education (Zundel and Deane 2010).

What then is (and should be) the impact of SoTL on our higher education communities? If SoTL has not resulted in deep or widespread changes in teaching practices, what are the barriers that restrict change?

Much of the focus on how to facilitate such change has focused attention to the role of academic development at the level of both individual teaching practice and (increasingly) organizational culture/practices (Blackmore 2009; Gibbs et al. 2009; and Schroeder and associates 2011). This paper will explore the kinds of contributions SoTL scholars themselves, whether faculty or academic developers, are uniquely positioned to make to this broad discourse on change in teaching and learning.

This paper, which will feature a short presentation by the authors and subsequent facilitated discussion about key themes, uses two lenses to look at how certain barriers may limit the reach of SoTL in higher education. First, drawing on research conducted on the role of academic development in influencing changes in teaching practices, it explores how understanding change processes and how to support changes in higher education practices, particularly through the transtheoretical model of stages of change, might inform the work of SoTL scholars (Shepherd, Harris, Chung, and Himes, 2014; Wuetherick, 2015). By conceptualizing the dissemination of SoTL as a key component of the how we support academic staff through the stages of change, we might better enable a more systemic change in teaching practices.

And second, drawing on the robust literature and a multi-institution, multi-year research project on transfer in the context of student writing, this paper also explores ways of understanding how SoTL scholars might support the application and transfer of SoTL knowledge to new teaching contexts (Perkins and Salomon, 1988, 2012; Beach, 2003; Tuomi-Gröhn and Engeström, 2003; Rounsaville, 2012; and Moore, 2012).

Building on these two examples, the session's facilitated discussion will focus on how SoTL scholars can make meaningful contributions to change in educational practices in higher education.

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## Session C5

Roundtable

### TACKLING DISENGAGEMENT IN TEACHING TEAMS

**Peter Lake**<sup>1</sup>

*1 Sheffield Hallam University*

Engaged students need engaging tutors, but sometimes work planning restrictions result in less than enthused colleagues presenting material they are not interested in; often badly. What approaches are there to solving this problem? Is the Ostrich method the most sensible?



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Many Learning and Teaching initiatives tend to be created with an ideal teacher in mind. Their traits, rarely explicitly declared, might include: hard working, willing to try new ideas, caring, sharing in the professional goals of the institution. But how do we help to engage colleagues not sharing all of these traits in the process of improving our student's experience?

At ISSOTL14 I presented some work on using Communities of Practice (CofP) as a management tool. There was lively debate and in other sessions it became clear to me that my institution is not the only one which has some less enthusiastic staff working for them. My particular interest is in using CofP as a tool for engaging the unengaged.

There have been numerous papers after Wenger's first real discussion of Communities of Practice (Wenger, 1998). Wenger himself followed up with 'Cultivating Communities of Practice: a Guide to Managing Knowledge' (Wenger et al (2002)). However the author's work thus far seems to support the hypothesis that, despite the early literature's insistence that a CofP should be free from management interference, communities can be an ideal way to pursue the management agenda of encouraging tutor engagement with both the domain and the way it is taught.

Another method used in many institutions for helping tutors to review their own teaching with a view to continuous improvement is Peer Observation with can be '... an effective component of a Faculty-based tutor development program' (Bell and Mladenovic, 2008). Can this, together with a CofP approach, help build the sort of organisational culture that fosters engagement?

To break the ice quickly and encourage participation in whole-group discussions I would start the session with a question: 'If you could have the answer to one question that would help improve your student's perception of their overall tutor-led learning experience, what would your question be?'

The session would continue with the chair setting the context and briefly describing some literature, and describing his own use of CofP as a mechanism for engaging colleagues. The table will then be asked to engage in a series of discussions which are aimed at answering some key questions. Many of those questions will be chosen by the attendees, but attendees will be encouraged to reflect on some questions with regard to their own institutions, such as:

How do we recognise disengagement?

Is it worth the effort to attempt to re-engage colleagues?

If so, how do we go about it?

If not, do Human Resources policies help or hinder with dealing with these issues?

What are the causes of disengagement?

Do teams disengage less frequently than singletons or pairs?

Contribution to Themes I see this as a contribution in the 'Engagement: leading inside and outside the academy' sub-theme, allowing attendees to think about the issues that surround managing less than fully engaged colleagues.

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## Session C6

Paper

### PRELIMINARY FINDINGS OF AN INTENSIVE HIGH-SCHOOL INTERVENTION PROGRAM AIMED AT RAISING STUDENT ASPIRATION TO ATTEND UNIVERSITY

Camilla Nicoll<sup>1</sup>, Kathryn Von Treuer<sup>1</sup>, Jacqueline Woerner<sup>1</sup>

*1 Deakin University*

Deakin University is working in partnership with low SES schools across Victoria, in order to conduct a longitudinal evaluation of an initiative called DEAP (Deakin Engagement and Access Program) and subsequent student aspiration. This study will longitudinally examine each year of this initiative, commencing grade seven to eventually comprise data through grades 7-12 and into university. The impact of success of these interventions is measured using the Student Aspiration and Retention Survey-high-school version (SARS-hs), which has been developed to measure key predictors of student aspiration. Grade seven participants across two consecutive years were randomly assigned to an intervention or non-intervention group, with surveys administered pre and post intervention in the 2013 and 2014 cohorts. A total of 451 students provided data at T1 and 394 at T2 in 2013. A total of 496 students provided data at T1 and 481 at T2 in 2014. These data provide two years of data collection in this longitudinal study and findings are preliminary. In the 2013 grade seven sample, educational aspiration decreased for the entire group and there was no significant impact of intervention (whether assigned to the intervention or non-intervention group) on aspiration scores. Females however, reported significantly higher aspiration compared with males. Higher perceived educational barriers predicted less likelihood of remaining at school whereas a desire for better employment increased aspiration to remain at school. Self-efficacy changed significantly over time, decreasing from T1 to T2. Preliminary results for the 2014 cohort demonstrate the grade seven sample reported a slight increase in educational aspiration in the intervention group only; however this difference did not quite meet the level deemed significant. Preliminary result from the 2014 grade eight sample saw very little change in aspiration for the grade eight cohort with a very slight increase to aspiration in the non-intervention group and a very slight decrease to aspiration in the intervention group. The intervention had no significant effect on self-efficacy, with self-efficacy decreasing in both the intervention and the control groups. Further results and implications of the findings will be discussed.

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## Session C6

Paper

### THE POWER OF MENTORING STUDENTS WITH AUTISM, BY STUDENTS WITH AUTISM - THE AWETISM RETHINK 'I CAN NETWORK' WAY

Penelope Jane Robinson<sup>1,2</sup>, James DH Ong<sup>3</sup>, Christian Tsoutsouvas<sup>4</sup>, Jackie Chanzi<sup>5</sup>, Christopher Varney<sup>6</sup>

*1 Ambassador, I Can Network (AWEtism Rethink Inc)*

*2 Assistant Lecturer, Monash University*

*3 Tertiary Coordinator, I Can Network (AWEtism Rethink Inc)*

*4 Schools Leader, I Can Network (AWEtism Rethink Inc)*

*5 Mentoring Project Manager, I Can Network (AWEtism Rethink Inc)*

*6 Chief Enabling Officer, I Can Network (AWEtism Rethink Inc)*

*6 Chief Enabling Officer, I Can Network (AWEtism Rethink Inc)*

Background: With roughly 1 in 100 Australian children on the autism spectrum, almost every educational institution has an

opportunity to structure their communities to enable autistic students to contribute more effectively. The problem: 86% of students on the spectrum report facing 'difficulty' in their schools and 81% of people on the spectrum do not have a post-school qualification (ABS 2012). Very few schools have programs addressing the unique problems faced by autistic students, and poor educational experiences at the primary and secondary level, lead to low levels of engagement at the tertiary level. The solution: The I CAN Network is piloting peer-to-peer mentoring programs, focusing on individual strengths, giving autistic youth access to mentors with a lived experience of autism, with the overall aim of increasing successful participation in education from the primary to tertiary sectors. Primary and secondary school mentoring programs increase student confidence, self-belief, and understanding of autism. The programs create more positive school experiences for autistic students and increase their participation throughout primary and secondary education. We expect this to positively influence participation in tertiary education. Our tertiary programs will increase retention of students on the spectrum by:

1. Offering support to students through weekly or fortnightly group mentoring meetings to discuss tertiary-specific and autism-specific issues and strategise positive solutions to them, with opportunities to make friends with others on the spectrum.
2. Offering opportunities for self-development and leadership by training tertiary students to become mentors for others, building their own, and their mentees', resilience and resourcefulness. Thus the program has the potential to grow exponentially within a single institution, and reach students on the spectrum across multiple tertiary institutions.
3. Supporting the transition to tertiary education, with the opportunity for secondary students to meet with an I CAN group at their preferred tertiary provider, before they apply. Students will be supported through the transition by a support group, mentoring, and a safe place to address any issues. It gives tertiary providers the opportunity to gain and retain autistic students.

Our programs work because, (i) students engage with leaders who share their experience of autism, (ii) we focus on strengths, (iii) we focus on effective strategies rather than negative experiences, and (iv) we effect changes to a positive self-belief, from 'I can't' to 'I CAN'. The opportunity to make friends on the spectrum is another crucial factor.

We wish to formalise our evaluation process, but have limited expertise in our current volunteers. Currently, we actively seek feedback from all stakeholders, including volunteers, primary, secondary and tertiary students, their family members, as well as teaching and academic staff. This feedback is anecdotal, but overwhelmingly positive, with large increases in confidence, greater participation in extracurricular activities, improved experience of education, and greater interest in continuing education reported. We use all feedback to develop and refine our programs.

We seek audience feedback about effectively measuring the following outcomes:

1. Increased satisfaction with educational experiences.
2. Increased retention in the secondary and tertiary education.
3. Increased recognition of autistic students in educational institutions.

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## Session C7

Paper

### ENRICHING LECTURE VIDEOS AND WEBCAST WITH DIGITAL TAGS ON SAM ONLINE PLATFORM TO PROMOTE ACTIVE LEARNING

Judy Sng<sup>1</sup>, Edmund Lee<sup>1</sup>, Maxime Marzin<sup>2</sup>

<sup>1</sup> Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore

<sup>2</sup> Universite Sorbonne Paris Cite

Many universities across the globe are compelled to make changes to the way education is delivered because of the explosive growth in information coupled with the increasing demands on relevance, skills and competency training. Our current medical school curriculum is being redesigned and pedagogic processes restructured to enable the achievement of these learning outcomes.

The potential of IT in supporting these pedagogic objectives is beyond doubt. In recent times, e-learning has made major strides in becoming one of the fastest growing modes of instruction (Allen & Seaman, 2013). The Yong Loo Lin School of Medicine has made an important paradigm shift to migrate up to approximately 50% of curriculum to e-platforms. An initial idea of this pedagogy is based on a 'flipped-classroom' approach where the more didactic parts of the curriculum are migrated, and live-interactions with a tutor/teacher is reserved for more interactive discussions that can focus on integrative content.

The migration of course content to e-platforms needs to be more thoughtful in its implementation. The final product must be innovative and create value, i.e. it must be better than existing platforms. One of the easiest means of developing e-content is simply to make lectures available online as webcasts. However, these webcasts in the unedited form, are usually lengthy difficult to navigate through. The videos are not digitally tagged and the digital content not searchable. In general these webcasts are of a much lesser quality than live lectures. In this context, we have been working on video recording of the lectures in bite size segments, or chapters, rather than as a single lengthy video.

Together with our partner at SciencesPo, SAM, an innovative online platform available at <http://www.sam-network.org>, we curated and enriched these recorded videos to enhance their intelligibility and accessibility to a wider audience by resynthesizing the recorded video chapters and layering content such as external links, YouTube videos and keyword searches not only to enrich these lectures but to make content more accessible.

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## Session C7

Paper

### ACTIVE LEARNING IN BUSINESS AND ECONOMICS: A REVIEW OF THE LAST DECADE (2004-2014) WITH A LOOK TO THE FUTURE

Murray Taylor<sup>1</sup>, Mauricio Marrone<sup>1</sup>, Mara Hammerle<sup>1</sup>

<sup>1</sup> Macquarie University

With a view to increasing knowledge within the emergent field of active learning, we examine recent developments in theory and practice. Our study of Higher Education institutions examines the changing nature of research around active learning in Business and Economics to gain an understanding of its future.

Extracting articles from Scopus, Web of Science and Science Direct published between 2004 and 2014, a systematic

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literature review of English articles was conducted. We include literature that deals with student-centred strategies, hence, search terms include active learning, problem-based learning, case-based learning, cooperative learning, collaborative learning, team-based learning, team learning, experiential learning, discovery learning, peer learning, peer instruction, and inquiry-based learning. Search results presented 10,266 articles. Most cited articles were added to our sample. The complete sample was culled based on exclusion criteria of 86 highly ranked journal articles within the business and economics field. Data was extracted and cross-checked by three independent researchers using pre-defined data fields. We analysed each paper along the following criteria: (1) active learning approach (2) aim of approach (3) educational level, (4) geographical area and (5) business area of focus.

Our review shows that active learning is a growing research area across the world that has gained greater prominence in the last three years. The three most popular active learning approaches were games and simulations, 'hands-on' experience and team-based learning, while research has concentrated in the business areas of Accounting and Management. Our review of the literature reveals that the undergraduate and postgraduate students are treated differently concerning active learning methods and desired learning outcomes. Increasing the understanding of course material, student engagement and allowing for students to gain a real-world understanding, were found to be the common aims of the active learning approaches. A key outcome of this research is the mapping of the active learning approaches to the aim of the approach. Our findings suggest that games and simulations have often been used to have an increase in student engagement and student understanding of course material, while other approaches, such as team-based learning, positively impact on social skill development. Building on these findings we present suggestions for the enhancement of the active learning literature and propose a common active learning definition to be applied in future studies. Other insights for future research directions that may benefit the literature overall are also examined. The paper contributes to educational research by providing an understanding for the current state of the active learning literature as well as for future studies interested in the integration of active learning principles.

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## Session C9

Roundtable

### USING SCHOLARSHIP AND EVALUATION IN PROGRAM QUALITY TO CHANGE INSTITUTIONAL POLICIES AND PRACTICES: A CASE STUDY FROM GRIFFITH UNIVERSITY

Jude Williams<sup>1</sup>, Heather Alexander<sup>1</sup>, Alf Lizzio<sup>1</sup>

<sup>1</sup> Griffith University

How do local scholarship and evaluation projects influence practice at the institutional level? This roundtable presentation is designed to promote discussion of how the outcomes of scholarship and evaluation in program quality can be successfully implemented and embedded into institutional policies and practices.

The discussion will be initiated through a case study of the Program Quality Project at Griffith University - a project designed to address a key challenge facing many universities around the world: meeting the dual demands for quality assurance and quality enhancements in degree programs.

The project used a participatory approach to the evaluation of program quality (Cousins and Earl, 1992). This involved

multiple stakeholders (including teaching team members, industry / employer partners, alumni, students and university personnel) in an iterative process across multiple programs and over several months, resulting in the development of a Program Quality Framework (the Framework). The broad consultative and participatory approach led to changes to the institution's policies and practices relating to curriculum renewal.

The implementation of the Framework and changes to policy and practice was only possible because of the scholarly approach adopted by the project team. This included a thorough review of national and international literature, an analysis of the current quality assurance environment and an evidence-based, consultative methodology that was used to gather information for, and garner understanding of, the program quality initiative. The Framework and associated practices were introduced through a staged process that included consultation with academic and professional staff and feedback from stakeholder groups at three points in the project timeline. At the end of the project an evaluation was conducted. The results of the evaluation show that the Institution's initiatives are viewed as robust and have led to the systematic embedding of quality assurance processes for programs at the university; as well as providing staff with the opportunity for curriculum renewal.

The project raised a number of issues at the university level, specifically around the provision of data and the time and resources required for an effective evaluation of program quality. These issues have led to several additional initiatives to support program quality, including a project to ensure the collation and provision of meaningful data on which decisions about program quality can be made and the introduction of two dedicated members of staff to support program quality assurance and curriculum renewal.

The Program Review Framework has been made public at two international conferences.

This roundtable presentation will briefly share experiences of changing policies and practices at the university level and through the use of an appreciative enquiry approach seek the experiences of colleagues engaged in similar work in their institutions. Is the approach adopted at Griffith University generalisable? Is it possible to benchmark the outcomes of this initiative in program quality to similar initiatives at other universities?

Reference

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## Session C10

Paper

### LEADERSHIP IN THE ACADEMY THROUGH COMMUNITIES OF PRACTICE

Bernadette Mercieca<sup>1</sup>

<sup>1</sup> Xavier College, Kew

Questions and Rationale: This paper considers the idea of communities of practice (CoPs) as a means of developing Theme 1- leadership in the academy; shared, distributed, collaborative leadership in higher education (HE) A glimpse at HE will generally show that academics are often isolated in their practice and individualism, rather than collaboration, is the norm. Palmer (2007) speaks of a 'culture of isolation' whilst McDonald (2012) points to the traditional favouring of research rather than teaching for promotion that leads to

private, individual teaching.

However, the growing movement towards a Scholarship of Teaching and Learning (SoTL) in HE, involving dedicated research into practices of teaching in order to understand how students learn, critical reflection and peer review, fits more comfortably with the concept of CoPs. Ernest Boyle (1990) maintains that if the vision of scholarship can be spread then a 'true community of scholarship' can develop, leading to more collaboration and greater creativity leadership.

Theory/Methods/Framework/Models: Lave and Wenger first coined the term, 'community of practice', in *Situated Learning: Legitimate peripheral participation* (1991). This focused on what they termed 'situated learning' and challenged the conventional understanding of the time that learning is internalised knowledge transmitted from teacher to pupil. Wenger's later work in 1998, *Communities of Practice: Learning, Meaning and Identity*, defined three key features of a CoP:

- (i) the domain - what initially motivates people to gather, with a shared concern or interest and in turn, what keeps the CoP focused, and ensures its relevance over time.
- (ii) the community - out of the passion that members feel for their shared domain comes their commitment to learn and share with each other. Their shared enterprise is the essence of what they are about.
- (iii) the practice - over time, participants develop 'a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems-in short a shared practice' (Wenger, 2006). Wenger-Trayner's (2012) more recent thinking focuses on the more complex social landscape of communities that many of us belong to. They explore this issue from the perspective of what it means to live and work across the boundaries of a range of different practices that make up a professional landscape. The metaphor of a landscape ensures that we pay attention to boundaries, to our multimembership in different communities and to the challenges we face as our personal trajectories take us through multiple communities (Wenger- Trainer, 2014).

Outcomes: This paper will consider the value that a CoP framework can add to developing leadership and professional competence in a HE environment. An example will be used from the University of Southern Queensland. The Faculty of Arts Teaching and Learning Community of Practice has been operating since 2006. Its domain consists of the teachers of first year courses offered by the Faculty of Arts. An evaluation of this CoP would be presented and the lessons learnt.

Reflective Critique: The CoP and the example at USQ would be fully evaluated with critical voices from participants being included.

Audience Engagement: The audience would have the chance to ask questions in a conversational context.

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## Session C10

Paper

### TRANSFORMING INSTITUTIONAL INITIATIVES TO A COMMUNITY OF SCHOLARLY PRACTICE THROUGH THE TEACHING AND LEARNING ACADEMY

Rebecca Sealey<sup>1</sup>

*1 James Cook University*

In 2011, James Cook University established the Teaching and Learning Academy as a joint initiative of the Deputy Vice Chancellor (Academic) and the Teaching and Learning Development Unit (TLD). The Academy was created to align with the Vice Chancellor's priority for a scholarly community, to

have a strategic focus on the promotion of teaching and learning leadership, and to support and recognise staff development efforts related to teaching and learning. Terms of reference were developed with the clear expectation that the Academy would function as communities of practice, identified as Special Interest Groups (SIGs). The Academy membership (currently 165 members) consists of academic and professional staff members who either have a significant teaching and learning leadership position or have a track record in the scholarship of teaching and learning. Members form (and lead) the SIGs in response to institutional priorities. Past SIGs such as the Mentoring and Peer Review groups have been key drivers for the institution-wide implementation and uptake of peer support programs. The current SIGs are: assessment, first year experience, English language and numeracy proficiency, learning spaces and blended learning, and work integrated learning.

The major annual initiatives of the Teaching and Learning Academy include: Learning and Teaching Week, SIG events, Fellowships and conference funding grants. The annual Learning and Teaching week is a significant event that has high staff attendance and engagement, providing a large-scale platform for the dissemination of innovative, evidence-based and effective learning and teaching practice across the wider institution. Activities include invited speaker sessions, interactive professional development workshops, vendor presentations, showcases of innovative practice by SIGs and individual JCU staff members, and the award ceremony for citations and Fellowships. Throughout the year, the SIGs run regular sharing sessions, showcases and writing retreats, as well as develop resources and best-practice exemplars that are disseminated to the University community via events and the Academy website.

Since 2012, eight Fellowships and twenty-three conference grants have been awarded to Academy members. These fellowships provided seed funding for capacity building leading to future large-scale priority teaching and learning projects, or expanded on priority teaching and learning projects. The Fellowship scheme has resulted in journal article publications and conference presentations, and success with Office for Teaching and Learning (OLT) priority funding. The conference grants provided financial support for members to disseminate their learning and teaching practice both nationally and internationally. The overall success of the JCU Teaching and Learning Academy is driven by three key factors, which are recommended for adoption when transferring the success of this initiative to other institutions: 1) the Academy is a members-led community of practice; 2) the Academy works collaboratively with the TLD Unit and the Office of the Deputy Vice Chancellor (Academic); and 3) the activities are clearly aligned with both institutional and national priorities. There is overwhelming evidence that the Academy has transformed the initial strategic initiative into embedded activity within the institution and provides significant contribution to the leadership and support of scholarly learning and teaching practice.

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## Session C11

Paper

### EXPLORING ENGINEERING ACADEMICS VIEWS OF WRITING AND IMPLICATIONS FOR FUTURE USE OF ONLINE TOOLS TO SUPPORT STUDENTS WRITING

Sarah Howard<sup>1</sup>, Maryam Khosronejad<sup>2</sup>, Rafael Calvo<sup>2</sup>

*1 University of Wollongong*

*2 University of Sydney*

The purpose of this study was to understand Engineering



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academics' perceptions of writing and knowledge of online writing tools. Online writing tools present opportunities for new strategies and pedagogies to support development of communication skills, to better prepare graduates for their professional work as engineers.

Literature: While Engineering undergraduate students may have depth and breadth in content knowledge, they have very limited understanding of disciplinary writing' (Gassman et al., 2013, p. 1270). Online writing tools (e.g. TurnItIn, Google Apps, etc.) are able to facilitate new approaches to writing in engineering, in ways that are specific to students' needs, support increased interaction and include larger numbers of students. In Engineering, use of online tools to supporting writing is not common.

Methods: Analysis draws on semi-structured interviews (N = 24) and questionnaires (N = 89) collected in 2013-2014 at three Australian universities. The Repertory Grid Theory method (RGT; Fransella, Bell & Banister, 2004) was applied to elicit personal constructs through interviews and guide analysis. The Technology Acceptance Model (TAM; Davis, 1989) provided a conceptual framework. Interviews asked participants to compare written assessments with three other forms of Engineering assessments, and three methods of managing written assessments. Ninety-six constructs were identified, from which 17 common constructs were included on a questionnaire.

Evidence: One-way ANOVA analysis of questionnaire responses demonstrated a significant main effect of assessment type on nine constructs. These were grouped according to TAM concepts of Usability, Attitudes and Ease of Use. Written assessments were viewed positively in relation to Usability and Attitudes, but low on Ease of Use. These were viewed as difficult and time consuming to administer in large classes. Logistical issues of Ease of Use related to providing feedback and writing development in large classes can be addressed through online writing tools. However, academics reported little knowledge and experience of using online writing tools.

Conclusions: Communication was identified as a key skill in Engineering. However, written assessments were not perceived as the most useful way to assess this. This belief varied among engineering sub-disciplines and seemed to relate to beliefs about writing for communication, engineering and/or learning. The main result of this research is a framework of academics' beliefs about writing in Engineering, which can be applied to examine writing-related future change and innovation. A critical discussion of the significant constructs identified and how these inform academics' teaching practice will be presented. Implications for future research and strategies for discipline innovation will be discussed.

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## Session C11

Paper

### MAKING THE IMPLICIT EXPLICIT: AN INVESTIGATION INTO TEACHER PRESENCE IN FACE-TO-FACE AND ONLINE COURSES

Alison Kuiper<sup>1</sup>

<sup>1</sup> The University of Sydney

The term 'teacher presence' appears frequently in research about online and distance learning. This paper views teacher presence through the Goffmanian lens, seeing it as multiple presentations of self created through the medium of instruction. The research question concerns how online teacher presence creates a feed back loop to more traditional conceptions of teacher presence. The hypothesis is that the serial nature of online pedagogy and the absence of direct feedback create a requirement for greater explicitness and more careful planning in both curriculum development and delivery, which then modifies face-to-face delivery.

For Garrison, Anderson and Archer (2000), teacher presence is a critical element in the design of effective learning environments. Although the role of the teacher is acknowledged as critical in all teaching, the term teacher presence appears relatively infrequently in literature about face-to-face teaching and learning. This may be a matter of difference in terminology or it may indicate different conceptualisations of what has been defined as 'the design, facilitation, and direction of cognitive, social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes (Arbaugh & Hwang, 2006, p. 10).

As different modes of teaching and learning delivery continue to proliferate, learning about effective delivery can become a two-way process, with lessons from online learning enriching face-to-face teaching as well as online and distance delivery adapting the principles and practices of classroom pedagogy. This paper provides a starting point for such an investigation. It draws on existing research and also on interviews with nine subject-expert teachers to investigate the way in which they conceptualised their sense of teacher presence. Of the nine teachers who were teaching in intensive mode courses, five were teaching wholly online and four in blended mode (online and face-to-face). In their planning for online delivery, all explicitly considered strategies which encapsulated their teacher presence. Planning for the presentation of self (Goffman, 2005) was less evident in the accounts of teaching in face-to-face mode. However interviews with those teaching in blended mode revealed that in their face-to-face teaching they were aware of the need to make explicit to the students features of planning and delivery which are often implicit in classroom teaching. Whether the increase of explicitness in their presentation of the course and of themselves is a result of their operating in dual modes is not clear but it raises lines of enquiry for future research into the relationships between teacher presence online and that in face-to-face teaching.

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## Session C12

Paper

### GROUP POST GRADUATE RESEARCH SUPERVISION: BEYOND THE MASTER AND APPRENTICE

Kerry Bissaker<sup>1</sup>, David Curtis<sup>1</sup>, Janice Orrell<sup>1</sup>

<sup>1</sup> Flinders University

Traditionally, postgraduate supervision of higher degree candidates research is conceived of as an academic discourse between the academic supervisor (or supervisors) and the candidate. In this presentation, we will describe an alternative approach in which we use a group supervision method that involves establishing group processes in which students meet as a group on a regular basis with their supervisors. This process does not replace the personal one-on-one meetings but augments them. The initiative is driven by both the need for greater efficiency and by perceived benefits to candidates. Benefits reported by candidates include knowledge sharing, an enhanced sense of support and greater confidence, e.g. in research proposal presentations. In this presentation, the opinions of postgraduate students and of those who have already completed their candidature about the use of the group process will be outlined as will the challenges and benefits perceived by the academics who have instigated Doctoral groups. Potential future development of the grass roots initiative will conclude the presentation.

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## Session C12

Paper

### SCAFFOLDED RESEARCH: STUDENT ATTITUDES AND STUDENT ACHIEVEMENT

Karen Manarin<sup>1</sup>, Miriam Carey<sup>1</sup>, April McGrath<sup>1</sup>

<sup>1</sup> Mount Royal University, Canada

The Council for Undergraduate Research (2013) defines undergraduate research as 'An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline.' Undergraduate research has been identified as one of the high-impact educational practices, leading to gains in critical thinking skills, information literacy and communication skills (Kuh 2008; Lopatto 2010). Often people associate undergraduate research with honours projects and research assistantships available only to a few; however, if undergraduate research leads to learning gains, it should be available to all students at multiple points during their studies (Healey and Jenkins 2009). The University of Adelaide's Research Skills Development Framework places activities along a continuum of knowiness and autonomy (Willison and O'Regan 2007). This collaborative scholarship of teaching and learning project explores student research at Level 3: Scaffolded Research; however, for these projects, students were also attempting to create new (at least to them) knowledge.

We examine the following questions: What are undergraduate student attitudes towards/perceptions of research? How does a scaffolded approach to original undergraduate research impact students' understanding of the research process? How does this impact vary with level and context? To examine these questions, we gathered data from three very different courses focused on research in Fall 2013. We gathered course work from a first-year writing course, a second-year psychology methods course, and a fourth-year English seminar. We also conducted semi-structured interviews after the courses were over to gather information about how students perceived the research process.

In this session, we briefly describe the larger project and the scaffold before focusing on student attitudes towards the research process; we also examine the research products, looking at how our students incorporated existing research to create emergent knowledge. Participants will see how different disciplines and levels tailor a scaffold to particular contexts. They will also be asked to consider whether scaffolded research is a reasonable goal for all undergraduate students. Is it worth the effort? Does it lead to greater learning?

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## Session C13

Paper

### INNOVATING PEDAGOGY IN A FIRST YEAR SCIENCE COURSE

Michelle Yeo<sup>1</sup>, Sarah Hewitt<sup>1</sup>

<sup>1</sup> Mount Royal University

In 2014-15, we conducted a study on the use of an innovative approach to deliver a first year Anatomy and Physiology service course required for first year Nursing students. This course has historically been delivered using a traditional lecture/exam based model. Flipped classrooms are receiving increased attention in science education (Bishop and Verleager, 2013), and calls have been made for research to help build an evidence base to justify their implementation and increase their effectiveness (Vickrey et al. 2015).

There are many variations of the flipped model. In this case, a variety of active learning techniques were implemented, most significantly, the creation of detailed concept maps by the students for each topic within the course, using skeleton maps created by the instructor. Additionally, on-line video lectures, in-class quizzes, and in-class group review assignments were all used in ten-day, overlapping cycles of content delivery. The intent was to provide a more interactive and active learning environment within the class and require a higher weekly engagement and study time outside of class. The cyclic delivery of content gave students an initial introduction to the topic, directed study time, time to consider the content conceptually, work together in groups, and be tested on the material.

Our study represents a systematic investigation into the learning in this course to better discover what was most effective and least effective about this approach. We wondered about the student experience and perception of the approach. Finally, we specifically focused on various students' approaches to using the concept maps and engaging with the various elements of the course.

In class, the impact observed by the instructor has been that the students participate more, seem less overwhelmed, and aren't falling behind. In the early stages of data analysis, we find compelling evidence that it is a highly effective pedagogy for a content heavy science course of this nature. The interviews suggest a variety of insights about the students'

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different approach to learning. Students described the importance of their intent to learn, the benefits of inter-leaved practice, the role of accountability in consistency of practice, the reorganization of their study time and strategies, the retention of their learning with this approach, and their ability to make connections to other contexts.

Audience members will be invited to consider whether such an approach might have value in their practice and be adapted to their own discipline and classroom context.

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## Session C13

Paper

### WHAT IMPORTANT CONCEPTS MIGHT THE SOTL MOVEMENT USEFULLY LEARN FROM THE EBP MOVEMENT?

Patrick Crookes<sup>1,2,3</sup>, Kay Crookes<sup>4</sup>

1 *University of Wollongong, Australia*

2 *(Visiting Prof) University of Huddersfield, UK*

3 *(Visiting Prof) University of Stavanger, Norway*

4 *University of Wollongong, Australia*

The notes for aspiring presenters wishing to talk about 'changing practice' in this theme include the question: 'how has SOTL been influential in changing practice at the local, institutional or sector levels?' An extension to this might usefully be 'how might SOTL more effectively influence and change practices at these levels?'

At the ISSOTL 2014 Conference in Quebec, I was present at a number of presentations in which it was asserted that SOTL has much to learn from the Evidence Based Medicine (sic) (EBM) movement. Given that both have at their heart, an intent to facilitate the dissemination and utilization of good practice (as well as for some, the generation of such evidence); it is not surprising that I heard few (if any) voices of dissent.

In this paper, I intend to briefly present a somewhat dissenting view. I will argue for example, that the processes which are celebrated and followed in EBM (most notably Randomised Controlled Trials [RCTs]- seen as 'The Gold Standard' for evidence of effectiveness) are very difficult to undertake credibly with respect to 'educational interventions'. Similarly, I will argue that EBM's target audience - Doctors, enjoy a level of independence in decision-making and effective resource-allocation in their practice; which is very different to that of the majority of scholarly teachers, SOTL practitioners and SOTL Leaders in universities.

As a result, the nature of the evidence underpinning teaching and SOTL; the nature of the relationship between SOTL scholars and their target audience (teachers); and the relative powerlessness of that audience within institutions; all differ from the conditions facing EBM practitioners. Thus as a movement, it may be less useful as a model for SOTL to follow than one might first think. Instead, I will postulate that SOTL has much to gain from the associated yet distinctively different

Evidence Based Practice (in health) movement, which typically has a broader conception of what constitutes 'good evidence' and seeks to influence audiences other than doctors, which typically require different approaches to persuade practitioners to change their practice and/or to support them to implement evidence.

In the remainder of the paper, I will share practical examples of entities, concepts, approaches and resources which have been developed and tested within Evidence Based Health, which I believe, will be of great interest and potential use to SOTL practitioners and leaders.

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## Session C14

Paper

### BECOMING THE GOOD SUPERVISOR: THE FORMATION OF ACADEMICS FOR THE 21ST CENTURY

Trine Fosstrand<sup>1</sup>

1 *UiT The Arctic University of Tromsø, Center for teaching, learning and technology*

Research supervision plays a key role in higher education when empowering the students to become researchers and future academics. Wisker (2012 p. 2) define research as a crucial element of learning' and as 'a fascination with questioning the world, ways of enquiring and solving problems, and creating, innovating and developing discourses, strategies and interpretations'. In this study, I investigate the experiences and success criteria related to research supervision among both unexperienced and experienced researchers. The aim is to understand both the complex challenges and related opportunities as a supervisor, but also to study the supervisors understanding and interpretation of what is required to become a good supervisor and to facilitate the students' journey to develop as future academics. The aim of the research questions posed is to investigate research supervision strategies and the role of the researcher, and also to understand the educational development needed to support these strategies. The question is; What are the challenges and opportunities in regard to improving research supervision for the 21st century?

Methodology/research design: Empirically, this paper is based on biographical interviews (Goodson 2000), with both experienced and unexperienced supervisors, as well as document analyses of the universities strategic plans on research supervision, to investigate the complexity and demands related to how research supervision is carried out. The study is based on the following empirical sources:

- 1) Semi-structured interviews with unexperienced research supervisors, recruited from different classes of participants in a program for research supervision.
- 2) Semi-structured interviews with experienced senior supervisors at two Norwegian universities. The universities that are chosen is one relatively young institution and one with a leading position as the most research-intensive university in Norway
- 3) Document analyses of the universities strategic plans when it comes to research supervision, to reveal how these plans are implemented among research supervisors at the different institutions.

Evidence: The findings addresses new challenges and possibilities when it comes to research supervision - and differences between experienced and unexperienced supervisors. Especially the younger supervisors are familiar and follow up the requirements that are expected of them as research supervisors and the situations of students. There are

great differences in approaches to research supervision, when it comes to age, gender, department and experience, but this paper also reveal overall patterns and 'quality factors' related to research supervision.

Conclusions: The paper outlines strategies and practises relevant to enrich research supervision and to support both individual research supervisors, new generation academics and educational development of SoTL for the individual faculty, and at levels of departments and faculties.

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## Session C14

Paper

### DOCUMENTING QUALITY TEACHING: DESIGNING A STRUCTURE FOR SUCCESS

Jennifer Lock<sup>1</sup>, Luciano da Rosa dos Santos<sup>1</sup>

*1 University of Calgary*

A challenge in higher education is how to document quality of teaching. Within this challenge is the issue of what counts as evidence and who is responsible for collecting and assessing it. Many institutions have a standard assessment tool that is managed by central administration, which requires students to respond to questions about instruction, assessment, and course materials. However, low response rates and the inability of the instrument to capture the nuances of learning environment affect the validity of such instrument. Therefore, how can institutions implement more robust methods of documenting teaching excellence? Even more important, how can academic leaders encourage the use of a broad spectrum of evidence that can be used to inform better teaching practices?

In order to respond to these challenges, a design-based research study is being conducted in a Faculty at a Canadian higher education institution. The overarching research question is: How can an Office of Teaching and Learning in a faculty support instructors in the documentation and study of their teaching practice? Drawing from the literature, this inquiry aims at creating a system that allows academic staff to use tools and guidelines to document their teaching, helping them create a collection of evidence that will support further development of their teaching practice.

Following McKenney and Reeves (2012) model for design research in education, this inquiry is organized in three phases. The first phase, analysis and exploration, encompassed a literature review on teaching documentation, investigating what strategies and processes are in place in other similar institutions. Simultaneously, a need analysis with key stakeholders within the Faculty was conducted, with the goal of identifying what specific needs should be addressed through the development of strategies for documenting teaching. Findings from this phase pointed towards the development of a digital teaching dossier framework. During the second phase, design and construction, a team of academic staff developed various guideline documents and tools to be used in the documentation of teaching. Guidelines for peer observation of teaching, mid-term student feedback on teaching, and course design/redesign were among the artifacts created. The third phase, evaluation and reflection, is scheduled for Fall 2015, where a pilot study will be conducted among selected academic staff members. Results from this first iteration will feedback into the redesign of the artifacts and the possible development of new ones to support the goal of documenting quality of teaching.

Expected outcomes of this research will inform how faculties can create systems to support documentation of quality in teaching. More than being used as an evaluation mechanism for annual performance reports and tenure and promotion committees, documentation of quality in teaching is a powerful tool for bringing evidence-informed practice into teaching in higher education.

During the session, presenters will share the process for the creation and use of the artifacts, as well as engage the audience in discussion in terms processes implemented in their own contexts with regard to documenting quality of teaching.

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## Session C15

Paper

### DESIGNING YOUR FLIPPED CLASSROOM: AN EVIDENCE-BASED FRAMEWORK TO GUIDE THE FLIPPED TEACHER AND THE FLIPPED LEARNER

Jorge Reyna<sup>1</sup>, Elaine Huber<sup>2</sup>, Yvonne Davila<sup>3</sup>

*1 Learning Technologist - Institute for Interactive Media and Learning - UTS*

*2 Academic Developer - Institute for Interactive Media and Learning - UTS*

*3 Lecturer In Higher Education, Faculty of Science, UTS*

Blended learning is not a new concept (Bonk & Graham, 2012; Garrison & Vaughn, 2008;) However it has gained prominence recently with the use of the term 'Flipped Classroom' (Bergmann & Sams, 2012). This approach replaces the traditional transmissive lecture for pre-class preparation, active in-class tasks and post-class work (Abeysekera & Dawson, 2015). Considered planning and implementation of flipped classroom (FC), can lead to increased teacher-student interaction and more effective learning (Moffett, 2015). It is crucial that the teacher is present when students attempt to analyse and apply new knowledge (Johnson, 2013). It has been postulated that FC can promote student's self-direction and lead them to taking responsibility of their own learning (Bergmann & Sams, 2012). However, there are two major limitations associated with flipped classrooms. From the academic perspective, it is a time consuming exercise to set it up and it will require constant monitoring and improvement (Della Ratta, 2015; Shimamoto 2012; Snowden 2012; Wagner et al. 2013). From the student side, it will not work if they fail to engage with pre-class work (Kachka, 2012).

The term 'Flipped Classroom' is gaining traction with academics but they are experiencing difficulties implementing effective learning designs (Chen et al., 2014). There is limited evidence-based research of the effectiveness of FC (Jensen et al., 2014). The approach is under-evaluated, under-theorised and under-researched in general (Abeysekera and Dawson, 2015). A recent search of the FC literature since 2012, returns publications mainly in the form of conference proceedings supplemented by a few journal papers. Most refer to case studies and none of them rely on particularly rigorous research designs. Examples can be found from many disciplines including education, sociology, languages, nutrition, chemistry, nursing, engineering and medical education.

A planning template for FC design that considers before, during and after class activities and assessments was described by Gilboy et al., (2015). This template was based on Bloom's taxonomy but does not address the student's experience. In contrast, Moffett (2015) described 12 tips for flipping the classroom but this was not comprehensive. At the time of writing, a holistic model to guide students and academics with flipped learning and teaching has not being described. As educators, we believe there are several variables or elements



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that could influence the success of a FC approach. This conceptual paper proposes an 8 step framework to support educators and students to teach and learn with the FC model. Based on principles of blended and student-centred learning, organisational appearance, universal design and evaluation, the framework acts as a conduit between theory and good practice.

Elements of the framework include: (1) Communication of the benefits of the flipped model to students; (2) accessibility of the material; (3) organisation of content; (4) timing for activities; (5) learning design; (6) online, (pre or post classroom) activities; (7) classroom work; and (8) evaluation and improvement. This paper will present the evidence behind each of these elements in a practical way to guide teachers and students through a flipped model of teaching and learning.

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## Session C15

Paper

### **FLIPPED LEARNING, FLIPPED SATISFACTION: GETTING THE BALANCE RIGHT**

Rosemary Fisher<sup>1</sup>, **Bella Ross<sup>1</sup>**, Richard Leferriere<sup>1</sup>, Alex Maritz<sup>1</sup>  
*1 Swinburne University of Technology*

Higher education around the globe is facing transformative change driven in large part by technology. Flexibility of delivery has become a focus for students (Henderson, Selwyn, & Aston, 2015), as an increasingly massified and diverse cohort of students are challenged by the competing demands of work, family and society. Universities, too, are challenged by both increased resource constraints and competition for enrolments. The interest in leveraging transformative innovation in teaching and learning is driven in part by the tantalising promises that technology offers in response to these challenges. The technology-facilitated flipped classroom, where the information transmission component is moved out of face-to-face class time and replaced by a range of interactive activities (Abeysekera & Dawson, 2014), offers a means to address some of the challenges faced by both institutions and students. However, studies of flipped classrooms have shown mixed results in terms of student engagement and satisfaction (Davies, Dean, & Ball, 2013; McLaughlin et al., 2014; Missildine, Fountain, Summers, & Gosselin, 2013) and recent studies have called for further research into the effectiveness of the flipped classroom approach (Abeysekera & Dawson, 2014).

We explore students' perceptions of their engagement and satisfaction with a technology-facilitated flipped approach in a third year core subject at an Australian university during 2015. Our findings reveal that students preferred the flipped class approach to the traditional face-to-face delivery. In post-semester surveys, students reported increased engagement, satisfaction and learning outcomes as a result of both the flipped classroom approach and the use of digital technologies in the delivery of learning opportunities. A striking result from our study, however, is that student satisfaction clearly increased over the semester, with students initially reporting frustration and less satisfaction generally.

We propose that initial student dissatisfaction is due to students feeling out of their comfort zone and challenged as they are exposed to a new delivery approach (Henderson et al., 2015). We will argue that the change in satisfaction can be attributed to students' acknowledging the model structure provided them with a greater opportunity for enjoyment of, and control over, the learning process. This is in line with research that variously finds student satisfaction both does and does not increase with flipped learning (Davies et al., 2013; McLaughlin et al., 2014; Missildine et al., 2013). The

implications are that students may require extra support in the initial stages of delivery of a flipped classroom to assist them to understand and take up the challenge of the flipped approach, thereby maximising engagement and satisfaction earlier in the semester. We suggest this need should incorporate a focussed orientation to flipped classrooms. This will involve using digital technologies coupled with a soft start that includes training exercises to upskill students to this new way of approaching their learning.

To capture the insights of our conference audience, we will ask audience members to contribute to the discussion by asking questions and offering solutions.

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## Session C16

Paper

### **INVESTIGATING THE ROLE OF TECHNOLOGY IN ENABLING EFFECTIVE FEEDBACK**

**Chrystal Zhang<sup>1</sup>**, John Hopkins<sup>1</sup>

*1 Swinburne University of Technology*

Assessment is crucial in guiding students learning and has powerful effects on both approaches to learning and learning outcomes. Formative assessment is designed to provide students with relevant feedback early in the learning process to support the achievement of learning outcomes. Such process-oriented feedback, a key element in formative assessment, is regarded to be most beneficial when it helps students reject erroneous hypotheses and provides cues to directions for searching and strategizing. It becomes effective when the recipient perceives the usefulness and feels motivated to support their need for competence.

While traditionally hand-written feedback on students formative assessment is still common, electronically enabled formats such as chatrooms, discussion boards, emails, recording and other options have become common feedback channels. Recently the social web technology has gained popularity and been introduced in many ways to facilitate students learning, including serving as a feedback provision platform. While there are numerous published case studies of social web activities in higher education, few of these have specifically focused on assessment tasks and on feedback.

To address this knowledge gap, this study aims to explore how social web technology can be employed to facilitate effective feedback in formative-assessment process. It attempts to determine how effective the social web technology is as a

mechanism for providing and receiving feedback?

Teams of five students are assigned with the task of conducting research into a specified topic and are required to present their findings at the end of a 12-week semester. The overall task is broken into milestones which must be completed biweekly. Evernote, a social web technology and document management tool that supports team-based project work, was chosen as the platform for students to record their progress and performance. Evidence of progress includes, but is not limited to, the collection of readings relevant to the assessment topics, which can be used as reference material, reflection and draft notes, and early drafts of the final report. The tutor monitors the students progress on a regular basis and awards marks aligned with the rubric outlined in the assignment brief.

The built-in 'Work Chat' communicator function is the primary platform for facilitating multi-directional communication, particularly for the tutor's feedback on students work. Students mainly use the Communicator to seek clarification on the requirements, brainstorm ideas, communicate with each other, agree on tasks, and seek assurance of their efforts to ensure that their work is in line with learning objectives.

A focus group discussion will be conducted at the end of the semester where students will be invited to share their experiences of receiving feedback via social web technology. A semi-structured survey will be administered with measurement constructs developed on existing literature for feedback effectiveness. The data collected will be analysed to determine students perception of the effectiveness of receiving feedback via Evernote. Secondary data such as students scores of the assignments will also be collected. This will be compared with students results for the identical assessment in previous years, before technology-enabled feedback was introduced.

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### Session D1

Paper

#### TEACHING FIRST YEAR HISTORY IN A STANDARDS ENVIRONMENT

Jennifer Clark<sup>1</sup>, Adrian Jones<sup>2</sup>, Pam Allen<sup>3</sup>, Bronwyn Cole<sup>4</sup>, Jill Lawrence<sup>5</sup>, Lynette Sheridan Burns<sup>6</sup>, Theda Thomas<sup>7</sup>, Joy Wallace<sup>8</sup>

1 UNE

2 Latrobe

3 UTas

4 UWS

5 USQ

6 UWS

7 ACU

8 CSU

This paper discusses ways to teach history at the first year level in a standards environment. It explores the impact of the introduction of Threshold Learning Outcomes intended to demonstrate student achievement at the end of the completion of a History major, for teaching at the beginning of that process. It presents the findings and workings of an OLT project called In the Beginning. This project married the Decoding the Disciplines practice, with First Year Pedagogy to determine what students ought to know and do in the first year in order to meet the Threshold Learning Outcomes at the end of their third year. Decoding the Disciplines unpacks the mysteries of discipline practice and makes obvious to students what may seem difficult and obscure. First Year Pedagogy explains the needs of transitioning students to embrace university learning. The combination of these two processes allows us to expose the skills students need to develop in their

first year as new practitioners in their discipline. This project resulted in the writing of good practice guides and a framework to assist staff to undertake curriculum development. This project applied these principles to five disciplines. This presentation examines the discipline of History and provides participants with the opportunity to examine the History Good Practice Guide and the framework.

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### Session D1

Paper

#### STAYING ON THE RIGHT SIDE OF THE LAW: A RELATIONAL MODEL FOR INTEGRATING ACADEMIC LITERACIES INTO FIRST YEAR

Gina Curro<sup>1</sup>

1 College of Law and Justice, Victoria University

Building on the success of past collaboration (Curró and Longo, 2014), this scholarship of teaching and learning initiative reflects a move away from a predominately solitary, self-contained and silent teaching culture to a more open sharing of practices. The purpose of this presentation is to provide insight into a case study, designed to integrate academic literacies into written assessment genres in first year units of study. This practical interactive workshop engages the audience participants directly with the teaching materials. Looking through the lens of the practitioner, they will be guided through the Writing Workshops for First Year Law (WWFYL), in order to understand my learning outcomes are reflected in first year assessment units of study. The participants will choose the workshops ranging from reflective writing to identifying specific legal writing required for assessment tasks, to the language of critical analysis; they can comment or raise questions at any point during the presentation.

Through the use of genre approaches, my aim is to demonstrate the different genres of legal writing students are expected to produce in their Law studies: reflective, descriptive, critical and analytical texts. Because I identify as an applied linguist, my objective is to raise awareness of the elements and features of legal writing and of the '... complex cognitive processes of discovering and mastering the knowledge-making rules and practices, the values and roles that characterise the disciplinary cultures...' (Warren, 2002, p. 87). By providing students with these practical tools to develop control and mastery over their writing, this tacit knowledge about writing becomes explicit. The longer term goals of the initiative are improved academic outcomes for students and more rewarding teaching and learning experiences for staff.

This teaching and learning initiative uses a relational model for integrating academic literacies (Ramsden, 1987), with staff and student feedback featuring in the evaluation process. An interim survey conducted at Week 3 revealed strong support for the workshops with students reporting ways they apply the learnings to other first year units. Perceptions on developing control over language, confidence and application of learning to future areas of study were also mentioned. Quality of teaching and staff survey data is being gathered to inform critical evaluation of the intervention. At the end of the semester, student performance in first year units of study will be tracked. However, feedback about the perceived social benefits of attending the WWFYL has not been captured. It would be useful to find out if regular participation in the WWFYL has led to an awareness of changes in writing confidence with respect to successful academic self-identity development? In addition, do these social benefits of WWFYL constitute a separate study in their own right for the future investigation? Bearing in mind the notion of tribalism and

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territoriality (Blackmore, Chambers, Huxley and Thackwray, 2010), how can we develop a stronger sense of shared ownership in relation to legal literacies?

## Session D1

Paper

### ASSESSING INDEPENDENT LEARNING: LITERATURE REVIEWS AND CRITICAL THINKING IN THE BIOMEDICAL SCIENCES

Tomas Zahora<sup>1</sup>, Lynne Mayne<sup>1</sup>, Timothy Cole<sup>1</sup>

<sup>1</sup> Monash University

The literature review (LR) is a core task embedded within higher degree research in the sciences. The underlying aim of a LR within this context is to critically appraise and survey published literature in order to justify the area and need for research, and to outline the research questions and methods. At honours (fourth-year) level, LR stands at an important juncture in undergraduate education at which students are expected to demonstrate breadth and depth of knowledge within their chosen discipline, as well as a critical approach to the literature. LR thus marks a transition point for the budding scholar where guided learning begins to give way to independent learning and research.

The expectations behind LRs assume a number of complex cognitive or critical thinking (CT) skills including interpretation, analysis, evaluation, inference, explanation and reflection. In addition, they assume an ability to evaluate and reproduce the genre of literature reviews as such.

However, students' acquisition of critical thinking skills and the discourse of the literature review is not a simple matter of understanding the need to engage with previous scholarship. The genre of the literature review exhibits a number of deeply embedded structures and linguistic features which, to the uninitiated, may seem arbitrary or counter-intuitive. Although students recognize that finding their voice in the process of conveying an understanding existing research is essential to good writing, the actual writing of the literature review is fraught with tension. The tension is magnified by another challenge: the tenuous grasp of the meaning of the research they are reviewing, and of the codes and conventions of the discipline.

As biomedical science is a relatively new interdisciplinary subject it is likely that each of the contributing disciplines bring different expectations regarding genre, tone and content. The juncture of subject and genre expectations with those of CT makes LRs in biomedical science a uniquely useful source for the study of student intellectual engagement and increasing autonomy. This is particularly relevant to assessment, as despite more than six decades of research into the pedagogy underlying critical thinking (CT), there is little evidence of a clear understanding amongst teaching staff on how to define and articulate CT within the assessment process.

The research reported here provides an evidence-based view of student and supervisor beliefs concerning the role and purpose of LRs in Biomedical Science Honours program. In addition, we have analyzed LRs across several biomedical science disciplines to assess CT in student writing, as well as the students' understanding of the genre and their voice.

Our broader aim is to develop the pedagogy underlying CT at Honours level and to provide a strategy for enhancing both student learning and support for supervisors. Outcomes from this project include qualitative approaches to measuring CT, rubrics and learning outcomes to support constructive alignment. This work has wider significance for Masters and PhD level studies and addresses the question of what we should expect in a LR at each of these different levels.

## Session D2

Symposium

### DIVERSITY: MAKING OUR SHARED VALUES VISIBLE

Diana Gregory<sup>1</sup>, Susan Stockdale<sup>1</sup>, Leigh Funk<sup>1</sup>, Kim Loomis<sup>1</sup>

<sup>1</sup> Kennesaw State University

Demonstrating effective skills relating to topics and issues in diversity is an essential requirement for today's leaders in higher education. Institutions of higher education are becoming increasingly diverse in terms of students, faculty, staff, and administrators. As a result, managing the ideas, creativities, styles, communications, and innovations within the workplace has become more challenging (Chuang, 2013). One area of emerging research is in the area of cross-cultural leadership within global organizations who have a highly diverse workforce. Given the challenges associated with the definitions of both leadership and culture, the literature in this area has not yet adopted a single agreed upon definition of cross-cultural leadership. However, these terms do share several common themes. Noting the shared themes, one cross-cultural leadership definition is 'the ability of an individual (the leader) to intentionally and unequally influence and motivate members of a culturally different group toward the achievement of a valued outcome by appealing to the shared knowledge and meaning systems of that culturally different group' (Encyclopedia of Leadership, 2004, Sage Reference: Cross Cultural Leadership 5). When striving to become a cross-cultural leader, one of the first things a leader must do is increase their cultural awareness (Moran, Harris, & Moran, 2011). Successful cross-cultural leaders must employ a future-oriented and flexible leadership style to survive and thrive in a fast-paced and rapidly changing environment (Chuang, 2013). Essential leadership skills for cross-cultural leaders include but are not limited to:

1. developing self-awareness,
2. appreciating individual differences,
3. looking a similarities,
4. understanding cultural stereotypes and biases,
5. leading with respect,
6. thinking with a big picture perspective
7. developing a global mindset,
8. gaining and offering supports
9. communicating effectively
10. utilizing motivational techniques
11. taking social responsibility seriously (2013).

As new members of an existing college-level leadership team, we recognize existing challenges of leading in a setting characterized by diversity, and are examining the literature for information regarding skills for effective leaders. Throughout the last year, this team has engaged in a number of activities to increase our individual and collective cultural awareness. The team will describe and model several of these strategies and demonstrate how the strategies reinforce essential cross-cultural leadership skills. Participants will be invited to join the team in a Value Statement Visual Sort (VS)2, an activity that can provides faculty with the opportunity to identify what they value and what they think their college values, and then to examine these identified values for consistency. Participants will also be invited to reflect upon how cross-cultural leadership skills may also advance typical higher education initiatives like shared governance, transparency, strategic planning and diversity. A closing discussion will invite participants to share their lessons learned and best practices with the team.

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### Session D3

Panel Session

#### HOW WILL UNIVERSITIES CONTRIBUTE TO STUDENTS' EMPLOYABILITY IN 2020?

**Vijay Kumar<sup>1</sup>, Peter Goodyear<sup>2</sup>, Dawn Bennett<sup>3</sup>, Bennett Merriman<sup>4</sup>, Beverley Oliver<sup>5</sup>, Siobhan Lenihan<sup>6</sup>**

*1 Associate Dean of Digital Learning, Office of Digital Learning, MIT*

*2 Professor of Education, Australian Research Council Laureate Fellow, Faculty of Education and Social Work, The University of Sydney*

*3 John Curtin Distinguished Professor, Faculty of Humanities, Curtin University*

*4 Founder and Director, Business Operations, Event Workforce, Bachelor of Commerce/Bachelor of Sport Science, Deakin University*

*5 Deputy Vice-Chancellor Education, Deakin University*

*6 Advisor to the Deputy Vice-Chancellor, Deakin University*

In recent years, many nations have experienced massive disruption, often driven by technological innovations (Deloitte 2012, Christensen 2013). Higher education business models have not gone unthreatened in these years (Christensen and Eyring 2011, Wildavsky, Carey et al. 2011, Sheets, Crawford et al. 2012, Coaldrake and Stedman 2013, Gallagher and Garrett 2013, Carey 2015). In the digitally disrupted economy, paid employment no longer necessarily means winning or keeping a short or long-term position in a company, organisation, small business or institution. Students and graduates may seek traditional positions, or they may create their own employment, or freelance in short-term and part-time contacts, sometimes simultaneously, before they enrol, during their course, and beyond graduation. Employability may come to mean that students and graduates can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create employment that benefits themselves, the workforce, the community and the economy.

OECD data show that employment rates increase with level of education, ranging in 2013 from 90 per cent of graduates employed in Scandinavia to 70 per cent in Greece, with Germany, New Zealand, the United Kingdom, Australia, the United States, Canada, Japan and Korea in between (OECD 2015). University graduates consistently have better employment rates than adults holding secondary and post-secondary (but not tertiary) qualifications. The challenge for traditional and emerging higher education providers is to ensure that graduates keep, or increase, this advantage.

In a moderated discussion, panel members and audience will engage in an extended and interactive conversation, exploring how institutions can reinvent their learning places and spaces (traditional and emerging physical spaces, in the cloud, and in the spaces between) and better prepare their teaching workforce to ensure students and graduates are prepared for unknown futures. We will explore how new business models will emerge, what they may be, and how they will involve new partnerships between public and private sectors.

### Session D4

Paper

#### SOTL: LOST IN TRANSLATION?

**Karen Manarin<sup>1</sup>, Earle Abrahamson<sup>2</sup>**

*1 Mount Royal University, Canada*

*2 University of East London, UK*

While the scholarship of teaching and learning (SoTL) has received increased attention in the literature of higher education, 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, but so do the local, regional, and national contexts in which we work. One potential problem is that SoTL scholars are focused on finding answers and solutions to an extent that they have almost lost their ability to ask new and different questions. One of the often-praised strengths of SoTL is its context-specific nature; however, findings cannot be assumed to be generalizable even within a single institution, as Liz Grauerholz and Eric Main (2013) have argued. The issues increase across institutional, disciplinary, regional, national, and international divides, and SoTL is still primarily an American, or at least North American, phenomenon. As Joanna Renc-Roe noted during her 2012 ISSOTL keynote, even the name 'scholarship of teaching and learning' does not have an equivalent in many languages. Differences in definitions are often subsumed within an academic and professional identity in a content specific environment. What is apparent is that we do not all speak SoTL, contrary to the messages emanating from the 2014 ISSoTL conference in Quebec City.

In this presentation we outline findings from a collaborative research project into academic identity and SoTL. Forty-two higher education professionals in six countries described their understanding of SoTL and their academic identities in an on-line survey. Eleven individuals delved deeper into questions about synergies and conflicts in the different parts of their academic identities through semi-structured interviews. We place their perspectives and concerns within larger definitional debates about SoTL (see, for example, Kathleen McKinney (2007) and Carolin Kreber (2013)). Mary Taylor Huber and Sherwin Morreale (2002) influentially argued that SoTL could be a trading zone among the disciplines. We argue that if the scholarship of teaching and learning is to thrive, we must learn to translate our local scholarship not only across or between institutions or disciplines, but also between nations. Participants will be asked to discuss and develop possible principles of translation.

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## Session D4

Paper

### ACORNS TO OAK TREES: A RANGE OF SOTL INITIATIVES FROM A SINGLE MODEL OF LEADERSHIP

Lee Partridge<sup>1</sup>, Deborah Clarke<sup>2</sup>, Lesley Petersen<sup>3</sup>

*1 The University of Western Australia*

*2 Charles Sturt University*

*3 Petersen Consulting*

At ISSoTL 2014, the authors reported on a case study of a scholarly society which was demonstrating leadership by providing an innovative avenue for academics, who were new to SoTL, to be introduced to, and to engage in, the Scholarship of Teaching and Learning. The Higher Education Research and Development Society of Australasia (HERDSA) had recognised that the way into SoTL was often daunting for academics from disciplines other than Education, to the point where they may be discouraged from participating. In a single program employing a range of technologies, synchronous online delivery, blended learning and flipped classroom pedagogies, participants from across Australia and New Zealand undertook a five week program. Evaluation of the program confirmed its utility for participants and several went on to publish their first SoTL paper.

This presentation reports on the developments since that time which involves two other iterations of the program, each employing technology to different degrees but all focused on supporting Communities of Practice (CoPs) of new scholars to SoTL. Relative to the first program, one version used a flipped classroom model with face-to-face delivery in a single one day workshop. The second iteration was more heavily reliant on online technologies providing a self-paced program for scholars at different stages of their journey into SoTL.

We demonstrate here the growth from a single program to a broader suite offerings. The three programs are compared and contrasted, drawing on the participant evaluations and the authors reflections. The degrees to which each provides a meaningful CoP, and the challenges faced in ensuring this, are discussed. Design principles that have emerged from the experience of the three cases are presented as a blueprint for other scholarly societies whose aim is to show leadership in the promotion of SoTL. It is hoped that this relatively small example of local leadership will indeed grow further and be scaled up into wider contexts and global communities of practice.

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## Session D4

Paper

### TRANSFORMING TEACHING AND LEARNING: USING PHOTOVOICE NARRATIVE TO ASCERTAIN CHANGING PRACTICE

Caroline Cottman<sup>1</sup>

*1 University of the Sunshine Coast*

Academics teaching in higher education face multiple pressures from within their institutions and from external factors. The work of academics is surrounded by uncertainty and complexity. These challenges mean it is very important to understand the implications of their practice for student learning (Knight, et al. 2006; Lodewijks, 2012).

Professional learning activities aiming to prepare academics for their teaching role take various forms. At the University of the Sunshine Coast (USC) two professional learning activities are undertaken across cohorts of new and experienced academics: Foundations of University Teaching (Foundations) and Peer

Assisted Teaching Scheme (PATS). The Foundations course aims for participants to critically reflect on their teaching practice, develop an advanced understanding of learning and teaching in higher education and engage with a variety of contemporary approaches in order to appraise these for application to their own teaching context. PATS enables academics to undertake a series of structured activities in collegial supported partnerships. Reflection on teaching practice through these activities opens new avenues for research and motivates academics to undertake a different trajectory of scholarship (Bulman, 2015). This study aims to ascertain the impact of professional learning as applied to teaching practice, from the perspective of the participants own narrative. It is evident that through the process of illuminating teaching practice academics are inspired to increased generation and circulation of ideas and enhanced collaboration with colleagues across disciplines to investigate learning & teaching issues. This study takes an innovative participatory approach to capturing the changes from the participants own perspective ' through text and visual artefacts.

By reflecting on their learning journey and subsequent changes in practice, participants (the academics involved) generate artefacts that offer insight into transformative moments. True to photovoice methodology (Palibroda, et al., 2009) there were a number of prompt questions to stimulate participants exploration of the journey since Foundations or PATS and what it has meant for them.

Participatory research does not create a theory or test a hypothesis; rather, it evaluates relevant and practical ideas. The ideas and outcomes from the photovoice narratives will lead to decisions about future professional learning and enable appraisal of the success of these institutional initiatives.

This paper invites critical dialogue and appraisal from conference participants in relation to feedback on professional learning programs and their impact on scholarship.

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## Session D5

Paper

### EVALUATING THE IMPACT OF A SHORT-TERM RESEARCH INTERNSHIP ON HEALTH CARE STUDENTS SELF-EFFICACY

Basia Diug<sup>1,2</sup>, Dragan Ilic<sup>1,2</sup>

*1 Medical Education Research Quality Unit, Monash University*

*2 School of Public Health and Preventive Medicine*

Introduction: Short-term research internships (STRI) provide an opportunity for students to be exposed to all facets of medical and public health research. These practical programs aim to encourage students to engage with research teams, provide network opportunities between researchers and students and to develop professional skills in a work environment. Although popular throughout many universities, little evidence exists as

to the effectiveness of these programs. Therefore, we aimed to evaluate the impact our STRI program had on student self efficacy in terms of research skills and professional development. Methods: We assessed health trainees who were part of a four week STRI program. Health trainees were assessed prior to, and after, the programs completion using a 15-item questionnaire, which was adapted from a previously validated instrument utilising general efficacy scales. Qualitative feedback was sourced through open-ended questions. The STRI program combined hands-on research, mentorship by a senior researcher, didactic classes and experiential learning through excursions to collaborators in an interdisciplinary environment.

Outcomes: Twenty-three students from four degrees (medicine, health science, biomedical science and general science) were accepted into the program from a total of 184 applications in 2014. All students had completed one year of their respective degrees. Research self-efficacy increased significantly across all three categories including research methodology and communication ( $p < 0.001$ ), understanding of regulatory and organisation-level aspects ( $p < 0.001$ ) and interpersonal aspects ( $p < 0.001$ ). Qualitative feedback identified that students valued experience as it allowed them develop research specific skills including articulation of findings as an abstract or critically evaluating the literature. Similarly, self-efficacy in relation to an understanding of ethical requirements and professional conduct increased across the cohort. These qualitative findings were supported by the respective quantitative outcomes. Sixty percent of students stated that the STRI had improved their ability to understand and conceptualise public health research in practice. Similarly, 45% stated that their data analytical and interpretation skills had improved, and 32% identified that they had an increased confidence in networking and communicating professionally. Of the three skills students would like to continue to improve 41% of students identified data analysis and interpretation, 36% wanted to focus on the academic writing whilst 36% wanted to develop skills in research design (36%). Favourite aspects of the program included; experiential learning through excursions to collaborators (77%), working in a research team (64%) and the interdisciplinary student environment (41%). Overall the STRI program had an increased impact on student self-efficacy. Students felt that their combined experience improved their self efficacy in all three categories which are key graduate attributes that are requisite by employers in medical research.

Reflective Critique: Interdisciplinary programs provide challenges as students have differing levels of knowledge and expectations whilst supervisors differ in mentoring style and tasks set. Both of these aspects can impact on student self efficacy. Audience Engagement: Student and staff videos are a central part of the program which will be shown to the audience. The audience reflection will be key as to get their insight on how to improve the program and student self efficacy.

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### Session D5

Paper

#### **CONSTRUCTING MASTERS PROGRAMMES IN COLLABORATION WITH EXTERNAL PARTNERS: COURSE EVALUATION AND INNOVATIVE DESIGN**

**Aysha Divan<sup>1</sup>**

*1 University of Leeds*

In the UK, in last few years, substantial concerns have been raised around the long-term future sustainability of Masters level training. This has been driven in part by changes to

government policy impacting on Higher Education (HE) combined with continuing concerns from employers indicating a mismatch between the skills and knowledge base of students graduating from universities and those required by industry. This is particularly evident in the science and engineering subjects which are intended to provide graduates with the capabilities that research-intensive, high tech industries require. Consequently, HEs are being forced to consider the purpose of their Masters degrees and the value they offer. This paper outlines the following, one; an evaluation of the existing Masters programmes on offer in the life sciences in a specific university and two, the development of a niche Masters training programme co-constructed with employers to address a particular specialist skills need. The evaluation draws upon three sources of evidence, from employers gathered through face to face discussions and on-line surveys relating to existing provision, from student alumni gathered through on-line surveys exploring the skills and knowledge gained through their Masters course and their utility in the workplace and from a web-based review documenting innovative programme design initiatives across a set of HE institutions. Data from employers show that they are increasingly recruiting graduates with Masters level qualifications and that our existing Masters provision may be better suited for progression to research-based careers in academia rather than roles in industry. This is supported by data from our alumni: with over 80% of the respondents indicating that the Masters training had added value in helping them to secure their current position, but with twice as many respondents working in industry compared to academia suggesting that more work-relevant content is required. This evidence demonstrates a clear need to align specialist skills and knowledge training with those required by industry and thus better prepare students to access, perform and progress within particular professions. Thus in the second part, we will describe how this information has led to the design of an Industry-focused Masters programme, developed in collaboration with employers. This section will highlight approaches to course design; including work-based placements, cross-disciplinary teaching and integration of real-life case studies into the curriculum. Overall, the audience will be able to reflect on the purpose of Masters-level studies at their own Institutions, be exposed to examples of innovative course design, the challenges and benefits associated with working with external partners and the role of gathering evidence to support programme development.

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### Session D5

Paper

#### **NEXUS: HONORS PRE-SERVICE SECONDARY TEACHERS' UNDERSTANDING OF TEACHING AND LEARNING THROUGH COLLABORATION WITH STUDENTS IN AN ALTERNATIVE EDUCATIONAL SETTING**

**Erin Mikulec<sup>1</sup>**

*1 Illinois State University*

Being successful in 21st century requires at the minimum a high school diploma, if not a college degree (Hayes, 2012; The Urban Institute, 2003), however, this is simply not the reality for all learners. In order to understand this aspect education, pre-service secondary teachers need to have direct experience working with at-risk youth prior to beginning their teaching career.

One way for pre-service teachers to do this is to complete clinical field experiences in alternative educational settings. Alternative educational settings serve youth who have disconnected or disengaged from traditional school

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environments for a number of reasons, including homelessness, being the children of incarcerated parents, poverty, chronic truancy, issues related to drugs and violence, or continual academic failure (Caroleo, 2014; Free, 2014; The Urban Institute, 2003). Collaborating with such partner sites supports SoTL as, according to McKinney (2006), institutions can work with community partners in order to facilitate the SoTL process, and not simply the product, into all classrooms.

In addition to a variety of field contexts, field experience must also be meaningful. Meaningful early field experiences are an integral part of the transition from student to teacher (Bennett, 2012; Caprano, Caprano & Helfeldt, 2010; Hallman 2012; Washburn-Moses, Kopp, Hetttersimer, 2012, Zeichner, 2010). Unfortunately, many early field experiences focus solely on observations by pre-service teachers, rather than on active engagement with learners. Active participation not only provides a meaningful experience, but can also impact how pre-service teachers imagine their future classrooms. Therefore, clinical experiences must also include a reflective component that provides pre-service teachers with a space for processing and reflection that allows them to develop their own understanding of teaching and learning (Hughes, 2009; Liakopoulou, 2012). This study again involves students in the SoTL process throughout the semester by connecting their clinical experience to the prescribed coursework. Their input in the process shapes the clinical experience and relationship between the University and the Agency for future students.

This presentation will discuss the learning outcomes of pre-service secondary teachers enrolled in an Honors section of an introductory education course who completed their clinical experience in an alternative educational setting. Over the course of the 10-week experience, the participants completed a weekly clinical journal in which they reflected on their observations and interactions at the Agency site. The participants also used the journal as a space to reflect on their experiences and how it was contributing to their development as teachers.

In order to interpret the participants' experiences, the researcher followed the data coding procedures of constant comparative analysis (Glaser & Strauss, 1967), which allows for a potentially deeper understanding of the experience of the pre-service teachers, as well as revealing their differences (Patton, 2002). Throughout the analysis, the researcher followed the three-level coding process (Strauss & Corbin, 1998). Through this process, the researcher identified core themes that emerged from the data and engaged in a final reading to further refine and support these themes with quotes.

Findings of the study include experiencing education from a different point of view, the challenges of teaching all learners, and identifying one's own assumptions about learners and reconstructing them in order to be effective teachers.

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## Session D6

Symposium

### BEYOND BIBLIOMETRICS - EXPANDING THE RANGE OF HIGH QUALITY, HIGH CREDIBILITY PEER-REVIEW OPPORTUNITIES AVAILABLE TO ACADEMICS

Daniel Bernstein<sup>1</sup>, Patrick Crookes<sup>2,3,4</sup>, Christine Brown<sup>5</sup>

*1 University of Kansas, USA*

*2 University of Wollongong, Australia*

*3 (Visiting Prof) University of Huddersfield, UK*

*4 (Visiting Prof) University of Stavanger, Norway*

*5 University of Wollongong, Australia*

In this symposium, the facilitators (from the US and Australia

and also with insight into the UK HE system) will pose several questions of the audience in and around the issue of the nature of scholarship and about providing feedback and commentary on scholarship in higher education, including but not limited to SOTL. We will ask how scholarship is currently conceptualised, assessed, valued, and its impact measured; and how such conceptions might be expanded upon in the future, via means other than 'mere bibliometrics'.

The conversation will take place on three levels of analysis, beginning with evaluation of course portfolios or other representations of a singular project on improving understanding in a course. That conversation will be built upon fifteen years of experience in providing feedback on documents in that genre, and it will explore options to make that feedback more efficient and more readily accessible outside of single institutions.

Accumulations of multiple course portfolios and publicly available reports on the results of teaching can also be evaluated, using broader teaching portfolios, such as those used by the Higher Education Academy in the UK to assess applicants for Fellowships in their Professional Standards Framework (PSF). The symposium participants will be asked to consider the criteria for such evaluation, as well as the process for obtaining meaningful external review of teaching taken more holistically than in a single course. This conversation will focus especially on complements and alternatives to basing the evaluation on various indicators of the standing of the outlets in which the work is made public.

The third level of analysis will consider the effectiveness of teaching and learning within a program, including offerings of multiple faculty members. This conversation will again consider the documentation presented and the criteria used for such program evaluation in terms of its capacity to articulate required skills, capabilities, competencies and values, backed by evidence of student achievement; which are often required by professional accreditation bodies.

In all cases, the goal of the symposium is to explore efficient and accessible models for obtaining substantive and credible peer review feedback that will be accessible on a regular basis.

Finally, the symposium participants will consider how we might build or expand upon, existing practices in the evaluation of SoTL, which could then be usefully applied across all forms of scholarship identified by Boyer and colleagues. We will consider whether there are practical and meaningful alternatives to the simple quantification of quality based on measures of the status or standing of the venues for being public (bibliometrics). The symposium organizers have extensive experience in all three layers of evaluation and commentary, and they are skilled at guiding conversations among colleagues that generate actionable steps toward new ideas in teaching and learning and teaching and learning leadership.

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## Session D7

Paper

### TRANSFORMING TEACHING AND LEARNING SPACE IN FIRST YEAR ACCOUNTING USING ACTIVE LEARNING PEDAGOGIES

Julie Walker<sup>1</sup>, Anthea Leggett<sup>1</sup>, Robyn Parry<sup>1</sup>

*1 University of Queensland*

There is a growing body of research on the significant gains that can be made in student learning using active learning pedagogies (Mazur, 2009; Deslauriers et. al., 2011) along with questions surrounding the utility of the traditional lecture (Butchart et. al., 2009; Freeman et. al., 2014). This paper

describes a major intervention to bring accounting to life in a large first year undergraduate course of 800-1000 students at an Australian university. A 2014 review revealed low student engagement and retention rates. While students found the course to be overall satisfactory, few found it interesting or relevant to their other studies or intended career. It also revealed that students lacked meaningful opportunities to practice what they learnt which is an essential tenet of learning (Race, 2010). The abstract nature of accounting lends itself to the need to immerse students in realistic scenarios where opportunities to practice the lingo and apply threshold concepts is critical to success' both in the course and professional life beyond. As active learning creates opportunities to apply knowledge and concepts to higher order thinking such as problem solving (Handelsman et al, 2009) it was pertinent to introduce simulated and collaborative learning environments to provide a solid contextual base for students' learning. The intervention has involved significant pedagogical redesign as well as the logistics of managing teaching spaces both physical and virtual in a very large cohort.

This paper presents a mixed methods study examining whether the course redesign using active learning pedagogies resulted in improvements in student engagement and learning outcomes. The approach was twofold using 3-D immersive environments and collaborative tutorials. The 3-D virtual business world was introduced as an experiential learning resource leading to a business plan assignment. The tutorial program has been completely redesigned to support collaborative learning and to ensure consistency in the delivery of the program across 40 tutorial groups. Resistance to change is a key factor in any intervention and teaching staff needed to be guided through the reasons for change and provided with support and resources such as training in collaborative techniques based on a university program.

Results from the study conclude that student engagement with the course has improved significantly from previous years, especially with the virtual business environment and there have been learning gains in key areas. There were minor inconsistencies in tutorial delivery across the 40 tutorial groups that can be addressed with future iterations. After initial resistance, the teaching team accepted changes to the tutorial design when it became evident that the collaborative approach led to better rapport with students.

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## Session D7

Paper

### REACHING AND TEACHING TOMORROW'S DENTAL PROFESSIONALS TODAY

**Arosha Weerakoon**<sup>1</sup>, Sarah Dahl<sup>1</sup>, Anne Gilmore<sup>2</sup>, Sandra March<sup>1</sup>, Grant Townsend<sup>3</sup>, Suzanna Mihailidis<sup>3</sup>, Liang Lin Seow<sup>4</sup>, Pauline Ford<sup>1</sup>

*1 School of Dentistry, The University of Queensland*

*2 Faculty of Health & Behavioural Sciences, The University of Queensland*

*3 School of Dentistry, The University of Adelaide*

*4 International Medical University*

Traditionally there has been a theoretical and practical diaspora in dental education; the sciences segregated in the early curriculum years with practical engagement located towards the end of the program. Thus, an unintentional intellectual disconnect has been created between the underpinning sciences and their application in the practice of dentistry. In addition, dental curricula have failed to embrace the use of technology-enhanced tools in teaching practice to challenge and engage students. These issues are not unique to dentistry, nor to the University of Queensland (UQ).

This project aimed to address a critical need to integrate the foundation sciences with the clinical components of the UQ dental program making learning enjoyable and effective. An enquiry-based curriculum using the 'Virtual Patient' (VP) model aims to improve graduate competency and immerse students in real-world situations.<sup>1</sup> The VP model is used to drive learning and assessment by optimising technology, flexible learning modes, and clinical and simulation facilities.

Students are provided with guided learning tasks along with integrated assessment and feedback in line with a virtuous cycle of learning.<sup>2</sup> The guided learning tasks are progressively layered in complexity, incorporating diverse learning experiences enhanced by technology-enhanced tools. Variation Theory has been used as the theoretical framework for the curriculum development. The aim is to help students develop a deep understanding of a concept, by exposing them to various ways of considering it. The VP scenarios and associated resource material provide one way of overcoming the unstructured and opportunistic presentation of real dental patients .<sup>1-2</sup>

What is proposed is an alternative model to the traditional pedagogy employed in dentistry in order to engage students and staff in a virtuous cycle of learning, through the use of carefully crafted and guided teaching and learning modalities. Significant changes in teaching practice and philosophy can create opportunities but also challenges. For many academics such curriculum innovation can be confronting, so a development team was formed to build a consultative process that integrates differing perspectives to develop a common understanding of the learning objectives and embed a process of iterative curriculum development. In addition this paper will report preliminary evaluation results, from quantitative student experience indicators and regular student focus group input.

This model may be transferable to other disciplines within the health sciences, given the potential disengagement between science and practice in other clinical curricula. Whilst this paper describes the implementation of the first year dental curriculum redesign, it is firmly focused on producing graduates who demonstrate high levels of professionalism; understand the science behind the art; enjoy learning and have the capacity to adapt and therefore engage with emerging technologies and paradigms. The audience will be given an opportunity to participate in an adaptive learning experience using a real-time response system.

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## Session D7

Paper

### PHARMACASES: CLINICAL APPLICATIONS AND SCENARIOS THROUGH EXPERIENTIAL LEARNING SYSTEM IN PHARMACOLOGY FOR MEDICAL PRACTITIONERS

**Judy Sng**<sup>1</sup>

*1 Department of Pharmacology, Yong Loo Lin School of Medicine, National University*

Didactic teaching remains the mainstay of traditional pharmacology classrooms. Many medical educators are



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experimenting with innovative ways of learning and imparting knowledge. Experiential learning is the process whereby knowledge is created through the grasping and transformation of experience (Kolb, 1984). What is vital in experiential learning is that individuals are encouraged to directly involve themselves in the experience and then reflect on their experience, using analytic skills to gain a better understanding of the new knowledge and thus retaining the information longer.

Using case studies is a powerful pedagogical technique for teaching medicine. Cases can be used not only to teach scientific concepts and content, but also process skills and critical thinking. Many of the best cases are based on contemporary, and often contentious, science problems that students encounter in the news or experience themselves, the use of cases in the classroom makes science relevant.

The objective of this study is to create an application that can virtually simulate clinical scenarios, with the aim of promoting active learning in this fact-filled subject of Pharmacology. It will be executed in two parts: first, by exploiting IT infrastructure and Internet, we will create several clinical case studies that students will be able to do at their own pace. This interface will be interactive and dynamic and the students will be able to self-evaluate their understanding of the topic by checkpoint quizzes (self-directed learning). The second is to create a computer-simulated program to test the understanding of basic concepts in antimicrobial medications, drug choice, route of administration and dosing. This will be a hands-on practicum that will be conducted at the end of the topic in a flipped classroom manner (facilitator-assisted learning). We propose incorporating phenotype and biochemical variability (e.g. weight, gender, etc.) into a virtual computer program to gauge medication dosage for a simulated patient. Both parts will serve as a platform to learn clinical pharmacology through case studies in an experiential manner and we will call it PharmaCASES (Clinical Applications and Scenarios through Experiential Learning System in Pharmacology for medical practitioners).

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## Session D8

Paper

### **AFTER THE PROGRAM: THE CHALLENGE OF BEING A SOTL LEADER AT A RESEARCH-INTENSIVE UNIVERSITY IN CANADA**

**Andrea Webb<sup>1</sup>**

*1 University of British Columbia*

At an institutional level, post-graduate certifications demonstrate positive steps toward an increase in scholarly teaching and capacity building in higher education. Unfortunately, administrators and faculty development professionals have struggled with how to encourage and prepare academic staff to do this type of scholarly work (Richlin & Cox, 2004). Ultimately, these programs promote scholarly teaching or individual SoTL inquiries, but what happens after the program?

There are many, significant barriers to change (Webb, Wong, & Hubball, 2013) including entrenched systems of credit hours, scheduling, methods of teaching and assessment, departmental or disciplinary silos, administration systems, and reward systems that value research over pedagogical or curricular leadership. The policies and practices that are designed to improve standards and efficiency are often at odds with those designed to improve student learning (Hockings, 2005; Young 2006). The challenge lies in encouraging faculty members to continue SoTL research while balancing the

research demands of their academic positions, criteria for promotion and tenure, and traditional disciplinary silos.

The Canadian SoTL Leadership program, which is the site of this research, is a learning-centered program for institution-level/Faculty-level educational leaders. Begun in 1998, this program strategically evolved from an initial focus on the scholarship of teaching and learning for the first decade, to its current focus on SoTL Leadership.

The purpose of this paper is to share recent research conducted to identify the supports and constraints encountered by past graduates of a SoTL Leadership program in order to consider how SoTL Leadership can be supported after the program ends. The participants of this study included 30 past graduates of the program. Based on a four-month phenomenological study (van Manen, 1990), the data collected include a questionnaire and in-depth interviews with past graduates of a SoTL Leadership program. Through thematic analysis (Boyatzis, 1998), these data revealed factors that enhance and constrain the ability to continue SoTL research at a Canadian RIU.

With little to no post-program intervention, few participants continue in SoTL work. They cite two constraints as significant barriers; institutional cultures and their self-concept as SoTL scholars. However, they also suggest that developing a SoTL mindset and institutional support for SoTL research encouraged them to continue in scholarly teaching and SoTL informed practice. The discussion will engage the audience in conversation around the key challenges those participants in SoTL programs face as they begin work/study in the scholarship of teaching and learning.

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## Session D8

Paper

### **IDENTIFYING SOTL ACTIVITY ACROSS AN INSTITUTION: A BIBLIOMETRIC APPROACH**

**Josephine Csete<sup>1</sup>, Mei Li<sup>1</sup>, Carmel McNaught<sup>2</sup>**

*1 The Hong Kong Polytechnic University*

*2 The Chinese University of Hong Kong*

Identifying the people conducting SoTL, and the types of SoTL activity throughout an institution, is complex as such activity is dispersed across departments and discipline areas. The people involved in SOTL may not know each other and also are likely to be disseminating their findings across a disparate variety of venues. This paper reports a study of SoTL activity in a three-year period (2011-2013) conducted within an institution in Hong Kong of more than 1200 academics.

The purpose of this study was to identify teachers who were conducting and disseminating SoTL and, by collating this information across multiple years, to build a picture of the 'pockets' and nature of SoTL activity within the institution. This profile provides important information for changing local practice towards continued growth of SoTL.

Methods: The study design involved multiple perspectives. Two researchers with experience in educational development worked with a librarian skilled in institutional research and bibliometrics. The methods used as well as the rationale for methodological decisions will be shared in detail so that other institutions can adopt or adapt the methods to their own contexts.

Methodology in brief:

\* Two large international databases (Web of Science and Scopus) were searched for every entry that had an institutional author affiliation across the three-year period (9887 identified).

\* Rating criteria and a rating protocol were created and piloted

on one year of publications (3350 records). Three raters independently rated the records, and then met to compare ratings. The criteria and protocol were refined and then applied to the remaining 6500 records.

Results: Conducting the ratings was useful for developing an understanding of the possible range of what constitutes 'educational research' (ER) as well as 'SoTL'. One important, though less intended, result of the study was an increased awareness of the impact that SoTL criteria and definition may have on encouraging the direction SoTL takes within the institution.

Results will be reported in the following areas:

- \* Criteria for what constitutes ER and SoTL
- \* Prevalence of ER and SoTL across the institution (ranging from 1.6% - 3.1% of total publication output for ER annually and 0.9% - 1.6% for SoTL)
- \* Analysis by document type ('articles' far surpassing books, book chapters, conference papers, proceeding papers, editorials and reviews)
- \* Analysis of output across 30 departments, schools and units in the institution (to identify 'pockets of activity')
- \* Analysis of the individuals involved in ER and/or SoTL across the three-year period (to identify people involved and better understand the patterns of dissemination)

Discussion: SoTL is emerging as a legitimate form of scholarly contribution and is intended to cross discipline boundaries. This emerging and cross-disciplinary nature challenges traditional methods of identifying and encouraging involvement. This study represents one attempt to benchmark current SoTL activity with an institution. It also highlights the tension between communities of practice and the boundaries that are imposed by existing database structures which are the bases of judgments of scholarly research output.

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## Session D8

Paper

### ENGAGING-THE-DISCIPLINES: NAVIGATING SOTL DEVELOPMENT IN CHALLENGING ENVIRONMENTS

Anna Wilkinson<sup>1</sup>, Mieke du Plessis<sup>1</sup>, Annal Oosthuysen<sup>1</sup>

*1 Centre for Teaching and Learning, University of the Free State, South Africa*

Evidence-based rationale: The Engaging-the-Disciplines (ED) approach evolved from experiences and research findings in two SoTL projects at the University of the Free State (UFS), South Africa, namely, the Decoding Learning in Law project (2013) and the Teaching-Learning Scholars project on a rural campus (2011). We have gained valuable insights into the disciplinary mindset, in particular regarding the predominant emotional barriers to successful implementation of SoTL on campuses. The barriers identified include a lack of motivation to participate, preconceptions about target populations and purpose, and perceptions about the (minimal) value of SoTL within disciplinary context. Findings also exposed an alarming lack of pedagogical knowledge among participants, as well as elements of antagonism towards the 'boring' theory and 'alien' terminology used. ED attempts to address many of the concerns raised and incorporates important features highlighted in SoTL literature: establishing learning communities, encouraging critical reflexivity, displaying sensitivity to 'hostile' disciplinary environments, fostering habits of inquiry, and advancing the institutional impact of SoTL.

Theory-based strategy: In the implementation of ED as core strategy in a new SoTL program at the UFS, Teaching-Learning (TL) Managers in the faculties play a leading role in establishing

disciplinary learning communities and stimulating faculty engagement with reading matter related to student engagement. By means of a thought-provoking process (labelled 'guided self-empowerment') we expose participants to carefully selected 'chunks' of student engagement literature (a paragraph or chapter from a book or article). We also recommend two specific book publications for use/reference. The purpose is to capacitate them with powerful, research-based TL knowledge that also presents possible solutions to many of their TL problems. Each portion of reading is accompanied by a set of critical questions, which challenges them to engage deeply with new knowledge and/or to make connections with existing knowledge. This is regarded a powerful way of putting learning into action (Bloom & Lowenstein, 2013). Motivational conditions, including a sense of purpose and belonging, are intentionally fostered (Wlodkowski, 2008). Boredom is minimized through critical reflection and stimulating discussions on the applicability of acquired knowledge within disciplinary context. Leaders stay in the background and only 'set the scene' for action. Almost unobtrusively, faculty are equipped with knowledge and 'tools' they can adapt as possible solutions to problems. Members are intentionally encouraged to document and share their experiences.

Conclusion: The ED strategy has already informed renewed enthusiasm and confidence among participants, as well as transformed attitudes, innovative practices and emerging scholarly work. This is evidence that active engagement with literature through guided self-empowerment and the creation of motivational conditions, combined with opportunities for reflexivity and collaboration, can have a positive impact on SoTL advancement in the disciplines.

Discussion: How do we effectively lead and navigate SoTL in challenging disciplinary environments?

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## Session D9

Symposium

### DECODING IN THE STEM DISCIPLINES: FROM THRESHOLD CONCEPTS TO BOTTLENECKS

Adrian German<sup>6</sup>, Joan Middendorf<sup>1</sup>, David Pace<sup>5</sup>, Ali Erkan<sup>4</sup>, Erika Lee<sup>2</sup>, Suzanne Menzel<sup>4</sup>, John F Duncan<sup>3</sup>

*1 Indiana University Center for Innovative Teaching and Learning (CITL)*

*2 Indiana University Bloomington, School of Journalism*

*3 Indiana University, School of Informatics*

*4 Ithaca College, Computer Science*

*5 Indiana University, Department of History*

*6 Indiana University, Computer Science Department*

In this session the presenters will discuss three threshold concepts and several bottlenecks in computer science and informatics. They will show how they teach and assess student mastery of specific mental actions that block student learning. Joan Middendorf (IUB CITL) will talk about the impact Decoding can have if used in the STEM disciplines. Right now we don't explicitly teach our students how to fail so they can get right back up. That's in direct conflict with our goal: to prepare students to play competitively upon graduation. If our students don't learn how to fail, how are they going to learn to take the

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risks to really innovate in the field?

Erika Lee (IUB School of Journalism) will discuss practices for incorporating failure (and recovery) as a teaching method to bring previously non-technical students into the world of technology and computational thinking. Students can be taught to embrace the debugging and testing process through a combination of repetition, mimicry and scaffolding.

Ali Erkan (Ithaca College, CSCI) will explore those bottlenecks to learning computer science that are so essential to mastery of the field that learning to overcome them can have a transformative impact on students' experience of the field. Mastering processes such as indirection, recursion, and multidimensionality can have such an impact. In fact he proposes that it is well worth devising a hierarchy of such challenges that will help instructors focus their energy where it will have the maximum impact.

Suzanne Menzel (IUB CSCI) will talk about recursion, both as a threshold concept and as a bottleneck in computer science. While experts agree recursion may be difficult for novices there's wide disagreement on the exact source of that difficulty. As Suzanne shows, recursion does not pose the same challenge to all students; what matters is to locate and resolve the difficulty in the terms it was expressed.

John F Duncan (IU School of Informatics) will talk about proofs as bottlenecks in engineering. Practical engineering needs careful chains of if-then reasoning, which engineering students are often surprisingly weak at. Engineers need to practice creatively logical thinking, whether in design or in debugging.

Adrian German (IUB CSCI) will describe the effects of learner-sighted practices in Decoding.

Session participants will identify bottlenecks to learning in courses of their own, specifically what students are getting wrong. Then to begin to piece together the epistemology of different fields teams will compare the computer science bottlenecks to bottlenecks in their own fields, describing similarities and differences in a final discussion of the ways of operating across disciplines.

References

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## DECODING AND STEM FIELDS

**Joan Middendorf<sup>1</sup>**

*1 Indiana University Center for Innovative Teaching and Learning (CITL)*

All concepts in a discipline are not equal. Some are threshold concepts they require almost an intellectual conversion to function well (Meyers & Land, 2006). Decoding the Disciplines provides a systematic framework for addressing such difficulties (Shopkow, Diaz, Middendorf, & Pace, 2013). Since 2010, the Faculty Collegium in Indiana University's School of Informatics and Computing have undertaken the decoding of their courses using this methodology.

Decoding the Disciplines begins with the bottlenecks to learning the places where over and over again students struggle. The bottlenecks serve as red flags identifying where the epistemology (sometimes called, 'critical thinking') is being used by the professor, but is not being made available to the

students. What is the reason for these gaps between the way students operate compared to the professors?

Experts find it difficult to describe their own expertise. Experts chunk and process information in larger units than novices do (Chase and Simon, 1973; Glaser and Chi, 1988). By laying out the bottlenecks of a field, we can begin to map the 'epistemology' ways of operating or how knowledge is created in that field. Once we figure out what the expert does (Step 2), we can use the other steps in decoding to show the students the mental processes we want them to use (Step 3), have them practice it (Step 4), persevere (Step 5), and assess their performance, (Step 6). Sharing what we have learned, which we are doing here, is Step 7.

And this brings us to what this session featuring a bunch of computer scientists has to offer STEM more generally?

Some of the problems in STEM

- \* US is falling behind in teaching in the maths and sciences-US ranked 48th in the world;

- \* Women and non-whites are under-represented;

- \* 73% of STEM faculty still primarily lecture conveying content rather than the critical thinking.

STEM fields are desperate to find a better way to make more students experience success. And Decoding the Disciplines can do this by focusing on the mental process we want students to learn, rather than the content. Many of the concepts we describe here are bigger than just computer science. As we have worked to understand the epistemologies of different fields, we have learned that many mental actions occur across various fields.

My colleagues will describe four related and epistemologically significant bottlenecks to learning in Computer Science and Informatics. Students find it difficult to understand verification of logical reasoning (also a problem in engineering), frustration with disciplinary procedures for debugging (anyone else get resistant students?), failure and recovery (how to deal with a blank page), and recursion (also relevant to math and biology). Four instructors collaborated in experiments to uncover their own tacit expert knowledge so they could help students operate successfully in the discipline, applying the concrete strategies of Decoding the Disciplines. Ali Erkan will theorize about threshold concepts. At the end of the session, David Pace will lead an exercise to apply these ideas to other fields.

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## ENHANCING DECODING OF DISCIPLINES BY INCORPORATING FAILURE AND RECOVERY AS A PROCESS

**Erika Lee<sup>1</sup>**

*2 Indiana University Bloomington, School of Journalism*

Some amount of failure is inherent to technology and part of the scientific discovery process. Writing a program involves seeing where the logic fails, and working through error messages; scientific mistakes discovered Penicillin to Play-doh, and a failed hypotheses can reveal much about the problem we re investigating. The process of creating and discovering is one bound to a cycle of failure and recovery. An expert takes that knowledge, adjusts and moves on.

In many fields, one of the first bottlenecks a student encounters is how to begin. This might look like a blank screen, a blank piece of paper, or even an empty petri dish, but the challenge is the same. Students don't yet know how to plan out what they need for a project or how to take the first steps. Without intervention, some students will see this not as part of the process, but as a personal failure. What should be a speed bump will turn into a stop sign.

Focusing on the second step of Decoding the Disciplines, to define processes that students need to master to get past bottlenecks, we looked at how students approach writing their first computer programs and where they got stuck. Can we help students identify requirements and methods to create their own “recipe” for how to start coding?

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## RECURSION AS A BOTTLENECK CONCEPT IN COMPUTER SCIENCE

**Suzanne Menzel<sup>1</sup>**

*4 Ithaca College, Computer Science*

We report on the experience of how the ‘Decoding’ technique was applied to a fundamental concept in Computer Science, the insights that surfaced, how we acted on the information, and the assessment that we undertook.

Recursion is widely accepted as a threshold concept in Computer Science, and our introductory course has long focused on teaching recursion using a functional programming paradigm. This is a bottleneck concept in the sense that students ‘remain stuck’ in the course if they fail to develop a natural and early understanding of recursion.

The decoding process led to several concrete interventions in our course. Most notably, we shifted towards introducing the concept in terms of modern and surprising algorithms to accomplish familiar computational tasks (e.g., secure transmission of credit card information over the internet, Google’s PageRank algorithm, handwriting recognition). At the same time, efforts were made to integrate the algorithms seamlessly into the lab, lecture, and homework aspects of the course by introducing Team-Based Learning (TBL) as well as mechanisms for providing rapid and wise feedback (in the form of code reviews) to groups during or immediately after class.

We present the results of a quantitative study comparing the performance of over 400 students on the final exam, and in the course, before and after the interventions. We conclude by sharing some comments from an attitudinal survey of students in the revised course.

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## APPLYING DECODING THE DISCIPLINES TO VERIFICATION AS A BOTTLENECK

**John F Duncan<sup>1</sup>**

*1 Indiana University, School of Informatics*

Due to the requirements of the STEM (Science, Technology, Engineering, and Mathematics) disciplines, successful practitioners must be confident in their solutions. Equally importantly, they must be able to demonstrate that others should also be confident in their work. While students in an introductory classroom setting may not immediately understand the value of presenting evidence of correctness, it remains a valuable skill that they must master if they wish to become experts. The actual process of verifying and demonstrating correctness, however, is not something that all learners find natural, sensible, or transparent. Complicating the matter even further is a strong emotional component to this challenge: learners aren’t even sure why proof is useful or important, nor do they grasp that its purpose might be to assist in their own learning.

The methodology laid out in Decoding the Disciplines (Decoding) allows instructors to identify places where learning increases in difficulty, and presents a process instructors can employ to address these problems. In STEM, I assert that one of these bottlenecks is verification. How do you know that your answer is correct? Are there degrees of correctness to a

given problem? What evidence can be offered to substantiate a learner’s intuition of correctness? How is this idea of verification related to mastery of the subject?

The Decoding cycle is commonly presented with 7 steps. The discussion of verification as a bottleneck will address steps 3 (explicit modeling to learners), 5 (learner motivation), and 6 (assessing learner mastery). Specifically, we will discuss how learners in mathematics and informatics courses interact with verification, with a focus on actual classes covering Discrete Mathematics and Introductory Programming. Students in the Discrete Mathematics course interact with the issue of verification in the form of proofs. Students in the Programming course interact with it in the form of test code, which is in many ways also an attempted proof. Both situations show strong parallels in learner emotional and process-oriented bottlenecks. Student pre- and post- course surveys show progress towards overcoming this learning challenge.

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## Session D10

Paper

### SHARED LEADERSHIP THROUGH AN INTERDISCIPLINARY PROFESSIONAL LEARNING COMMUNITY: INTERWEAVING THE LANGUAGE AND CULTURE OF BUSINESS AND EDUCATION TO IMPROVE STUDENT LEARNING

**Valia Spiliotopoulos<sup>1</sup>, Kirk Kristofferson<sup>2</sup>**

*1 Simon Fraser University*

*2 Arizona State University*

Questions and Rationale: This session will address the challenges and opportunities of implementing a shared leadership model through the development of an interdisciplinary ‘professional learning community’ (Dufour, 1998) in a Canadian, research-intensive business school to support positive educational change. The key question is: How can a shared leadership model of an interdisciplinary Professional Learning Community collaborate to support and implement a learning assessment process in business education? This session is most relevant as interdisciplinary professional learning communities are increasingly in demand in order to address complex issues and solve multi-faceted problems in leadership and educational change in higher education and beyond (Holley, 2009). More importantly, the session addresses the challenges and opportunities that exist in collaborating with academics and professionals from diverse disciplines to improve student learning in an academic culture that has traditionally valued professional autonomy, academic freedom, individual achievement, and disciplinary expertise.

Theoretical Frameworks and Models: The project and paper used various models from which to interpret the process and results of conducting a learning assessment project. Dufour’s (1998) work on Professional Learning Communities is used as a basis from which to explain the shared leadership model used for educational reform. In addition, the work is based on Huber and Hutchings’s (2004) framework of teaching as community property and assuming collective responsibility for student learning in an interdisciplinary context in higher education.

Outcomes: The session will share the results of student learning that emerged from engaging in a data-driven learning assessment process; the outcomes focused on assessing student learning in the areas of critical thinking, analytical reasoning, integrative thinking, communication skills and ethical reasoning. These student learning goals reflected an effort on the part of the business school to support more liberal learning in undergraduate business education (Colby et al., 2011).



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Reflective Critique: First, the session will reflect on the sociopolitical and institutional context in which this interdisciplinary project occurred. Next, the faculty-led 'Assurance of Learning' process will be analyzed to explain the nature of the collaboration between the education specialists and the business faculty in developing the professional learning community through a shared leadership model. (Martell and Calderon, 2005).

Audience engagement: The audience will be invited to share their strategies and processes for participating in a shared leadership model in learning assessment in various contexts in higher education.

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## Session D10

Paper

### **DISTRIBUTED LEADERSHIP IN A DISTRIBUTED COMMUNITY OF PRACTICE: ENABLING PROFESSIONAL DEVELOPMENT THROUGH TRUST, SUPPORT, AND FUN**

Joanne Stewart<sup>1</sup>

*1 Hope College*

Questions and Rationale: The Interactive Online Network of Inorganic Chemists (IONiC) is an international faculty community of practice whose goal is to improve teaching and learning in chemistry in higher education. One of the group's strategies is to shift the private nature of teaching to a more public one through building supportive relationships and sharing content and practices online. A leadership council sustains the community using a distributed leadership model. Our questions are 1) How does the community impact the professional practice of community members? and 2) Does the leadership council follow distributed leadership practices and is the leadership effective?

Theories and methods :Changing beliefs about teaching requires a cultural shift and IONiC uses a 'systems change in higher education' approach (A. Kezar, 2009, [mobilizingstem.wceruwv.org/documents/Synthesis of Scholarship on Change in HE.pdf](http://mobilizingstem.wceruwv.org/documents/Synthesis of Scholarship on Change in HE.pdf)). IONiC serves as an intermediary organization that uses its own network and external levers, such as the American Chemical Society, to make things happen. Some might question if a truly open and dynamic community of practice can drive change, but systems thinking shows that this is possible through the broad reach of community members. The right leadership is critical, and IONiC's leadership will be examined using the benchmarking framework developed by the Office of Learning and Teaching-funded 'evaluating distributed leadership' project in Australia ([distributedleadership.com.au/](http://distributedleadership.com.au/)).

Outcomes: The impact of the community on professional

practice will be described at both the personal and the institutional level. Data from a community survey, interviews, and an analysis of participation rates will be used to show that 1) faculty participants change both their teaching content and methods after participating in the community, 2) faculty feel supported by the community and have a desire to 'give back' in ways that support IONiC's mission, 3) faculty are able to give back through a changing array of community activities, and 4) the effective leadership team reflects many of the tenets of a distributed leadership model.

Reflective critique : The IONiC community has many opportunities to grow and improve through reflective practice. External feedback is obtained through peer-reviewed grant proposals and publications. Internally, a community survey is carried out every other year. The mechanisms for reflection include annual face-to-face project meetings of the leadership team, weekly virtual meetings of various sub-committees, and daily conversation in a Skype chat room. This practice has led to 1) new directions or projects for the community, 2) collaborative publications and grant proposals, and 3) improvements in the web site.

Audience participation: Audience discussion and input will be sought in three areas: 1) What experiences do audience members have with distributed leadership and what critique can they offer of the model presented here? 2) What experiences do audience members have in promoting change through the development of communities of practice and how might they provide guidance to the IONiC community? and 3) Are they aware of nascent communities of practice that could benefit from the lessons that IONiC has learned?

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## Session D10

Paper

### **DESIGNING AN EVALUATION TOOL TO ASSESS THE IMPACT OF COMMUNITIES OF PRACTICE ON PEER PROFESSIONAL LEARNING AND DISTRIBUTED LEADERSHIP**

Kristin Warr Pedersen<sup>1</sup>

*1 University of Tasmania*

Communities of practice (CoP) provide opportunities for peer learning, leadership and institutional change (Blackmore 2010; Hildreth and Kimble 2004; Wenger et al, 2002). Despite increased attention and support given to promoting and enabling CoPs in the higher education sector (Cox & Richlin, 2004; Ng & Pemberton, 2013), evidenced impact of the CoP model as a formal enabler of distributed leadership and professional learning is lacking. The purpose of this paper is to provide an evaluative framework for assessing the impact of the CoP model on enabling peer learning and distributed leadership that addresses key priorities in learning and teaching in higher education.

This paper uses the Communities of Practice Initiative (CoPI) at the University of Tasmania as a case study to trial an evaluation framework under development by the author. The CoPI provides peer professional learning opportunities around priority and special interest areas in learning and teaching, in order to empower institutional change and organisational learning through distributed forms of leadership. In just over four years, the initiative has reached over 600 staff, across all faculties of the institution through the establishment of more than 30 CoPs.

The CoPI will be evaluated against a variety of metrics that explore the impact of the initiative on (1) numbers and diversity of staff involved; (2) numbers and diversity of strategic initiatives and priorities delivered on; (3) sustainability

indicators and success rates of CoPs in the initiative; (4) teaching practice and student learning; (5) engagement in scholarship of learning and teaching; (6) progression of individual and group work into other areas of impact (i.e. SoTL; grants, teaching innovations, curricula, broader community engagement); and (6) job satisfaction, leadership opportunities and interdisciplinary and collegial opportunities for professional growth. Data collection methods include surveys, interviews, data analytics and systematic capture and analysis of anecdotal evidence from participants collected over the last four years.

This paper will report on up-to-date findings against each of the above metrics. In doing so, this paper will critique the usefulness of each metric for assessing the impact of the CoP model on peer professional learning and distributed leadership in the academy. Audience participation will be invited in critique of the evaluation framework. The value of this paper is in exploring the potential to provide measurable evidence of the impact of a strategic and supported CoP model with particular attention to how this model might enable and support peer learning and distributed leadership in a contemporary higher education environment.

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## Session D11

Symposium

### **BECOMING THE ORACLE: REFLECTING ON EMERGING TRENDS IN PEDAGOGY AND PRACTICE TO ENVISAGE CHANGE - ACADEMIC AND PROFESSIONAL PERSPECTIVES ON BLENDED LEARNING AND THE FLIPPED CLASSROOM**

**Anne Taib<sup>1</sup>, Nell Kimberley<sup>2</sup>, Andrew Coleman<sup>3</sup>, Peter Wagstaff<sup>4</sup>, Lakmal Abeysekera<sup>5</sup>, Josephine Hook<sup>1</sup>, Paul Sugden<sup>3</sup>**

*1 Monash University Library, Monash University*

*2 Monash Business School, Monash University*

*3 Department of Business Law and Tax, Monash Business School*

*4 Department of Marketing, Monash Business School*

*5 Department of Management, Monash Business School*

This symposium provides an interactive platform for exploring the sub-questions in Conference Theme 2 via three inter-related papers, each focusing on recent adoption and adaptation to the new pedagogies at Monash University. Following the papers, a structured 20-minute discussion aims to enable participants and attendees alike, to better imagine or invent the way forward by shining a light on the lessons learned by early adopters.

The Monash Business School has embraced two new pedagogical directions with far-reaching results. Blended Learning and the so-called Flipped Classroom Model both herald a sharp move away from the time honoured tradition of the didactic lecture-tutorial system. Student-centred, peer-to-

peer and interactive pedagogical models such as task-based and problem-based learning are by no means new. However, recent dynamic shifts in technology and social media as well as changing student profiles and preferences have brought about a radical rethink of the university's teaching purpose, teaching methods and attitudes to learning which in turn reverberate into new approaches to teaching and learning spaces ' both virtual and physical.

This symposium offers a window into the early stages of the adoption of blended learning and the new pedagogies from a practitioner perspective. It explores the tensions, challenges and opportunities of these approaches from the vantage point of three participant groups: academic course coordinators and teachers, learners, and allied professional staff who scaffold research and learning skills development. Each paper adopts a framework of critical reflection to explore how these educational models are precipitating new practice, new insights into learning, and new teaching and learning environments.

Each paper identifies strategies being developed to facilitate the pre-class, in-class and post-class model with emphasis on e-learning components. New approaches to engagement, delivery of content, facilitation of learning and feedback are considered. The nexus between pedagogy and learning spaces is explored with reference to current teaching space refurbishment projects at Monash. Interrogating the theory behind the new approaches, each speaker considers the early lessons learned and speculates on the impact that these approaches will have on student engagement and on teacher development needs, taking into account the range and complexity of pedagogical and instructional design skills required. Importantly, evidence of student uptake and reaction to the new models is explored with reference to emerging data and findings.

Outline: 90 minutes Chair: Dr Nell Kimberley, Associate Dean, Learning and Teaching Monash Business School

3 x 20 minute papers plus 5-minute question time

1. The role of technology in the new course delivery model 'honing in on evolving student expectations and behaviours (Peter Wagstaff, Lecturer, Department of Marketing)
2. The challenge of adapting to the new pedagogies and digital platforms while providing inspiring teaching (Dr. Andrew Coleman, Senior Lecturer, Department of Business Law and Tax)
3. Online and at hand Working together to scaffold the development of student research and learning skills in the new virtual and physical teaching spaces. (Dr. Lakmal Abeysekera, Lecturer, Department of Management & Anne Taib, Learning Skills Advisor, Monash Library) Structured Discussion facilitated by Josephine Hook, Learning Skills Coordinator, Monash Library (20 minutes)

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## A LEADING QUESTION

**Nell Kimberley<sup>1</sup>**

*1 Monash Business School, Monash University*

Implementing successful and sustained change in a higher education institution places enormous demands on its leadership. For example, a recent report by the Australian Business Deans Council (ABDC) identified several areas requiring major change to its constituent organisations (ABDC Report, July, 2014). The report advocated a transformation of business education to produce innovative, creative, well-rounded and capable employees who are able to adapt across disciplines and borders. As a consequence, business schools are encouraged to review the nature and content of their

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course offerings for relevance and perceived value by society and to deliver their programs more flexibly, using more contemporary modes of teaching and technologies.

In order to respond to these challenges, the leadership approach and behaviours driven by a Dean and leadership team are critical if the required changes are to be adopted and implemented successfully. So, what constitutes effective change leadership at the school level? As part of a UK research project examining leadership in higher education, Bryman (2007) identified a set of 11 leader behaviours common to both departmental and institutional levels which could be summarised as envisioning and enabling major change. Of the behaviours identified, those associated with leader effectiveness included the creation of a clear 'strategic direction' and the 'inculcation of values'. 'Vision' or strategic direction may be defined as 'a picture of the future with some implicit or explicit commentary on why people should strive to create that future' (Kotter, 1996, p. 68). The instilling of values is also important to change implementation, as values assist others 'to understand and appreciate the direction' the school is taking (Bryman, 2007, p. 25). The values to be instilled include 'terminal' values or beliefs about the goals that are worthy of pursuit, and 'instrumental' values referring to beliefs about the types of behaviour appropriate to reaching these goals (Rokeach, 1979). Both have been widely addressed in the extant management literature and are important to the implementation of change (Whitely, 1995).

The higher education literature has recently focused on 'distributed leadership', which is variously defined as: 'A form of shared leadership that is underpinned by a more collective and inclusive philosophy than traditional leadership theory that focuses on skills, traits and behaviours of individual leaders' (Jones, Lefoe, Harvey & Ryland, 2012, p. 71) or as a 'dynamic influence phenomenon, rather than a static division of leadership role behaviours' (Clarke, p. 199).

The literature encompassing change leadership is complex and fragmented, characterised by the diversity of approaches and opinion. Often these theories are presented as being mutually exclusive. While there are no perfect models of change leadership, in the higher education context, transformational and distributed leadership may be complementary. This case study of a large Australian business school examines behavioural dimensions of both transformational and distributed leadership that led to successful, transformative change in the education portfolio.

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## THE ROLE OF TECHNOLOGY IN THE NEW COURSE DELIVERY MODEL - HONING IN ON EVOLVING STUDENT EXPECTATIONS AND BEHAVIOURS

Peter Wagstaff<sup>1</sup>

*1 Department of Marketing, Monash Business School*

While no empirical data exists to support the idea of the 'Digital Native', as described by Marc Prensky (2001), the term has become widely accepted as a means to describe the majority of current undergraduate students, raised in the age of digital technology and social media. His idea that such students consequently require a 'media-rich learning environment' because they think and learn differently (Prensky, 2001) has similarly gained widespread currency and fuelled the widespread adoption of blended-learning in higher education.

One of the more prominent implementations of blended learning by educational institutions is the flipped classroom 'an approach in which 'direct instruction moves from the group learning space to the individual learning space', freeing up class time for students to apply concepts in an active manner (Flipped Learning Network, 2014). In universities, this often

results in the abandonment of large lecture theatres, in favour of smaller, student-centred, interactive workshops. This approach has been shown to maximise student learning opportunities (Michael, 2006).

This paper reports on the evolution of a one-semester Marketing unit delivered using a blended-learning methodology to first-year undergraduate students over five semesters at Monash University. The paper begins by outlining the original impetus for change from traditional lecture/tutorial delivery, and then guides the audience through the critical stages of the unit's development to its current flipped learning format. Drawing closely on data obtained via analytics, as well as student and teacher evaluations, the course designer/coordinator provides a detailed account of the technical, pedagogical and curricula considerations that have shaped the decision-making process. Referring to live examples of the unit, the look and feel of the student learning experience is discussed and evaluated with reference to students' own feedback.

An important aspect of this paper is the focus on analysis of student expectations over time versus their actual behaviour with respect to the unit engagement and uptake. By close analysis of student behaviours across semesters, it has been possible to fine tune and adjust the unit to better respond to student learning needs, striking an appropriate balance between online learning and the face-to-face classroom.

The paper provides a critical review of the opportunities and challenges of flipping a university course. Valuable lessons from this case study will be shared, both successes and mistakes, which provide a rich backdrop for ongoing discussion in the broader symposium.

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## Session D12

Paper

### FRAMING CONVERSATIONS ABOUT DIVERSITY IN THE LANGUAGE CLASSROOM

Ketevan Kupatadze<sup>1</sup>

*1 Elon University, Department of World Languages and Cultures*

We as teachers in the US academia, particularly teachers of second and foreign languages, are used to speaking of diversity in positive terms. We tell students to embrace it and we promote it on our campuses through our courses, extracurricular activities, etc. We consider diversity to be an essential component of student educational experience and academic success. But, do students always understand why? Do students fully understand the meaning of diversity and its value? Should we reformulate the way we ask students to understand diversity? Should we have clearer goals when teaching about it? Through specific examples of activities developed for advance level Spanish language, culture and literature courses, this presentation will offer different ways to teach about diversity, as well as infuse diversity into the Foreign Language curriculum.

This presentation will focus on specific pedagogy adopted in two advance level Spanish courses with the topic of diversity at the center of attention. My intention will be to show how students came to understanding as to how difficult it really is to accommodate, develop tolerance and cohabit with the Other and this, appreciate the practice and realize the importance of promoting it. We saw many instances in the history of diverse countries during which the existence of diversity had caused civil wars, political and social clashes, and difficulties of collaboration and coexistence. So, students in these courses had an opportunity to reflect not only on

positive, but also on troublesome and difficult aspects of the experience of diversity. Through different texts - whether fictional, autobiographic, documentary, or cinematographic - that portrayed the experiences of people from diverse nations, people of diverse race, age, sex and sexual orientation, as well as people of diverse social class, students were constantly asked to think about the intolerance towards diversity that characterizes many societies and often-detrimental effects of such intolerance. In the end, we all came to an agreement that it is not diversity that has value in itself, but rather the acquired sense and understanding of difference and tolerance towards such difference.

The assessment of students understanding of diversity was based on students comments during class discussions, responses given on the final exam and/or final course evaluation, as well as the questionnaire completed pre and post courses.

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### Session D13

Paper

#### **DISSOCIATING POWER RELATIONS: USING ACADEMICS' STORIES OF VALUE TENSIONS TO DEVELOP NEW ACADEMIC DEVELOPMENT METHODS**

**Vikki Pollard<sup>1</sup>**, Julia Savage<sup>1</sup>

*1 Deakin University*

And, in order to understand what power relations are about, perhaps we should investigate the forms of resistance and attempts made to dissociate these relations. (Foucault, 1983: 211)

It has been argued that SoTL can be used as a methodology for faculty professional development and that such a method is a 'space for critique and endorsement of practice' (Fanghanel, 2013: 60). This perspective depends upon an analysis of the local experiences of faculty academics in order to develop changed practices beyond the local. This type of inquiry can be both initiated and supported by academic developers. The aim of this paper is to present an emerging type of SoTL methodology developed through the analysis of a research project recently undertaken at a large Victorian university. The project investigated course team culture in relation to curriculum review through the perspective of Course Team Leaders.

Derek's narrative is presented in this paper. His story of struggling to 1) develop a collaborative team culture and 2) work collegially across faculties with other discipline academics who teach into his course brings to the fore the idea of 'values tensions' (Di Napoli, 2014). According to Di Napoli, academic developers are forced to 'play a game of power forces' (6) and that these points of play are 'heuristic devices for beginning to reflect on possible ways that academic developers enact their sense of agency (7). This can be extended to a SoTL methodology that takes the 'values tensions' experienced by Derek as typical of the types of tensions experienced by Course Team Leaders. As academic developers we argue that an aspect of our work is to develop a scholarly approach to these tensions with the aim of reducing them, in order to enable collaborative decisions about the curriculum. The focus for curriculum decisions is a transformative one; changing the student learning experience. We discuss how the university and academic developers can support, and sustain, the development of this model. In this presentation, we will be posing dilemmas that audience members may have experienced and facilitate discussion on potential methodology.

### Session D13

Paper

#### **TRANSFORMING TEACHERS' PRACTICE: WHAT TEACHERS SAY ABOUT THE IMPACT OF A PEDAGOGY COURSE ON THEIR TEACHING**

**Claude Savard<sup>1</sup>**, Serge Talbot<sup>2</sup>

*1 Studies Council, Université Laval, Quebec, Canada*

*2 General Direction of undergraduate studies, Université Laval, Quebec, Canada*

The subject of this paper is under the conference theme (#5) of changing pedagogical practices of university teachers. It addresses the following questions: How institutional initiatives have been successfully implemented and how these initiatives have been influential in changing teachers' practices in their discipline? More than 500 teachers have followed an institutional pedagogy course entitled The Pleasure of Making Learning Happen offered at Université Laval since 1996. We wanted to know if that course had a genuine impact on their teaching. We analysed 182 short video clips (under 10 minutes), produced between the year 2002 and 2013, where more than 50 teachers were asked to testify on the impact the course had on their practices. Two experts on pedagogy viewed the clips and categorized their content using a classification of pedagogical principles and notions (Educational cards) that has been used during the course. The two experts had to agree on the judgment made for each observation (inter-observer agreement).

The results show changes in their values and actions in accordance with the objectives of the pedagogy course. For example, values took the form of learning principles such as: «learning is constructed based on the individual's learning dominant styles»; «learning is achieved through meaning»; «learning is achieved with the support of others»; «learning is a deliberate act». Teachers identified also several changes in the use of teaching formulas such as problem-based learning, cooperative learning and discussion group. They identified also some changes in their assessment methods, for instance, the use of self-assessment for formative or diagnostic purposes. Very interestingly, the teachers described also some other values that were not explicitly named in the pedagogy course syllabus but remained fundamental in the way the pedagogy course was given. They identified «the right to make mistakes» as one of these ideas as well as the «importance of showing modesty when dealing with the complexity of knowledge». Several teachers identified different qualities for teaching like «openness to change» and «creativity».

The interpretation of the data suggests that most of these teachers have undergone a genuine transformation in their values and attitudes towards teaching that should produce, in time, changes in their practice. They were very accurate and explicit on their vision of teaching and education in general. A bigger part of their testimony was on the explanation of their values and their philosophy which is, for the authors of this research, a very good sign that more profound changes are susceptible to happen on the long run. These testimonies were filmed at least two years after the pedagogy course, to insure sufficient time for changes in behavior and values.



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## Session D13

Paper

### PREPARING THE FUTURE PROFESSORiate: THE SCHOLARSHIP OF MENTORSHIP AS REFLECTIVE PRACTICE

Kathy Takayama<sup>1</sup>, Neal Fox<sup>1</sup>

*1 Brown University*

The importance of mentorship in academia is widely acknowledged (Sambunjak, Straus & Marusic, 2010), but there is a notable lack of formal training of young scholars in mentorship practices and the principles that underlie positive, effective mentoring. In recent years, the characteristics that define successful mentoring relationships and outcomes in academic settings have attracted increased scholarly discussion (see, e.g., Pfund et al. 2006; Lee et al. 2007). Nonetheless, few devoted venues exist for professional development in mentorship and the essential principles that promote such practices (Feldman et al, 2009). Indeed, newly minted research mentors rely on intuition, emulate former mentors, or learn by trial-and-error. Studies indicate that high attrition rates among PhD students are connected to poor mentoring and advising (Bell, 2012). Furthermore, increased retention of underrepresented minorities and women in STEM fields can be achieved with institutional efforts to provide positive mentoring experiences for postgraduate students (Cuny & Aspray, 2000; Margolis & Fisher, 2003; Thompson & Campbell, 2012).

This session describes the creation, implementation, evolution and outcomes of a university program for postgraduate students designed to bridge this gap by promoting the development of effective research mentorship skills in future faculty mentors at an early career stage. Our work examines and applies professional development practices that are informed through the scholarship of teaching and learning, specifically drawing on three fundamental models: self-authorship, communities of practice, and multiple scholarships. Firstly, our iterative approach establishes a continuum of self-authorship (Baxter Magolda & King, 2004) through which effective practices evolve based on the emerging needs of mentor-scholars in relation to the demands of the academe. Second, we apply a community of practice model (Lave & Wenger, 1991) toward the cultivation of a scholarly, reflective approach to the practice of mentorship among the future professoriate (i.e. postgraduate students). Finally, we propose a new paradigm to complement Boyer's four scholarships of the professoriate (Boyer, 1990) the scholarship of mentorship, which enhances our current and future professoriate's ability to excel in each of the other scholarships.

In our program, postgraduate student-undergraduate student teams engage in a yearlong research project directed solely by the postgraduate students. The teams were selected through an application process requiring the submission of a brief research proposal, budget, a mentorship plan, and a letter of support from a faculty (academic) advisor. In addition to being a professional development opportunity for postgraduate students, the program also acculturates undergraduates into the scholarship of the discipline through an intensive mentorship experience in which the availability of guidance exceeds what time-poor faculty could provide. During their award tenure, postgraduate student mentors engage in goal-setting for themselves and for their mentees, receive monthly training in mentorship skills through seminars and discussions led by experienced faculty mentors, and become a community of peer mentors for one another.

We will share our emerging frameworks that foster effective mentorship as ongoing reflective practices with the hope that

this model that can be transferable to other institutions as well as to programs for early career faculty.

## Session D14

Paper

### EXPANSIVE LEARNING AND LEADERSHIP LABORATORIES - A MODEL FOR ENGAGING AND DEVELOPING EMERGING LEADERS OF LEARNING AND TEACHING

Kylie Readman<sup>1</sup>, Jennifer Rowe<sup>1</sup>

*1 University of The Sunshine Coast*

Effective leadership of learning and teaching is critical for improving the quality of higher education in Australia. In order to ensure that this leadership is in place, universities must build a pipeline of leaders at all levels. This requires a range of strategies including development of existing staff to take up these roles. Workforce planning indicators currently show that higher education is not well prepared to deal with imminent changes to the demographic of the workforce. Leadership development is especially important for emerging leaders with an interest in learning and teaching when they are making decisions about their career trajectories, their research profiles and future opportunities for leadership roles.

This presentation reports on the Expansive Learning Leadership Initiative (ELLI), a leadership development program for emerging leaders in higher education offered at one Australian university. The ELLI supported and developed 15 participants, building capacity to enable successful leadership and scholarship of teaching and learning into the future. There were two significant aspects of the program: projects undertaken by each team and Leadership Laboratories to support the development process.

In teams of two or three, participants worked in their local contexts on problems that had previously been poorly defined, were unstable and which could result in sustainable change or scalable innovation. The projects were focused on engaging students and staff in change activities that ranged from preparing a teaching team for an innovative approach to large class teaching to involving students in a continuous quality improvement process to enhance existing formal feedback tools.

Participants engaged in monthly Leadership Laboratories, designed according to the principles of expansive learning, to share, analyse and expand their activities, resolve contradictions and develop new models of activity for their projects, and foster their leadership capacity. During each laboratory, participants shared observations and data about their own project in the context of collaborative analysis and design. Topics such as 'leading learning', 'change, impact and sustainability' and 'challenges of leadership' were investigated to help participants reach new understandings about leadership in learning and teaching and to design or test a new response, concept or model related to their own project as a result.

The leadership work that participants undertook was distributed, networked and informal. It was characterised by learning and teaching scholarship, crossing traditional discipline boundaries, building capacity amongst peers and making the university a better place to work and learn. Their focus on activity brings attention to the work of leadership rather than to the traits of leaders themselves. The participants identified six significant changes in themselves: a sense of agency, increased opportunities for collaboration, recognition as learning and teaching leaders, impact of their projects on promoting positive change, the ability to engage and inspire

others, and insight into leadership. The ELLI provided opportunities for participants to engage actively in practice based learning about leadership, created a sustainable and reusable pedagogic model for applied leadership development and broadened the definition of what might constitute leadership in a higher education setting.

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## Session D14

Paper

### LEADERSHIP AND CHANGE STRATEGIES IN TEACHING AND LEARNING

Jill Scott<sup>1</sup>, Brenda Ravenscroft<sup>1</sup>, Brian Frank<sup>1</sup>, **Natalie Simper<sup>1</sup>**, Jake Kaupp<sup>1</sup>

*1 Queen's University*

Institutions committed to continuous improvement of teaching and learning face many leadership challenges in today's higher education environment, including low engagement from faculty overloaded with diverse demands, funding constraints, and increasing demands for accountability from students and government. Notwithstanding these challenges, leaders at Queen's University have implemented several strategic initiatives aimed at engaging instructors in evidence-based practices to improve the quality of student learning. The initiatives, while varied in their structure and scope, share common features: providing support and training for faculty members, minimizing barriers to innovation, building communities and partnerships, developing local leaders, taking an evidence-based approach, facilitating the scholarship of teaching and learning, and disseminating information and knowledge.

This presentation employs the Henderson et al., (2011) framework to critically examine leadership in these key institutional initiatives. The four-quadrant framework for facilitating educational change encompasses (1) dissemination and implementation of curriculum and pedagogy, (2) developing reflective teachers, (3) enacting policy, and (4) developing shared vision. The initiatives with reference to specific quadrants of the Henderson model include:

University-wide Strategic Plan for Teaching and Learning: Creating a university-level committee to develop and implement recommendations and coordinate learning improvement initiatives across campus (aligning LMS, and coordinating technology-enhanced learning (4), creating infrastructure to support the expansion of experiential education, and developing policies around classrooms and active-learning spaces) (1), and targeted departmental support for quality assurance (3)

Course Redesign Project (Faculty of Arts and Science): Redesigning large introductory courses in multiple disciplines as blended models to improve student engagement through active learning in the classroom (1); modifying faculty policies and structuring the project to minimize barriers and ensure sustainability (3), creating a faculty learning community and facilitating their involvement in SoTL (2)

Integrated Learning Initiative (Faculty of Engineering and Applied Science): Collaborative development of an engineering design spine, providing infrastructure to support active learning pedagogies and studying student learning of critical thinking and problem solving (2), leveraging continuous improvement requirements in the accreditation process (3) and working collaboratively on multiple projects with interested faculty (4)

In order to ensure maximum impact of scarce resources and sustainability of improvements, each of these initiatives has undergone review and assessment. For example, data from the

Classroom Assessment of Student Engagement indicate statistically significant improvements in key student engagement subscales in redesigned courses involving 9,000 students. Furthermore, preliminary evidence suggests that, collectively, the initiatives are starting to influence the academic culture, and a project to survey changes in faculty attitudes across the institution is currently underway.

Audience members will gain insight into effective leadership strategies and will evaluate their relevance through use of a 'relevance scorecard,' encouraging them to consider the applicability of each strategy presented, thereby providing them with their own road map to educational change.

Henderson, C., Beach, A., & 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.

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## Session D14

Paper

### SHARED LEADERSHIP AND ADVOCACY EFFORTS TO PROMOTE INSTITUTIONAL CHANGE: A CASE STUDY

**Carol Van Zile-Tamsen<sup>1</sup>**, Xiufeng Liu<sup>1</sup>

*1 Center for Educational Innovation, University at Buffalo*

In July, 2014, the Center for Educational Innovation was created at the University at Buffalo (UB). This Center serves as a nexus for campus-wide efforts to further elevate the scholarship of, and research support for, pedagogical advancement and improved learning at the university. Center staff members are committed to advancing the scholarship of teaching and learning through integrated services, education, research and development related to university teaching, learning, and assessment. The Center was the culmination of a three-year effort to change the campus culture such that faculty members and administrators would come to value teaching and assessment of student learning as a more integral part of the university mission. Since UB is a member of the Association of American Universities (AAU) and a high research institution, the importance of playful pedagogy and assessment of student learning often seemed to get lost in the push to advance the research mission.

Change in institutions of higher education can move at a very slow pace because of the importance of tradition, which often includes a shared governance model (Caruth & Caruth, 2013). The purpose of this session is to illustrate how avenues for shared leadership, along with advocacy efforts, can be leveraged to bring about meaningful institutional change, even within a highly regulated public institution. In addressing conference theme one, leadership in the academy, the authors will describe this three-year effort to create the Center. Two committees, one task force, and countless hours of advocacy eventually achieved the desired result.

The process for bringing about this change at this institution will be described within the framework of institutional change, addressing external factors, as well as internal culture, policies, and politics (Fumasoli, 2013). In this case, the shared governance model provided an opportunity for a group of like-minded faculty and staff from a variety of departments to creatively address two major gaps in resources and support for faculty: pedagogical assistance and support for conducting assessment work at the level required for regional accreditation. Committee members were able to garner support by taking advantage of external stressors and internal organizational turnover. Further, individual committee members used advocacy skills to lobby for the desired results. Authors will outline the external stressors, the internal culture,

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policies, and politics that formed the institutional climate in which the committees did their work. The composition of the relevant committees, their processes, and their achievements will be described. Further, strategies for appropriately focusing committee work and advocacy efforts and for riding waves of institutional opportunity will be addressed. The session will conclude with participant questions and an open discussion of additional strategies that have been used to successfully encourage change at other institutions.

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## Session D15

Paper

### SHAMELESSLY REWARDING READING: HOW TECHNOLOGY-ASSISTED ASSESSMENT CAN FACILITATE STUDENT READING IN THE HUMANITIES

Judith Seaboyer<sup>1</sup>

*1 University of Queensland*

Students in the humanities don't read: so runs one thread of the broad-ranging debate about the future of reading. The problem is not as recent as one might think. Teaching and learning specialist Eric H. Hobson outlines thirty years of research, including the 2001 United States National Survey of Student Engagement, which reports that 'students see a weak relationship between course reading and academic success' and that a 'consistent pattern of research findings establishes compliance with course reading at 20-30% for any given day and assignment.' In other words, on any given day at least seven out of ten won't be prepared for class.

But of course students, like most of us, occupy the World Wide Web where they most certainly do read. What's needed is what cognitive neuroscientist and reading specialist Marianne Wolf refers to as bi-literacy. She is right when she points out that our 'eye-byte culture' privileges scanning, clicking, and browsing over close reading, and that longform linear text is increasingly sidelined as unwieldy and outdated. But my practice-based research shows that digital natives are every bit as capable as their forebears of privileging the kind of deep, ethical reading of longform text that is the foundation of disciplines in the humanities. I have so far surveyed three large first-year classes (each +200 students) in which quizzes were used, alongside two controls. The percentage of quizzed students who reported completing 75% of the required reading increased by 57%; the percentage of those who reported reading everything increased by more than 300%. Tutor focus groups reported that quizzed classrooms become communities of active learners as critique-ready students were able to engage in higher-order thinking.

I will describe a pragmatic and sustainable approach to achieving reading compliance whose first step shamelessly appeals to a grade-centered, return-on-investment culture: by making reading count in terms of the final grade, I persuade students to prioritise it just as they prioritise an essay or an exam. Because deep reading is essential to deep learning, I am pleased to reward students with marks and instant feedback for spending the time reading necessarily takes. I set technology-assisted, feedback-rich quizzes that are aligned with reading guides, lectures, tutorials, and discursive assessment. This means students complete, reflect on, and discuss reading across the semester rather than reading instrumentally in time to write an essay or in the days or hours before an exam.

Further, in the face of the massification of tertiary education and its ramifications, technology-assisted assessment addresses increasing teacher workloads. The quizzes take time to prepare, but once they are in place they can be modified,

improved, and recycled from year to year. And just as the technology provides instant feedback to students, so teachers can see gaps in student understanding and address them immediately in lectures and tutorials.

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## Session D15

Paper

### STUDENTS' PRE-CLASS PREPARATION: CONCISE AND INTERACTIVE ONLINE MODULES THAT STUDENTS USE

Margaret Wegener<sup>1</sup>, Timothy McIntyre<sup>1</sup>, Dominic McGrath<sup>2</sup>, Sam Peet<sup>1</sup>, Catherine Holmes<sup>3</sup>

*1 Physics, The University of Queensland*

*2 Institute for Teaching and Learning Innovation, The University of Queensland*

*3 Mathematics, The University of Queensland*

We have been exploring the challenge of getting students to prepare for class for the last five years. During this time we have investigated assessed preparation, types of reading and finally, interactive online modules.

Now 75% of our students in an introductory service course regularly complete pre-class preparation that supports active learning during class. We make use of our students' enthusiasm for and habitual use of the internet and internet-capable mobile devices. We have developed, implemented and evaluated an extensive suite of 'Five-Minute Physics' online modules for a range of Physics courses. With these, we have created multiple opportunities for students to learn, in small grabs of time. The modules contain concise text, images and diagrams, video, sound, interactive simulations, and formative quizzes with instant feedback, drawing on known effective practices. The modules are made up of segments that can each be addressed in about five minutes. These resources are usable on multiple platforms, on computer, tablet and smartphone. They have changed the behaviour of students, making a dramatic improvement to the level of engagement. We can now realistically work on the assumption that students have done the preparation for class. Students have incorporated the modules into their study lives, accessing the material with a range of devices. They enjoy using 'Five-Minute Physics' and value it as an aid to class preparation and for revision. Students particularly value that their lecturers produced the resources.

This approach has been adopted and adapted by academics in Mathematics and Chemistry (for 'MathSims' and 'ChemBytes' respectively). The modular template structure has enabled us as academics to develop and update resources without ongoing expert support. The design principles we have used assist the creation of suites of modules tailored to specific student audiences. Varied materials can be tightly integrated, including incorporation of other externally available digital learning resources. Collaborating with students has enabled us to add student contributions in some cases.

We have collected data from student surveys, focus groups and usage analytics over first- and second-year cohorts and across Mathematics and Physics over the past two years. Each cohort showed substantial engagement with the modules. We will discuss differences observed between cohorts, and explore trends emerging about how students are using technology for out-of-class activities.

During the presentation the audience will have the opportunity to use the resources, engaging with the interactive components.

## Session D15

Paper

### **THE PHYSICAL UNIVERSITY AND A CONNECTED CURRICULUM FOR THE FUTURE: THE HOLISTIC BUILT ENVIRONMENT AND RESEARCH-BASED EDUCATION**

**Brent Pilkey<sup>1</sup>**

*1 University College London, Centre for the Advancement of Learning and Teaching*

Change is affecting higher education in a number of ways and universities must adopt flexible and coherent strategies in order to prepare students for an unknown future. A growing body of literature argues the way this can be done is by enhancing synergies between teaching and research (e.g. Brew 2012); bringing students closer to research and the production of knowledge has a number of benefits relevant to students' present experiences and future careers. This paper outlines a long-term flexible Connected Curriculum strategy for higher education at a research-intensive UK university, University College London. This new model 'part of a recently launched twenty-year vision and a wholesale commitment to changing UCL's programmes of study (Arthur 2014) 'will enable students to participate in research throughout their undergraduate years, while also building connections both vertically across a programme's year groups and horizontally across disciplinary divides, as well as beyond the university setting. While no doubt visionary in nature, an initiative of this magnitude can run up against some challenges, including the limits presented by the physical university setting. The learning environment can offer both initial perceived challenges to staff and students as well as real hindrances to implementing a holistic research based education, which can seem compounded at institutions located in a densely urbanised setting.

After an initial framing of the UCL Connected Curriculum including its framework of six dimensions of connectivity (Fung 2014), this paper goes on to highlight findings from an on-going study with four international research-intensive universities. The empirical study, consisting of qualitative data gathered from undergraduate students and university employees 'teaching and academic staff, senior management, and colleagues in facilities departments explores the perceived and real issues of implementing curricula changes from the perspective of the physical university built environment within and beyond the traditional learning environment. Participants for the study were selected to represent a diverse window into multiple perspectives and disciplinary backgrounds. Along with outlining challenges, solutions are offered which range in scale, cost and time commitment, that can move beyond real and perceived barriers to research based education.

This paper aims to build a bridge between two bodies of scholarship of change, the work on research based education and the literature on university built environments and improving learning, while also presenting internationally gathered primary research framed in the context of UCL's ambitious long-term goal of shifting an education paradigm. Conference delegates will be encouraged to offer critical comments on the paper and the UCL Connected Curriculum, but also to share the ways in which their own institution's built environment creatively facilitates a holistic approach to research based education.

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# Program Thursday 29 October 2015

0830-0930 Plenary Keynote (Storey Hall) - Associate Professor Chng Huang Hoon				
Room Number	16.01.001	16.07.008	16.07.007	16.07.001
0930-1030	<p><b>Session E1</b> <b>Theme 2</b> 0930-1000 <b>Dominic McGrath</b> Learning to teach in higher education: The 'promise' of digital solutions and what new teachers want</p> <p>1000-1030 <b>Timothy Perkins</b> Collaborative Responsivity - a novel approach to University team teaching</p>	<p><b>Session E2</b> <b>Theme 1</b> <i>Roundtable</i> 0930-1030 <b>Jane Skalicky, Phill Dawson, Kristin Warr Pedersen, Robert Nelson, Sally Rogan</b> Conceptualising student leadership across international contexts</p>	<p><b>Session E3</b> <b>Theme 2</b> <i>Roundtable</i> 0930-1030 <b>Judith Westrup</b> Learning &amp; Teaching for Sustainability: Creative Design of a Multidisciplinary e- Assessment APP</p>	<p><b>Session E4</b> <b>Theme 1</b> 0930-1000 <b>Andrea Webb</b> Developing educational leaders through the integration of threshold concepts in the Scholarship of Teaching and Learning</p> <p>1000-1030 <b>Janelle Wilkes</b> Leadership in the Academy: First Year Curriculum change in Quantitative Skills</p>
Room Number	80.08.010	80.03.001	80.07.009	80.09.006
0930-1030	<p><b>Session E9</b> <b>Theme 5</b> 0930-1000 <b>Cheryl Amundsen</b> A multi-level assessment framework for a grants program supporting teaching inquiry: Looking beyond the impact of individual projects</p> <p>1000-1030 <b>Alan Barnard</b> Embedding peer review of teaching in practice disciplines: development of a multi-disciplinary approach to workplace experience</p>	<p><b>Session E10</b> <b>Theme 2</b> 0930-1000 <b>Natalie Brown</b> Getting the right blend: Applying a learning and teaching model to collaborative research</p> <p>1000-1030 <b>Edgar Fuller</b> The Impact of Anxiety on Student Performance in a Self-Paced, Computer Facilitated Developmental Mathematics Program</p>	<p><b>Session E11</b> <b>Theme 2</b> <i>Roundtable</i> 0930-1030 <b>Heather Alexander, Jude Williams, Louise Maddock</b> The Future of Professional Learning</p>	<p><b>Session E12</b> <b>Theme 5</b> 0930-1000 <b>Catherine Snelling</b> Taking Big Steps with Small Feet: how we have stepped up our simple version of flipping the classroom to the wider world of higher education</p> <p>1000-1030 <b>Michelle Yeo</b> Phenomenology of Surprise in a SoTL Scholars' Program</p>
1030-1100		MORNING TEA		

Plenary Keynote (Storey Hall) - **Associate Professor Chng Huang Hoon**

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session E5</b> <b>Theme 4</b> <i>Roundtable</i> 0930-1030 <b>Sandra Jones</b> Porous borders: a Living Learning Laboratory Leadership Partnership</p>	<p><b>Session E6</b> <b>Theme 3</b> 0930-1000 <b>Denise Chalmers</b> An adaptable tool for institutions and individuals to develop and apply teaching criteria and standards  1000-1030 <b>Lisa Thomas</b> Discover, Connect, Inspire: Transitioning into a whole of institution, continuing professional development framework</p>	<p><b>Session E7</b> <b>Theme 1</b> 0930-1000 <b>Anthony Baker</b> Coordination and teaching in a large-scale first-year subject: a case for distributed leadership  1000-1030 <b>Angela Carbone</b> The Peer Assisted Teaching Scheme: Enabling distributed leadership in learning and teaching</p>	<p><b>Session E8</b> <b>Theme 6</b> 0930-1000 <b>David Boud</b> Best estimates of knowledge about assessment in higher education? Foundations for course design and leading assessment in the academy  1000-1030 <b>Natalie Simper</b> Rubric Development Framework for Assessing Essential Learning Outcomes</p>
80.10.013	80.11.006	80.11.007	80.11.009
<p><b>Session E13</b> <b>Theme 6</b> 0930-1000 <b>Karen Willis</b> Faculty and University challenges in leading the construction of high quality SoTL projects  1000-1030 <b>Lynne Roberts</b> Identifying the SoTL training needs of Academics with Teaching Responsibilities</p>	<p><b>Session E14</b> <b>Theme 3</b> 0930-1000 <b>Stephanie Eglinton-Warner</b> Implementing and evaluating diversity and inclusion principles for effective learning  1000-1030 <b>Meloni Muir</b> A start to fostering knowledge, skills and attitudes to ensure inclusive teaching environments</p>	<p><b>Session E15</b> <b>Theme 5</b> 0930-1000 <b>Katherine Bathgate</b> Sessional team leadership: changing practice in moderation and peer review in a very large first year unit  1000-1030 <b>Lee Rusznyak</b> How assessment tasks may obscure conceptual demands: Enabling students to move beyond common-sense responses</p>	<p><b>Session E16</b> <b>Theme 2</b> 0930-1000 <b>Tina Bhargava</b> Online Teaching and Learning Strategies to Develop Affective Competencies  1000-1030 <b>Kath Dooley</b> A focus on collaboration: educating screen production students for the future</p>

MORNING TEA

# Program Thursday 29 October 2015

Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1100-1230	<p><b>Session F1</b> <b>Theme 2</b> 1100-1130 <b>Anske Robinson</b> Teaching research methods in the virtual learning environment - blending pedagogy with practice</p> <p>1130-1200 <b>Rosaline Sebolao</b> The effect of academics exposure to industry and alternative pedagogical practices in higher education: a pragmatic perspective</p> <p>1200-1230 <b>Lynette Sheridan Burns</b> Building academic capacity for an online future</p>	<p><b>Session F2</b> <b>Theme 1</b> 1100-1130 <b>Ragnhild Sandvoll</b> How academic leaders understand, enact and endorse according to scholarship of teaching and learning?</p> <p>1130-1200 <b>Warren Sellers</b> Leadership? in the academy: Navigating troubled waters - a provocation</p> <p>1200-1230 <b>Jillian Hamilton</b> Ripples of Change: Negotiating the Barriers and Benefits of Implementing Distributed Leadership in Higher Education</p>	<p><b>Session F3</b> <b>Theme 2</b> <i>Symposium</i> 1100-1230 <b>Jessie Moore, Chris Anson, Liane Robertson</b> Investigating the Teaching of Writing as a High-Quality High-Impact Practice</p>	<p><b>Session F4</b> <b>Theme 1</b> 1100-1130 <b>Ana-Maria Bliuc</b> Transforming academic mentoring: a cross-disciplinary case study on shared practice for student learning</p> <p>1130-1200 <b>Anne Gilmore</b> Creating distributed leadership through peer mentoring: a model for improvement and innovation in teaching and learning</p> <p>1200-1230 <b>Jo-Anne Kelder</b> Shared leadership in the academy: creating opportunities and meeting expectations to enhance student learning</p>
Room Number	80.08.010	80.03.001	80.07.009	80.09.006
1100-1230	<p><b>Session F9</b> <b>Theme 5</b> <i>Symposium</i> 1100-1230 <b>Debra Bateman, Wendy Sutherland-Smith, Michele Ruyters, Anne-Lise Ah-Fat, Laurel Mackenzie</b> The Scholarship of Academic Integrity and Misconduct in times of change</p>	<p><b>Session F10</b> <b>Theme 2</b> 1100-1130 <b>Kay Gallagher</b> Case studies in innovative teaching: Tablet technology in the EAP classroom</p> <p>1130-1200 <b>Bettie Higgs</b> Scholarship of Teaching for Transitions: building a resource and impact on practice</p> <p>1200-1230 <b>Karin Oerlemans</b> Disruption and Change - Introduction of blended learning in the studio space</p>	<p><b>Session F11</b> <b>Theme 2</b> 1100-1130 <b>Randall Bass, Daniel Bernstein</b> Formation by Design: Integrating wider learning outcomes into teaching, learning and institutional change</p> <p>1130-1200 <b>Alison Beavis</b> CLARA-fying Learning - Developing the learning power of Science students using group coaching as a novel strategy for large subject scaling</p> <p>1200-1230 <b>Angela Brew</b> Leading and changing learning through engaging students in research-based experiences</p>	<p><b>Session F12</b> <b>Theme 5</b> 1100-1130 <b>Alastair Robertson</b> A whole institutional approach to curriculum reform; flipping practice</p> <p>1130-1200 <b>Marcus O'Donnell</b> University-wide Curriculum Transformation and ePortfolio implementation: closing the SOTL loop from early adoption to institutional embedding</p>

16.07.002	16.07.003	16.07.004	80.07.009
<p><b>Session F5</b> <b>Theme 4</b> 1100-1130 <b>Earle Abrahamson</b> The Scholarship of Civic Engagement: A case study in a post-1992 UK University</p> <p>1130-1200 <b>Monica Green</b> Into the Field: Pre-service teacher perspectives of local and community-based pedagogies</p>	<p><b>Session F6</b> <b>Theme 3</b> <i>Panel Session</i> 1100-1230 <b>Geoff Scott, Darrell Evans, Chng Huang Hoon, Kerri-Lee Krause, Mustika Indah Khairina</b> Diversity in the academy: teachers, students, practice, context</p>	<p><b>Session F7</b> <b>Theme 1</b> 1100-1130 <b>Sabina Hussain</b> Developing an integrated undergraduate film curriculum through a collaborative and cross-disciplinary approach: Challenges and opportunities</p> <p>1130-1200 <b>Elizabeth Johnson</b> Threshold Learning Outcomes (TLOs) for Australian science degrees: integrative scholarship in action</p> <p>1200-1230 <b>David Jones</b> Leading New Course Innovation and Development: Contemporary Challenges in Australian Built Environment Education</p>	<p><b>Session F8</b> <b>Theme 6</b> <i>Symposium</i> 1100-1230 <b>Sue Webb, Penny Jane Burke</b> Putting theory to work in leadership for social equity</p>
80.10.013	80.11.006	80.11.007	80.11.009
<p><b>Session F13</b> <b>Theme 6</b> 1100-1130 <b>Natasha Kenny</b> Enhancing the Scholarship of Teaching and Learning through Integrated Networks of Practice</p> <p>1130-1200 <b>Peter Felten</b> SoTL as the Signature Pedagogy of Educational Development</p> <p>1200-1230 <b>Patrick Crookes</b> Developing, piloting and evaluating a collaborative system to promote innovation in the Australian and UK Higher Education sectors; focusing on the Reward and Recognition of Teaching</p>	<p><b>Session F14</b> <b>Theme 3</b> 1100-1130 <b>Helen Flavell</b> Capital A for Aboriginal please: can students perspectives be transformed in a large compulsory Indigenous Australian culture and health course?</p> <p>1130-1200 <b>Darryl Low Choy</b> Decolonising the Curriculum: Empowering Built Environment students with Indigenous Protocols and Knowledge</p> <p>1200-1230 <b>Beth Marquis</b> Leading the learning of global justice: Exploring the potential of an interdisciplinary, community-engaged inquiry course</p>	<p><b>Session F15</b> <b>Theme 5</b> 1100-1130 <b>Deborah King</b> Transforming local practice into a force for change - why scholarship of teaching and learning in undergraduate mathematics matters</p> <p>1130-1200 <b>Rosanne Coutts</b> Marking moderation in a science vocation</p> <p>1200-1230 <b>Michael Drinkwater</b> Evidence-based teaching practices in science departments: Common practices or still just the champions?</p>	<p><b>Session F16</b> <b>Theme 2</b> 1100-1130 <b>Margaret Jollands</b> Students' perspectives on developing employability skills in an employment shortage</p> <p>1130-1200 <b>Lucy Mercer-Mapstone</b> What does the future hold for our teaching, our students and our learning? A skills-based future for higher education: A practical and evidence-based approach to integrating communication skills into undergraduate science degrees</p> <p>1200-1230 <b>Andrea Price</b> Targeted skills-based resources: Adapting teaching approaches for a non-traditional student cohort in an online environment at the University of Tasmania</p>



# Program Thursday 29 October 2015

1230-1400		LUNCH (including ISSOTL Business Meetings)		
1400-1430		Invited Speaker (Storey Hall) - Associate Professor Manjula Devi Sharma		
Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1430-1530	<p><b>Session G1</b> <b>Theme 2</b> 1430-1500 <b>Sarah Stein</b> Beliefs and practices related to presence: Learning from the words of teachers of distance and on-campus courses</p> <p>1500-1530 <b>Dominique Verpoorten</b> Faculty engagement with blended learning - A study based on the Theory of Planned Behavior</p>	<p><b>Session G2</b> <b>Theme 1</b> <i>Roundtable</i> 1430-1530 <b>Sandra Jones, Marina Harvey, Heather Davis</b> Engaging staff in professional development as an inclusive learning activity: a distributed leadership approach</p>	<p><b>Session G3</b> <b>Theme 2</b> <i>Roundtable</i> 1430-1530 <b>Martin De Graaf, Benjamin Cooke, Belinda Johnson, Angela Hassell, Sedat Mulayim, Jose Roberto Guevara, Anne-Lise Ah Fat</b> The Informal Curriculum as a Tool for Student Engagement</p>	<p><b>Session G4</b> <b>Theme 1</b> 1430-1500 <b>Sharon Flecknoe</b> Transitioning of academic identity to education-focused at a research intensive University</p> <p>1500-1530 <b>Lillian Smyth</b> Research-led education and research careers: the roles for social engagement and perceived leadership</p>
Room Number	80.08.010	80.03.001	80.07.009	80.09.006
1430-1530	<p><b>Session G9</b> <b>Theme 5</b> <i>Roundtable</i> 1430-1530 <b>Jody Horn</b> Can knowing the literature be sufficient for diversity? Findings from a black male student-faculty learning community</p>	<p><b>Session G10</b> <b>Theme 2</b> 1430-1500 <b>Hussein Dia</b> Using Social Media to Enhance Learning Outcomes in Engineering Courses</p> <p>1500-1530 <b>Rachael Field</b> The use of animation to promote student learning about the importance of mental well-being for tertiary study success</p>	<p><b>Session G11</b> <b>Theme 2</b> 1430-1500 <b>Angela Carbone</b> The future of learning and teaching based on Australian ICT students' views of employability</p> <p>1500-1530 <b>Paul Chua</b> How can one teach so that what one is teaching engages with a life: Towards a Leadership Transformation Experience in an Executive Education Programme in Singapore</p>	<p><b>Session G12</b> <b>Theme 5</b> 1430-1500 <b>Beverley Oliver</b> Student engagement with graduate capabilities and course learning outcomes</p> <p>1500-1530 <b>Theda Thomas</b> Using conversation maps to collect SOTL data and engage lecturers</p>
1530-1600		AFTERNOON TEA		

LUNCH (including ISSOTL Business Meetings)

Invited Speaker (Storey Hall) - **Associate Professor Manjula Devi Sharma**

16.07.002	16.07.003	16.07.004	80.02.003
<p><b>Session G5</b> <b>Theme 4</b> 1430-1500 <b>Daniel Diaz Vidal</b> Analyzing the impact of college life on academic and post academic outcomes. 1500-1530 <b>Erin Mikulec</b> Learning outcomes of an international online discussion forum among pre-service secondary teachers in the United States and Finland</p>	<p><b>Session G6</b> <b>Theme 3</b> 1430-1500 <b>Ruth Moeller</b> International Suitcase: Developing transnational teaching competencies through an online resource and community of practice 1500-1530 <b>Pauline Ross</b> Reconceptualising and evaluating the academic role in the Sciences</p>	<p><b>Session G7</b> <b>Theme 1</b> 1430-1500 <b>David Birbeck</b> Course handover: A tool to support course coordinators 1500-1530 <b>Maira Cordiner</b> Distributed leadership: an essentially contested 'concept' that is losing its popularity as its complexities are revealed</p>	<p><b>Session G8</b> <b>Theme 6</b> <i>Roundtable</i> 1430-1530 <b>Melissa Neave, Paul Battersby, John Whyte, Anne-Lise Ah-fat</b> Understanding the role of Professional Development in University Teaching</p>
80.10.013	80.11.006	80.11.007	80.11.009
<p><b>Session G13</b> <b>Theme 6</b> 1430-1500 <b>Deborah West</b> Building SoTL capacity across multiple institutions: Fostering knowledge and skills for the development of applications for teaching awards and grants 1500-1530 <b>Beth Marquis</b> Leading SoTL in and across the Disciplines via a SoTL Research Fellows Program</p>	<p><b>Session G14</b> <b>Theme 3</b> 1430-1500 <b>Michelle Barker</b> Beyond internationalisation: Framing conversations around 'Interculturalisation of the curriculum' 1500-1530 <b>Jinqi Xu</b> Change and Learning - How the Change Process Reshapes Student Learning Over Time?</p>	<p><b>Session G15</b> <b>Theme 5</b> 1430-1500 <b>Guopeng Fu</b> Graduate teaching assistant development in a practice-and-theory framework 1500-1530 <b>Lee Rusznyak</b> The affordances of tutorials in enhancing students' understanding of a threshold concept: A case study</p>	<p><b>Session G16</b> <b>Theme 2</b> 1430-1500 <b>Tina Overton</b> Expert vs novice: Can undergraduates ever become expert problem solvers? 1500-1530 <b>Jonny Wells</b> Designing work ready students for 21st Century employers with an 'engage', 'connect', 'pull don't push, 'online and multifaceted approach'</p>

AFTERNOON TEA

# Program Thursday 29 October 2015

Room Number	16.01.001	16.07.008	16.07.007	16.07.001
1600-1730	<p><b>Session H1</b></p> <p><b>Theme 2</b></p> <p>1600-1630 <b>Scott Beattie</b> The journey not the destination: Assuring quality via Course Landmarks</p> <p>1630-1700 <b>Deanne Gannaway</b> What's up with the Australian BA?</p> <p>1700-1730 <b>Joy Higgs</b> Transcending pedagogies: strategies for disrupting learning and teaching spaces</p>	<p><b>Session H2</b></p> <p><b>Theme 1</b></p> <p><i>Symposium</i> 1600-1730 <b>Kelly Matthews, Lucy Mapstone-Mercer, Jacquie McDonald, Beth Marquis, Mick Healey</b> Learning and leading in international collaborative writing groups: Student, academic, facilitator, and coordinator perspectives</p>	<p><b>Session H3</b></p> <p><b>Theme 2</b></p> <p>1600-1630 <b>Kim Anh Dang</b> Paired-placement as an alternative model to promote teacher learning in professional practice</p> <p>1630-1700 <b>Melanie Nash</b> Developing links across Figured Worlds: Integrating Physical and Visual Literacies in the Exploration of Artifacts and Cultural Spaces</p>	<p><b>Session H4</b></p> <p><b>Theme 1</b></p> <p>1600-1630 <b>Andrea Carr</b> Engaging and leading teaching teams in the development of quality curricula: A collaborative approach</p> <p>1630-1700 <b>Dary Dacanay</b> Curriculum Leadership Practices of Administrators in Ateneo De Manila University</p> <p>1700-1730 <b>Rosanne Coutts</b> Leadership in assessment practice: an investigation of inter-institutional similarity and divergence of assessment practice in the context of externally benchmarked curriculum in the health sciences</p>
Room Number	80.08.010	80.03.001	80.07.009	80.09.006
1600-1730	<p><b>Session H9</b></p> <p><b>Theme 5</b></p> <p><i>Symposium</i> 1600-1730 <b>Adrian Jones, Jennifer Clark, Adele Nye, Sean Brawley</b> The Teaching and Learning of History in the Age of Educational Outcomes and Standards</p>	<p><b>Session H10</b></p> <p><b>Theme 2</b></p> <p>1600-1630 <b>Ekaterina Pechenkina</b> Integrating technology for learning: A case study of Echo360</p> <p>1630-1700 <b>Gerry Rayner</b> E-texts in higher education: Disruptive or merely disquieting?</p> <p>1700-1730 <b>Bella Ross</b> Wikis for group work: Encouraging transparency, benchmarking and feedback</p>	<p><b>Session H11</b></p> <p><b>Theme 2</b></p> <p>1600-1630 <b>Leanne McCann</b> Sustainable partnerships for future pedagogies: Mastering Academic and Research Skills (MARS)</p> <p>1630-1700 <b>Kathleen Lilley</b> Challenging a Eurocentric notion of global citizenship: Perspectives of informants from culturally diverse backgrounds</p>	<p><b>Session H12</b></p> <p><b>Theme 5</b></p> <p><i>Symposium</i> 1600-1730 <b>Ada Haynes, Denise Drane, Elizabeth Lisic</b> From Local Assessment to Changing Classroom Practices Nationally and Internationally: Improving Students' Critical Thinking Using the CAT (Critical thinking Assessment Test)</p>

16.07.002	16.07.003	16.07.004	80.02.003
<p><b>Session H5</b> <b>Theme 4</b> 1600-1630 <b>Ruth Greenaway</b> University-Community-School Engagement: Awakening aspirations 1630-1700 <b>Kevin O'Connor</b> Developing a Sense of Place: Engagement through School and Community Partnerships 1700-1730 <b>Noeleen McNamara</b> The engagement of legal studies students and their transition to studying law at University</p>	<p><b>Session H6</b> <b>Theme 3</b> 1600-1630 <b>Julie Maakrun</b> The impact of an international service learning project on pre service teachers levels of agency and cultural competence 1630-1700 <b>Patricia McLaughlin</b> The Global Canopy: Ensuring today and tomorrow's students have competency navigating in a globalised world 1700-1730 <b>Joan Richardson</b> The World is a Book and those who do not travel read only a page</p>	<p><b>Session H7</b> <b>Theme 1</b> 1600-1630 <b>Maria Mackay</b> Leadership in challenging the process: Creating a discourse on curricula practice in regard to clinical skills curriculum 1630-1700 <b>Marcus O'Donnell</b> Curriculum Transformation: leading change through a research driven consultative model</p>	<p><b>Session H8</b> <b>Theme 6</b> <i>Panel Session</i> 1600-1730 <b>Jo-Anne Kelder, Caroline Cottman, Carol Rolheiser, Angela Carbone, Justin Walls, Liam Phelan</b> Exploring peer-to-peer leadership initiatives to develop SoTL capacity amongst faculty</p>
80.10.013	80.11.006	80.11.007	80.11.0096
<p><b>Session H13</b> <b>Theme 6</b> 1600-1630 <b>Dominique Verpoorten</b> Infusing SoTL components in staff training - A faculty development continuum at the University of Liège 1630-1700 <b>Georgina Fyfe</b> Maximising potential from Teaching Focused academic positions - the Inaugural Curtin TF Retreat 1700-1730 <b>Cathryn McCormack</b> SoTL vision and the need for a useful working definition of effective teaching</p>	<p><b>Session H14</b> <b>Theme 3</b> 1600-1630 <b>Michelle Eady</b> Authentic Empathy: A Lesson in Understanding Self and Others, Canadian Indigenous Children's Perspective through Drawings 1630-1700 <b>Ranjit Voola</b> Educating future leaders in combating the enduring problem of poverty: Incorporating poverty alleviation in business curriculum 1700-1730 <b>Claudine Moutou</b> Do students need help unscrambling our epistemological differences in teaching ethics or do we need to accept we have a problem first?</p>	<p><b>Session H15</b> <b>Theme 5</b> 1600-1630 <b>Howard Jackson</b> Transforming the Faculty Culture across the STEM Disciplines 1630-1700 <b>Kanchana Jayasuriya</b> Embedding professional skills development in Engineering: A case study of a grass-roots initiative 1700-1730 <b>Heather Scott</b> Learning through inquiry leads to change in practice</p>	<p><b>Session H16</b> <b>Theme 2</b> <i>Symposium</i> 1600-1730 <b>Amani Bell, Airini, Matt Benton, Ema Wolfgramm-Foliaki</b> Australia, New Zealand, South Africa and Canada - convergences and divergences in the experiences of first-generation university students</p>



# Abstracts Thursday 29 October 2015

## Plenary Keynote

### LEADING LEARNING AND THE SCHOLARSHIP OF CHANGE FROM THE SOTL MARGIN: SOTL CAPACITY BUILDING FROM AN ASIAN LOCATION

Huang Hoon Chng<sup>1</sup>

*1 National University of Singapore, Singapore*

As a research-intensive university, the National University of Singapore (NUS) has for over a decade nurtured and maintained a rigorous research agenda and more recently has extended the focus on educational and pedagogical research. With the newly revised Educator Track in place since January 2015, the investment in educational research has gained a new urgency. With university leaders actively speaking about fostering SoTL (and the science of learning) in NUS and viewing teaching as a form of scholarship that enhances student learning outcomes, the university has taken the first positive step towards evidence-based educational research. For colleagues interested in educational research, and for Educator Track colleagues in particular, fostering SoTL opens up a new pathway for career advancement along the Educator Track, where research in education is an essential requirement for promotion to the rank of a tenured full professor.

In this paper, I provide an account of the journey my colleagues and I embarked on in the past year to provide leadership for institutional learning and change vis-à-vis SoTL. I will detail the motivations and the various activities we have established for fostering SoTL culture within NUS, and the multiple levers that will have to be moved to build a conducive culture for SoTL research. The institutional "opposing forces" (Cruz 2014) alongside the institutional resources and strengths that provide the base for transforming the institutional landscape will be discussed. I will share the approach adopted and some data gathered in the first phase of this proposal for change, and the challenges encountered thus far.

In titling this paper "Leading Learning and the Scholarship of Change from the SoTL Margin", I will also address the issue of what it means to introduce SoTL and effect cultural shift from the periphery of the dominant SoTL community and networks (see Chng and Looker, 2013), with only distant contact from the mainstream and the discourse sounding much more like a foreign-accented language than a native tongue. While being situated at the margins has its obvious disadvantages for the effort to build SoTL capacity, and may be said to constitute a form of "pedagogical solitude" and isolation (Hutchings et al., 2011:125), this marginal location also presents interesting opportunities to be free from historical baggage and allows us to invent and breathe fresh meanings into our own SoTL practices, and thus provides us with the means to define and do SoTL from the perspective of Singapore/Asia.

We envisage a day when SoTL will establish itself as a normative practice in educational scholarship within the university, integrated within and impacting the four main areas of teaching and learning practices, faculty development perspectives, assessment and the way teaching is valued and recognized (Hutchings et al. 2011), and in the process redefine (some of) the "priorities of the professoriate" (Boyer 1990), though this may take years to become evident.

#### References

- Boyer, E.L. (1990), *Scholarship Reconsidered: Priorities of the Professoriate*, Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching.
- Chng, Huang Hoon & Peter Looker (2013), "On the margins of SoTL discourse: An Asian perspective." *Teaching Learning Inquiry*, Indiana University Press, Volume 1, 2013.
- Cruz, Laura (2014) "Opposing Forces: Institutional Theory and

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Hubball, Harry, Anthony Clarke, Chng Huang Hoon and Peter Grimmett, "The Scholarship of Educational Leadership in Research-Intensive University Contexts: Institutional Implications for Promotion and Tenure Supervision", in *Asian Journal for the Scholarship of Teaching and Learning*, Singapore.

Hutchings, Pat, Mary Taylor Huber and Anthony Ciccione (2011), "Getting there: An integrative vision of the scholarship of teaching and learning", *International Journal for the Scholarship of Teaching and Learning*, Volume 5, No.1.

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## Session E1

Paper

### LEARNING TO TEACH IN HIGHER EDUCATION: THE 'PROMISE' OF DIGITAL SOLUTIONS AND WHAT NEW TEACHERS WANT

Dominic McGrath<sup>1</sup>, Kelly Matthews<sup>1</sup>, Lydia Kavanagh<sup>1</sup>, Ellen Dearden<sup>1</sup>, Peter Rutherford<sup>1</sup>, Julie Duck<sup>1</sup>

*1 The University of Queensland*

How academics are supported in becoming university teachers varies widely by institution. Although preparation, orientation, and professional development programs are common (Chalmers et al., 2012; Felder et al., 2011), they vary in terms of curriculum, models of implementation, presenters, program length, and intended audience. Research into effective teaching development programs (Gibbs, 2013; Healey, 2000; Roxa & Martenssen, 2009) shows that those that are most effective:

- \* accommodate the diversity of participants;
- \* are relevant to discipline contexts;
- \* develop knowledge and values through experiences spaced over time; and
- \* embrace social learning approaches.

New managerialism (Deem, 2001) increasingly pushes universities toward forms of entrepreneurship, internationalisation, and globalisation. Particularly, there is pressure to use an approach to preparing academics for teaching, which is scalable, online, applicable across institutions and countries, and if possible outsourced. Massive open online courses (MOOCs) represent one mode of globalised learning, which is increasingly focussed on supplementing and changing courses and programs, and engaging professionals (Sharpes et al., 2014). Commercial, for-profit products are increasingly available including online programs designed to inform academics how to teach.

But how do academics teaching to on-campus students want to learn about teaching?

This paper presents data from two sources: a summary of Australian university approaches to supporting new academics in their teaching and a survey of academics, both new and experienced, from a research-intensive Australian university (n=118) around how they want to learn about teaching. The results are presented in the context of new managerialism and will illuminate divergent views on teacher development including cross-disciplinary contradictions, and beliefs about the time required to learn about teaching. Notably, surveyed academics converged on their beliefs about digital solutions with strong preferences for an institution-specific program dominated by face-to-face interactions, spaced over an extended period.

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## Session E1

Paper

### **COLLABORATIVE RESPONSIVITY - A NOVEL APPROACH TO UNIVERSITY TEAM TEACHING**

**Timothy Perkins<sup>1</sup>, Julie Maakrun<sup>1</sup>**

*1 The University of Notre Dame Australia*

In 2015, two lecturers from the University of Notre Dame Australia, Sydney campus, trialled a novel approach to their teaching with a desire to increase student engagement and to model best practice in collaborative teaching. Waters & Burcroff, 2007 state that University lecturers need to practice what they preach (p.306) when it comes to teaching their students about the value of collegial collaboration and team teaching. Tennant & Dogson (2007) refer to the importance for adult learners of seeing and experiencing the behaviours being explored in lectures.

The researchers in this project referred to Goetz' (2000) definitions of Team Teaching and Collaborative Teaching to define their approach, which they refer to as Collaborative Responsivity. Goetz refers to teachers actively sharing the instruction of content in her definition of Team Teaching and describes Collaborative Teaching as a process in which teachers work together in designing the course and teaching the material not by the usual monologue, but rather by exchanging and discussing ideas in front of their learners.

There are many examples of University level team teaching (Fullwiler & Young, 1990; McDaniel 1992; Winn & Messenheimer-Young, 1995; Goetz, 2000; Waters & Burcroff 2007) and this study, is an organic and responsive team teaching approach, which builds on the work of each of these studies. The lecturers set themselves the challenge of increasing student engagement, reducing professional isolation, providing professional learning for each other and modelling best practice when it comes to their students' future work in open-plan learning environments. Both lecturers entered the arrangement of their own volition with the intention of building on a strong base of academic and intellectual respect for each other's teaching. They planned, taught, assessed and evaluated the course together in an

atmosphere of professional critical reflection aiming for the best possible outcomes for the students involved in the unit of study. Their shared view of the primacy of the best possible experience for the students was the guiding principle for both lecturers and the fulcrum around which the trial experienced the positive response it has initially received from the students involved. The methodology involved a survey for all students to complete as part of the unit evaluation. Initial analysis of student feedback was extremely positive with 84% stating that it was the best unit they have yet been involved in at the university and the primary reason given for this was the delivery method of the staff involved.

The trial being referred to in this study was with 55 students during a one-week intensive Summer School in January 2015. The students attended for 8 hours a day for 5 days as an alternative to a full semester course normally run for 3 hrs per week over 13 weeks. The Unit was a compulsory social justice unit and the cohort was comprised of undergraduate primary and early childhood students in the second year of a four year degree. This study explores initial results of the trial.

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## Session E2

Roundtable

### **CONCEPTUALISING STUDENT LEADERSHIP ACROSS INTERNATIONAL CONTEXTS**

**Jane Skalicky<sup>1</sup>, Phill Dawson<sup>2</sup>, Jacques van der Meer<sup>3</sup>, Kristin Warr Pedersen<sup>1</sup>, Robert Nelson<sup>4</sup>, Sally Fuglsang<sup>1</sup>, Sally Rogan<sup>5</sup>, Raphael Pereira<sup>6</sup>, Sarah Stewart<sup>1</sup>**

*1 University of Tasmania*

*2 Deakin University*

*3 University of Otago*

*4 Monash University*

*5 University of Wollongong*

*6 Curtin University*

Universities have historically been seen as having a significant role in shaping and nurturing the leaders of tomorrow, but only in the past several decades have student leadership development efforts become more explicit and targeted (Shook & Keup, 2012). The term leadership™ in the context of higher education is not easy to define. As opposed to more dated notions of leadership as 'positional' or as an inherent characteristic of students, it is now considered that all students who involve themselves in leadership education have the potential to increase their skills and knowledge (Komives et al, 2005).

Programs to develop student leadership have proliferated in the higher education sector since the mid-1980s (Cress, et al. 2001). A preliminary review of the international literature on student leadership development reveals the vast majority of case studies published are drawn from experiences in the USA (Astin & Astin, 2000; Dugan, 2013). Whilst there is no doubt there is increasing activity in the student leadership space across the globe, documentation of this work is not prolific in international peer-reviewed journals. We speculate that a possible reason for this is that student leadership development is conceptualised differently across different parts of the globe. For example, in Australasia, there has been less emphasis on formalised student leadership development programs, such as those documented in the USA, and more focus on developing leadership capability through immersion in leadership roles within student-led programs focused on delivering institutional priorities.

The intention of our roundtable is to open discussion about how we perceive student leadership in different cultural and institutional contexts, and how we might uncover a common

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language and conceptual framework through which we can share our understandings and good practice. In turn, we hope this will lead to greater valuing of student leadership programs across a diversity of international contexts and in doing so enhance the recognition of leadership development opportunities as key components of the university experience in the 21st century.

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## Session E3

Roundtable

### LEARNING & TEACHING FOR SUSTAINABILITY: CREATIVE DESIGN OF A MULTIDISCIPLINARY E-ASSESSMENT APP

Jude Westrup<sup>1</sup>, Roger Kerr<sup>1</sup>

*1 RMIT University*

All future students and scholars active within learning and teaching for sustainability will need knowledge, skills and acumen in mobile learning and e-assessment within their discipline and across disciplines. Sustainability is by definition trans- and multi- disciplinary and learning and teaching for sustainability encompasses all scholarly disciplines.

A creative and collaboratively energetic design process for multi-disciplinary e-assessment and learning was piloted, to foster improved staff development and student learning. Contextualised within learning and teaching for sustainability international theoretical and educational frameworks, scholarship, knowledge and research this Round Table will explore and inspire participants with particular matching of disciplines in a curriculum design process. Participants are encouraged to bring Course (Subject) materials to interactively develop and implement within and between Institutions and countries after ISSOTL 2015.

This will also assist and promote cross-disciplinary conversation to create synergy and prompt new lines of inquiry (ISSOTL Mission) at all levels of tertiary learning and teaching 'vocational, undergraduate and postgraduate.

The aim of ReLifing was to provide learners and staff with an example of how they could develop APP/s that connect environmental, socio-cultural and economic aspects with disciplinary principles and professional practices, of sustainability, across diverse (multi-) disciplines and industries without expensive, environmentally intense, complex and repetitive on-campus sessions .

Multidisciplinary, multimodal e-assessment that can be provided in any location was scoped with three academic staff from very diverse disciplines and all three of RMIT's academic Colleges Business, Design & Social Context and Science,

Engineering & Health

(<http://www.rmit.edu.au/about/governance-and-management/organisation-structure/academic-colleges-and-schools/>). To create e-assessment tasks that evidence and enhance students learning and graduate outcomes this 'prototype' APP is accompanied by Staff and Student Guides and suite of learning resources that are intended to be transferable to other discipline-combinations, and/or professional-industry collaborations.

Students will use the ReLifing App onsite going to a site visit, field trip or other professional setting and together undertaking their learning activities and recording their observations digitally text, image, video recordings.

These are then uploaded to the project wiki and further developed in e-portfolios they jointly

prepared in a first workshop and via an e-collaboration. The learning process includes: onsite, inside (classroom) and online (digital) learning experiences and assessment components. Self-selection of project topics within given parameters also enables learners to create innovative sustainability solutions for relevant educational or applied cases, issues and situations.

One of the most important and enjoyable aspects of this effective and creative design, e- learning and assessment process is that it is multidisciplinary, a concept pivotal to innovation in ReLifing and essential to Sustainability for future students and scholars.

ReLifing is available for all devices (phone, tablet and desktop) at [relifing.businesscatalyst.com](http://relifing.businesscatalyst.com)

or download from iTunes.

This LTfS Round Table aligns well with the presentation of Plenary speaker Professor Geoff Scott who is a colleague from the National SUSTAINED Network (URL: <http://sustainability-ed.blogs.latrobe.edu.au>), also with design thinking and the urban eco-campus or eco-city.

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## Session E4

Paper

### DEVELOPING EDUCATIONAL LEADERS THROUGH THE INTEGRATION OF THRESHOLD CONCEPTS IN THE SCHOLARSHIP OF TEACHING AND LEARNING

Andrea Webb<sup>1</sup>

*1 University of British Columbia*

Institutional educational leaders are increasingly being asked to make research informed and evidence based decisions around pedagogical, curricular, and policy initiatives and/or changes. Unfortunately many institutions lack the internal, strategic SoTL expertise and struggle with incentives to build that capacity (Hubball, Lamberson, & Kindler, 2012). Threshold concepts (Meyer & Land, 2003; 2005; 2006) are intellectual spaces to be negotiated on the path to conceptual mastery; they are central to ways of thinking and practicing within a discipline or field. Recent studies illustrate that threshold concepts have proved useful for initiating cross-disciplinary discourses and acting as a starting place for curriculum making (Carmichael, 2010; 2012). Theorization in threshold concepts can work as a lens with which to investigate SoTL and as a frame to consider curriculum for programs on teaching and learning in higher education (Kandlbinder & Peseta, 2009).

The purpose of this paper is to share recent research conducted to identify threshold concepts in SoTL in order to consider how SoTL based programs can foster educational leadership. Focusing on the 'stuck places', this research considers the experience of educational leaders enrolled in a SoTL Leadership program at a research-intensive university in

Canada. The discussion will engage the audience in conversation around the areas of success and key challenges that participants in SoTL programs face as they begin work/study in the scholarship of teaching and learning.

Based on an intensive eight-month phenomenological study (van Manen, 1990), the data collected include a questionnaire, in-depth interviews, and participant observations of the cohort enrolled in a SoTL Leadership program. These data revealed seven potential threshold concepts and factors that enhance and constrain the ability to navigate the threshold concepts.

The nature and substance of threshold concepts in SoTL suggest three conclusions; research methodologies and methods must be explicitly taught in SoTL-based programs, the participants in these programs need to embrace liminality, and ultimately engage in thinking across multiple disciplines. The factors that enhanced and constrained the ability to navigate these threshold concepts offered a complex picture of how educational leaders in research-intensive universities engage with SoTL. Participants willingness to be learners enhanced their ability to navigate the intellectual and emotional challenges of a new field, however the responsibilities of research and institutional expectations were strong constraints.

In light of the potential institutional benefits afforded by SoTL (Hubball, Clarke, Webb, & Johnson, 2015), an understanding of SoTL that includes threshold concepts will help to support educational leadership within departments and institutions. It is hoped that participants at this session engage in rethinking their SoTL experience and consider the troublesome nature of enculturation into the scholarship in teaching and learning.

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## Session E4

Paper

### LEADERSHIP IN THE ACADEMY: FIRST YEAR CURRICULUM CHANGE IN QUANTITATIVE SKILLS

Janelle Wilkes<sup>1</sup>, Jackie Reid<sup>2</sup>

*1 School of Environmental and Rural Science, University of New England*

*2 School of Science and Technology, University of New England*

Introduction: Distributed leadership has many definitions in the literature. In this presentation, we discuss Gronn's (2002) definition, which is based on deep theoretical analysis.

Distributed leadership incorporates a willingness to move beyond the conventional boundaries of leadership; is underpinned by concertive action; based on trust; and through intuitive understanding, results in a pooling of initiatives and expertise leading to a product that is greater than the sum of the individuals (Gronn 2002). Interestingly, some recent papers have differentiated between distributed and distributive leadership; however, the distinction is not always clear.

At the University of XX, a regional institution with a diverse cohort of students and a strong focus on distance education, a First Year Teaching and Learning Network (Network) was established. With a Coordinator in each school, the network aimed to increase the Scholarship of Teaching and Learning (SoTL) by supporting staff teaching first year students through distributed leadership. The Coordinators in the two Science schools developed a close collaboration on a number of projects to address first year issues relating specifically to science students. In this presentation we will give details of one of these projects and then engage the audience in a discussion about whether this is an example of distributed or distributive leadership.

Learning objectives

The audience will:

1. Consider differences between distributed and distributive leadership definitions used in the literature, particularly in SoTL,
2. Learn how a leadership framework has been successfully used to evaluate and make holistic curriculum changes to first year Quantitative Skills (QS) in the sciences, and
3. Engage in discussion of the key components of the leadership framework with the aim of classifying the case study as an example of either distributed or distributive leadership.

Methods: In this presentation we will discuss an Australian Government Office for Learning and Teaching funded project aimed to describe course QS needs; map the first-year curriculum for on campus and distance students; and, where necessary, make changes to curricula.

Results: Through leadership based on trust and intuitive understanding, underpinned by institutionalised formal structures (Gronn 2002), the science Coordinators developed a close working relationship. They successfully led forums across the schools gaining engagement from the majority of academic staff. All respondents to a final project evaluation agreed that the project activities had been useful in promoting interdisciplinary discussion about QS in science disciplines. A mapping tool was designed and implemented and 26 first year units were successfully mapped for QS, allowing science courses to be mapped at the first-year level. This led to major curriculum review and changes in mathematics.

Reflective critique: Although situated in the sciences, this project's development and implementation has broad relevance to all disciplines where a critique of skills is required. Through the foundations of strong leadership and the enthusiasm and engagement of the teaching staff this project was successful and catalysed changes in how QS are now taught at the institution.

Gronn, P. 2003, Distributed Leadership. In K. Leithwood, et al. (eds) *Second International Handbook of educational Leadership and Administration*, Kluwer, Dordrecht.

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## Session E5

Roundtable

### POROUS BORDERS: A LIVING LEARNING LABORATORY LEADERSHIP PARTNERSHIP

Sandra Jones<sup>1</sup>, Jason Downes<sup>1</sup>, Jacinta Ryan<sup>1</sup>

*1 RMIT University*

The objective of this Round Table is to present, reflect on, and disseminate the concept of a Living Learning Laboratory Leadership partnership designed as more integrated engagement between university academics, students and practitioners.

The rationale for this Round Table is recognition of the need for a new focus for higher education to enable universities and industry to work more closely together to address ever emergent wicked complex issues. It is well recognised that graduates need to be both flexible and innovative in their thinking and approach to problem solving, culturally conscious and adaptable, and understand the technological infrastructure advances that continue to expand opportunities for global communication and virtual interactions. This has led to an emphasis on design of learning opportunities to develop the employability skills of students, modernisation of the curriculum, renewal of teaching methods, identification of professional output capacities.

University academics have long-established links with practitioners to ensure current and timely advice on the



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emergent skill needs for leadership learning. In addition, opportunities for students to gain practical skills through work-integrated learning and hearing practitioner present case studies of their experience, have been designed to develop students soft skills. However, as the speed of change increases, practitioners, are looking more to academics to identify new approaches to broaden student skills. In this situation the traditional boundary between academics and practitioners is becoming more porous, requiring a new framework upon which to build living learning partnerships.

The idea of a learning organisation, first mooted by Senge) has since been expanded to incorporate the possibility for change in learning approaches to be tested in a safe laboratory environment through initiatives such as ULab that use MOOCs as a hybrid learning platform. In addition the concept of a living laboratory is being developed, especially in the environmental sciences, to explore real-life testing and experimentation where users and producers co-create innovations. While less expansive, other examples of living learning laboratory partnerships, are being trialled as effective change within current curriculum offerings.

The Round Table will engage participants in an authentic learning opportunity of a Living Learning Laboratory partnership. The four element flexible framework for the Living Learning Laboratory was designed based upon the experience of an Innovative Management Practice Trial undertaken by the authors in 2013.

The outcome will be two-fold. Reflection on the flexible framework for the Living Learning Laboratory (and potential modification) based on participant feedback and secondly, dissemination of the Living Learning Laboratory to underpin curriculum design more broadly.

The Round Table contributes to the conference theme of Leading learning and the scholarship of change in several ways. First, it explores the issue of a potential new form of collaborative partnership inside and outside the academy. Second, it highlights a more authentic learning approach for students beyond placing students in a situated learning (work-integrated) environment.

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## Session E6

Paper

### AN ADAPTABLE TOOL FOR INSTITUTIONS AND INDIVIDUALS TO DEVELOP AND APPLY TEACHING CRITERIA AND STANDARDS

Denise Chalmers<sup>1</sup>, Rick Cummings<sup>2</sup>, Beatrice Tucker<sup>3</sup>, Sue Stoney<sup>4</sup>, Sofia Elliot<sup>5</sup>, Rachel Wicking<sup>1</sup>, Trina Jorre de St Jorre<sup>1</sup>

1 *The University of Western Australia*

2 *Murdoch University*

3 *Curtin University*

4 *Edith Cowan University*

5 *University of Notre Dame*

The Australian University Teaching Criteria and Standards (AUTCAS) framework\* was developed in response to significant changes in the Australian higher education environment which include an increasingly diverse student and staff population, a new regulatory and accreditation framework and the growing imperative to demonstrate quality in teaching in the local and international higher education marketplace. The Framework has been developed through an extensive review of the literature and current practices in international and Australian universities and wide consultation across the higher education sector. The framework is underpinned by carefully researched definitions and principles of quality teaching that are expressed through seven criteria.

The organising principle is alignment with academic appointment and promotional levels. For each criterion the framework suggests standards of achievement that might be applied to each promotional level, cross-referenced to examples of indicative evidence that could be used to demonstrate achievement. The framework was developed with the intention that these criteria, standards and indicative evidence be adapted by individual universities to suit their own context and values. The framework also supports individual teachers in building evidence of their impact in an increasingly complex work environment including traditional research-teaching academics to teaching focussed academics and professional staff. The increasing diversity in academic and teaching roles requires institutions to provide greater clarity about how they determine, facilitate and reward teaching quality in their policies and practices.

The framework has been widely disseminated and trialled in Australia, contributing as a timely catalyst for discussion and interest in utilising the framework within institutions. In response to this interest, an extension project was implemented to support institutions to develop their own teaching criteria and standards, embed criteria in institutional processes such as recruitment, probation, staff review/development and promotion.

Over 24 Australian universities utilised the Framework in reviewing and developing their own teaching criteria. Successful strategies for embedding teaching criteria and standards into institutional policy and processes were identified and written as case studies. The Framework, resources, case studies and good practice recommendations for use and implementation are available on the project website ([www.uniteachingcriteria.edu.au](http://www.uniteachingcriteria.edu.au)).

We will briefly describe the framework and how it has been used by institutions and individual academic staff, illustrating its flexibility by the different ways the framework has been used to support, develop, promote and embed quality teaching criteria and standards. We will conclude with an open discussion on how it can be used by teachers to demonstrate and document their diverse contributions related to teaching and learning.

\*The AUTCAS project was funded by the Office of Learning and Teaching (OLT).

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## Session E6

Paper

### DISCOVER, CONNECT, INSPIRE: TRANSITIONING INTO A WHOLE OF INSTITUTION, CONTINUING PROFESSIONAL DEVELOPMENT FRAMEWORK

Bonnie Amelia Dean<sup>1</sup>, Kathryn Harden-Thew<sup>1</sup>, Romy Lawson<sup>1</sup>, Christine Brown<sup>1</sup>, Lisa Thomas<sup>1</sup>

1 *University of Wollongong*

The higher education landscape is changing with growing diversity of learners, technologies, teaching spaces, and industry expectations. In this multilayered complexity of change, new strategic directions are envisaged in order to transform curriculum and support academic staff at the coalface of teaching and learning. These developments have been the impetus for change in the way professional development for teaching is offered at the University of Wollongong (UOW).

Until 2015, UOW has facilitated a University Learning and Teaching (ULT) course for new academic staff as well as a range of face-to-face and online professional development opportunities for sessional teachers. These offerings while attending to core teaching and learning principles around

diversity, inclusivity and best assessment practices, were segmented with little opportunity for engagement in professional development beyond the course.

In this context of change, the University's Learning, Teaching and Curriculum Unit is undergoing a significant process to review the professional development and support of all teaching staff across the institution. This effort aims to address the changes occurring in the broader higher education context and, more locally, as courses undergo renewal. Through engaging with faculty representatives and stakeholders across the university, a Continuing Professional Development (CPD) framework was conceptualised with seven learning criteria, benchmarked against international teaching standards (Higher Educational Academy), national standards (Australian Criteria of Teaching Standards) and internal expectations and performance framework (Academic Performance Framework, UOW). CPD has been constructed to cover five levels that increase in complexity in line with career stages. Staff can seek recognition of their teaching at a nominated level by aligning their teaching activity with the specified learning outcomes and demonstrating this through constructing a teaching portfolio of evidence. CPD also comprises open and integrated online modules and face-to-face workshops, just in time resources and special interest groups available to all UOW teaching staff.

In the first semester of implementation, several online modules have been made available and ten face-to-face workshops have been run, covering teaching and learning topics and ways to evidence professional practice for CPD portfolio support. In addition, following individual consultations, the first rounds of CPD portfolios have been peer reviewed by a panel of experienced teaching staff. In 2015, we continue to teach-out ULT while piloting CPD with full implementation planned for 2016.

Participant feedback, to date, has been positive, including teaching staff from across the university and representing several stages in career development. Though in its infancy, the feedback gained indicates that this new framework addresses two felt needs: firstly, that staff engage with CPD in order to enhance knowledge, sharpen skills and take opportunities to broaden networks across the university. Secondly, that staff are interested in the activity and language of teaching and learning for purposes of portfolio building.

This presentation will reflect on and outline the processes of transition for re-envisioning professional development at UOW. We will invite reflections on how we might evidence and evaluate new course impact, as well as the perceived, ongoing benefits and challenges of a university-wide, continuing professional development framework.

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## Session E7

Paper

### COORDINATION AND TEACHING IN A LARGE-SCALE FIRST-YEAR SUBJECT: A CASE FOR DISTRIBUTED LEADERSHIP

Anthony Baker<sup>1</sup>

*1 Faculty of Science, University of Technology Sydney*

The enrolment in first-year chemistry at the University of Technology Sydney is close to 1000 students. Whilst subjects are usually coordinated by a single staff member, that situation is unrealistic for such a subject. In reorganizing Chemistry 1, a distributed model of leadership was put in place. In terms of the university requirements one person had to be designated as coordinator but several tasks were delegated to other staff, such as the organization of the laboratory teaching and the

fielding of student inquiries about one-off changes of lab session.

The commitment to distributed leadership went far beyond the delegation of administrative tasks. Teaching in the laboratory was carried out by postgraduate students and there was a strong intention to make them leaders in the laboratory sessions. There was also a concern to draw the demonstrators into the academic community as junior colleagues rather than as a convenient source of casual labour. To this end a start-of-semester induction session was held at which senior staff of the School made clear the expectations that the School had of the demonstrators and taking account of a substantial literature on the induction of teaching assistants (as examples: Herrington and Nakhleh (2003), Bond-Robinson and Bernard-Rodrigues (2006)). There were also break-out sessions in which experienced demonstrators shared their experiences of laboratory teaching. The demonstrators appreciated the effort to assist their professional development as academics. In subsequent semesters, feedback collected from the previous induction session was used to improve the experience.

During semester contact with the demonstrators was informal, but extensive seeing the demonstrators were research students in the School, and it was clearly communicated at every opportunity that there was strong interest in achieving quality learning and teaching in the laboratory. A major event was an end-of-semester debrief where demonstrators had full opportunity to comment on the laboratory learning and teaching. Many demonstrators mentioned that they really enjoyed the chance to suggest improvements in the laboratory teaching program and recognised that they were being acknowledged as valuable colleagues.

This focus on the demonstrators as a key element in our teaching and learning team was one element of major changes wrought in Chemistry 1, so it was not the sole reason for the passrate jumping from ca 70% to 84%. Clearly indicating student recognition for the important role the demonstrators played in their learning was that the student feedback on the experience in the laboratory, which we have specifically collected, is quite remarkable: in 2014, 28 out of 38 demonstrators achieved a rating of 4.5 or above on a 5-point Likert scale for the question "Overall, I am satisfied with the teaching of this staff member".

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Herrington, D.G. & Nakhleh, M.B. (2003). What Defines Effective Chemistry Laboratory Instruction? Teaching Assistant and Student Perspectives. *Journal of Chemical Education*, 80(10), 1197-1205.

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## Session E7

Paper

### THE PEER ASSISTED TEACHING SCHEME: ENABLING DISTRIBUTED LEADERSHIP IN LEARNING AND TEACHING

Angela Carbone<sup>1</sup>, J Evans<sup>1</sup>

*1 Monash University*

Since 2005, the potential of distributed leadership for advancing teaching quality in Australian higher education has been explored through a series of projects that have primarily focused on improving leadership capacity through changes to institutional structures and leaders in formal functional roles. For the purposes of this paper, two projects (Jones et al. 2012, 2014) have been selected to explore the potential of

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distributed leadership in improving teaching quality. These projects designed a new conceptual model and benchmarking tool for distributed leadership that can assist higher education institutions to identify the action required to implement distributed leadership.

This paper shifts this focus and positions academics as leaders of learning in their students, units and courses and promotes building their leadership capacity for improved quality teaching outcomes. An example of how leadership capacity is being built in academics is presented through a Peer Assisted Teaching Scheme (PATS). Essentially a collegial collaborative peer mentoring partnership, PATS is designed to improve the quality of teaching and student satisfaction of course units, and build leadership capacity amongst recognised outstanding academics as mentors in the Scheme.

The Peer Assisted Teaching Scheme (PATS) is presented as a model that effectively connects leadership development in academics for improved teaching outcomes and distributed leadership in higher education. In determining the distributed leadership nature and potential of PATS (and how it rates in enabling distributed leadership) the Jones et al. benchmarking tool was applied by co-ordinators of the Scheme from five diverse higher education contexts. This signifies the first application of the benchmarking tool and evaluation of the Jones et al. model.

PATS has been found to be an expression of distributed leadership and aligns strongly with the core ideas highlighted by the general literature and the core criteria of the Jones et al. model. PATS has been shown to be an efficient and cost-effective way of developing leadership capability in academics, executed to good effect. While PATS has some distributed leadership strength, opportunities for improvement emerged from the application of the benchmarking tool specifically on the importance of succession planning and managing leadership change and transition so to maintain momentum and sustainability of the Scheme. The collective PATS experiences were shown to rate well against the domains and elements of the benchmarking tool, indicating that PATS is highly functional and proficient in enabling distributed leadership behaviour and practices for improving teaching quality. What remains unanswered, however, is how distributed leadership may engage, enable and assess an academic's commitment to quality teaching and developing leadership capability.

Experiences, insights and limitations of applying the benchmarking tool will be shared with the audience. This discussion will present how the challenges of self-assessment were overcome by creating dialogue on shared experiences, plus the importance of accommodating multiple perspectives and how they might be incorporated into the appraisal process. In addition, and perhaps of great importance to initiatives targeting learning and teaching development, is how leadership change, transition and succession could be best addressed by using the benchmarking tool.

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Jones, S., Hadgaft, R., Harvey, M., Lefoe, G. and Ryland, K. (2014). Evidence-based benchmarking framework for a distributed leadership approach to capacity building in learning and teaching, Final Report for the Australian Government Office for Learning & Teaching. Retrieved from <http://www.distributedleadership.com.au/>

## Session E8

Paper

### **BEST ESTIMATES OF KNOWLEDGE ABOUT ASSESSMENT IN HIGHER EDUCATION? FOUNDATIONS FOR COURSE DESIGN AND LEADING ASSESSMENT IN THE ACADEMY**

**David Boud**<sup>1</sup>, Phillip Dawson<sup>1</sup>

*1 Centre for Research in Assessment and Digital Learning, Deakin University*

The need for teaching and learning to build on an established evidence base is well established (Kreber, 2002; Pace, 2004). One of the challenges of leadership at an institutional level is ensuring that scholarly teaching innovations build upon our best estimates of effective practice from the literature. In the early stages of establishing a new research centre on assessment in higher education, the founding members decided to take stock of what we know and don't know about assessment at this point in time with a view to developing a program of research that addresses important outstanding issues rather than ones we were reasonably confident about. Some of this is derived from empirical research (e.g. Hattie, 2009), some from philosophical and conceptual analyses of assessment practices (e.g. Boud & Associates, 2010) and yet others from national and international policy positions. Together they represent our best understanding of assessment now.

The paper seeks to interpret this evidence and portray a current 'state of play' of assessment. Some of the key characteristics identified include: a concern with the consequences of assessment for learning, the need for clear and defensible representations of what students can do, a focus on tasks and time on meaningful tasks, an emphasis on feedback rather than a predominant focus on marks, the development of students' capacities to make judgements of their own work and that of peers through assessment processes, a program-wide view of a full range of outcomes rather than a focus on course units and particular knowledge outcomes, the need for assessment to be framed in terms of standards and criteria rather than numerical grades. While there is considerable potential for the digital enablement of assessment practices, these have not changed our basic understanding of assessment issues.

The paper will discuss the strength of knowledge claims in these areas and identify consequences for (a) courses and pedagogy, and (b) assessment research.

The presenters will engage the audience in discussion and debate around the chosen characteristics of effective assessment. In particular they will seek the audience's input in identifying any missing assessment characteristics that have compelling evidence. A matrix of evidence will be presented showing the connections between different types of evidence and the specific knowledge claims.

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## Session E8

Paper

### RUBRIC DEVELOPMENT FRAMEWORK FOR ASSESSING ESSENTIAL LEARNING OUTCOMES

**Natalie Simper<sup>1</sup>**, Jake Kaupp<sup>1</sup>, Brian Frank<sup>1</sup>, Jill Scott<sup>1</sup>, Brenda Ravenscroft<sup>1</sup>

*1 Queen's University*

Instructors at post-secondary institutions are increasingly recognizing the importance of developing essential learning outcomes (ELOs) like critical thinking and problem solving. Assessing these outcomes is often difficult for instructors, who tend to be more comfortable with domain-specific content. In 2013 Queen's University established the Learning Outcomes and Assessment (LOA) project to investigate multiple methods of assessing ELOs. One of these methods scores student work artefacts using the VALUE rubrics, meta-rubrics designed for broad assessment of undergraduate learning across programs (Rhodes 2013). To assist instructors in adapting VALUE rubrics to course contexts, the project researchers developed a rubric-building workflow called "Building Assessment Scaffolds for Intellectual Cognitive Skills" (BASICS). BASICS uses the VALUE rubric dimensions, but breaks up the language of the high level descriptors into manageable chunks.

This presentation describes a specific example of the application of a VALUE rubric tailored for course application, and demonstrates the five-step process to produce a task-specific rubric that participants could use in their own course. In Step 5, instructors fine-tune the rubric to clarify what they expect their students to demonstrate, which is part of an effective curriculum design process (Wiggins & McTighe, 2011). The use of rubrics also facilitates constructive alignment of teaching, learning and assessment (Biggs & Tang, 2011).

The aim of BASICS is to promote the development of rubrics that use task specific language, while still retaining the hierarchy and taxonomy necessary for comparing student achievement of ELOs longitudinally, or between groups. This presentation concludes with the discussion and feedback on the functionality, content, and potential context for the use of the BASICS application.

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## Session E9

Paper

### A MULTI-LEVEL ASSESSMENT FRAMEWORK FOR A GRANTS PROGRAM SUPPORTING TEACHING INQUIRY: LOOKING BEYOND THE IMPACT OF INDIVIDUAL PROJECTS

**Cheryl Amundsen<sup>1</sup>**, Lannie Kanevsky<sup>1</sup>, Angela McLean<sup>1</sup>

*1 Simon Fraser University*

We have taken an intentional and scholarly approach to the design of the Simon Fraser University Teaching and Learning Development grants program. The program provides grants of up to \$5,000 (CAD) and other supports to enable instructors to identify questions of interest to them about their teaching and their students' learning, conduct a systematic investigation, and share their findings with close colleagues and beyond (Amundsen et al, in press). The program is designed to accomplish two goals: 1) support faculty members to enhance knowledge and practice related to teaching and learning (Connolly et al, 2007), and 2) engage faculty in teaching as a socially situated practice (Waterman et al, 2010). Since mid-2011, over 140 grants have been awarded, involving 130 different faculty members (approximately 13% of all full time faculty at our University).

We consider evaluation a key element of the overall grant program design. Our assessment framework evaluates the effectiveness of the grants program on three levels: individual, departmental and institutional (Fanghanel, 2007; Norton, 2008) and within each level, our two goals (Hum et al, 2015). Previous reports of institutional efforts to enhance teaching and learning have tended to focus on one level with little connection between these levels, thus arguably inhibiting their potential to generate change (Trowler et al, 2005). Similarly evaluations of SoTL initiatives, in particular, have tended to focus either on the individual academic (Chalmers, 2011; Kember, 2002) or on the departmental/institutional level (Gray et al, 2007; Waterman et al, 2010). By considering multiple levels, our assessment framework provides a more comprehensive and holistic understanding of how our program is achieving its goals and the interplay between levels. We employ multiple sources and types of data, and triangulate between them. Main data sources are faculty surveys, research assistant surveys, interviews, and documentation (project proposals, final reports).

In this session, we will focus on our second program goal: to engage faculty in teaching as a socially situated practice. We will describe the program elements designed to address this goal and will also share our findings of the various other ways in which this goal is being addressed informally. The findings we will present come from faculty survey responses (n=60), interviews (n=15) and final project reports (n=80). We have documented a "Ripple Effect" demonstrating project effects that have emerged at all three levels of our assessment framework as a result of the interactions among grant recipients, their departmental colleagues, colleagues across the University and beyond. Examples include a "reading circle" stimulated by a project that now attracts academics from across the university [institutional level] and using the findings of a project to redesign 3 other courses [departmental level]. We feel the collaborative and social aspects of our program design have, in part, led to this impact beyond individual grant projects.

We argue that the focus of our program's second goal is somewhat unique in the context of other SoTL grant programs, and is an effective ways of fostering an institution-wide culture of inquiry in teaching and learning.



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## Session E9

Paper

### EMBEDDING PEER REVIEW OF TEACHING IN PRACTICE DISCIPLINES: DEVELOPMENT OF A MULTI-DISCIPLINARY APPROACH TO WORKPLACE EXPERIENCE

Alan Barnard<sup>1</sup>, Vivienne Tippet<sup>1</sup>, Fiona Coyer<sup>1</sup>, Robyn Nash<sup>1</sup>, Karen Theobald<sup>1</sup>, Timothy Rider<sup>1,2</sup>, Theresa Harvey<sup>1</sup>, Naomi Malouf<sup>1</sup>

<sup>1</sup> Queensland University of Technology

<sup>2</sup> Queensland Ambulance Service

This presentation reports on an ongoing cross discipline project to embed peer review of teaching (PRoT) into workplace clinical supervision to support scholarship of teaching and learning (SOTL) within clinical contexts. The project is informed by the constructivism of Biggs & Tang (2011) who emphasise links between active learning, student knowledge and teacher activities, and principles related to collaborative action research (Feldman, 1999). It adopts a cross-discipline design involving nursing and paramedicine to embed PRoT into clinical workplace supervision for the promotion of student learning and assessment. Despite annual multi-million dollar investment in student workplace education there is limited opportunity for course leaders to influence the quality of student learning experiences. This project integrates PRoT within clinical supervision of nursing and paramedicine students as an intervention to support and develop clinical supervisors. The project's multilayered evaluation of outcomes includes examination of the influence of PRoT on teaching efficacy, and iterative review and refinement of project guidelines and resources. Teacher efficacy will be measured using a modified Teachers' Sense of Teacher Efficacy Scale (Tshannen-Moran & Woolfolk Hoy 2001) and two focus groups with participants will examine gaps, modifications, usability of resources, and factors that assist or hinder PRoT success.

How has SOTL been influential in changing practice at the local, institutional or sector levels?

Clinical supervision is a major course component in practice disciplines and workplace education influences the quality, cost and effectiveness of courses. Clinical supervisors note variable support and lack of feedback on their contribution(s) (Clair 2003; Embo, et al. 2015; Wilson, 2013). Successful use of PRoT in clinical contexts has been undertaken only at small scale across a range of practice disciplines with initial success (Adshead, White & Stephenson, 2006; Nugent, Bradshaw and Kito 1999; Gareis and Grant, 2014), and this project seeks further evidence and to develop resources to enhance and embed the process. The ultimate benefit will be to extend SOTL into workplace education through a PRoT strategy for sustainable support and professional development of clinical supervisors.

How have grass roots initiatives been scaled up into wider contexts and practices?

This project extends PRoT to clinical education in the workplace and has two primary impacts: (1) the project develops a cross disciplinary strategy to embed PRoT into clinical education practice; (2) the project tests the influence of PRoT on clinical supervisor development.

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## Session E10

Paper

### GETTING THE RIGHT BLEND: APPLYING A LEARNING AND TEACHING MODEL TO COLLABORATIVE RESEARCH

Natalie Brown<sup>1</sup>, Theresa Koroivulaono<sup>2</sup>, Simone Tuisawau<sup>3</sup>

<sup>1</sup> University of Tasmania

<sup>2</sup> College of the Marshall Islands

<sup>3</sup> University of the South Pacific

Technology is ubiquitous in modern higher education, and is certainly not confined to those students who study on-line or at a distance. Indeed, many universities use a blended learning approach incorporating both face to face and on-line modes of delivery. However, whilst it is recognised that the pedagogy of on-line delivery is necessarily different to that of face to face, the best way to design and deliver blended courses has yet to be fully explored. At the University of Tasmania (UTAS), the use of technology in delivery of quality, contemporary teaching has been accepted as a given, and a commitment towards developing a blended model of delivery has been endorsed by the Academic Senate. Therefore, regardless of primary mode of delivery, all courses comprise some on-line elements. To reflect this, a more nuanced model for blended learning and teaching has been adopted encompassing three elements: high quality resources (available on-line); synchronous and asynchronous interaction; and high impact learning experiences. High impact learning experiences are those specifically designed to meet the learning outcomes within the dominant mode of delivery. Achieving the 'right blend' of these elements in course design is a focus of considerable academic work at UTAS and has led to a focus on researching the experiences of students and staff who are working and learning successfully through a blended approach.

The University of the South Pacific (USP), utilises a range of pedagogical approaches and modes of delivery across its 12 member countries, including an increasing use of technology and on-line learning. In 2014, UTAS and USP began a

collaborative relationship drawn by a common interest in blended learning that was student-centred and recognised the contexts in which we work. Together, the two institutions deliver both face to face and distance courses across multiple campuses in 14 countries. The authors, with backgrounds in academic development, recognised the richness these diverse contexts would bring to a consideration of the 'right blend' for successful learning for our students. This became the foundation for this research project.

Reflective of both our dispersed locations and the focus of our research, the authors adopted an approach that reflected the elements of the UTAS blended learning model. Whilst it is not uncommon for research to be undertaken using on-line resources, communication and collaboration tools, we also purposefully designed high impact learning experiences for the researchers at the scoping phase. These were experiential and involved immersing the researchers in context, and spending time to make a personal connection to the informants of the research. Forging connections was seen to be particularly important as appreciative inquiry was the chosen research approach. This paper will discuss and analyse the methodology used, and relate this to our developing understanding of quality blended learning as described by the elements of the model. The presentation will also invite dialogue from our colleagues on the potential of high impact immersive experiences to facilitate deeper understanding of effective pedagogies through cross-cultural collaborations.

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### Session E10

Paper

#### **THE IMPACT OF ANXIETY ON STUDENT PERFORMANCE IN A SELF-PACED, COMPUTER FACILITATED DEVELOPMENTAL MATHEMATICS PROGRAM**

**Edgar Fuller<sup>1</sup>**

*1 Department of Mathematics, West Virginia University*

Student performance in mathematics classrooms is a complicated combination of many factors including variations in student content background, instructor efficacy, curricular structure and student attitudes. Students in developmental mathematics courses are especially sensitive to a number of these factors. They present with a number of deficiencies in their mathematical understanding and skill set, and this condition creates a strong likelihood that additional difficulties will make it impossible for a student to succeed. Researchers have studied a number of these but have typically focused on improving the presentation of material as in (Epper & Baker, 2009). Other work in educational psychology indicates that anxiety levels in mathematics (Hembree, 1990; Eden, Heine, & Jacobs, 2013) have a strong impact on student performance (Boylan, 2011 and Ashcraft & Krause, 2007) as well, though work on the ways in which this manifests in developmental classrooms is less common (Crosby, 2014) and more recent. We seek to understand what levels of anxiety contribute to successful performance and what levels adversely affect working memory or mathematical performance. Increasingly, computer supported classrooms utilizing 'flipped' model or a self-paced curricula that demand strong student engagement and self-efficacy are used as remedial support courses.

In this work we will summarize the results of the administration of the Abbreviated Mathematics Anxiety Rating Scale (A-MARS) survey (Alexander & Martray, 1989; Richardson & Suinn, 1972) given to groups of students in a non-credit bearing developmental course covering arithmetic and algebraic skills and concepts leading up to college algebra

implemented as a hybrid self-paced model utilizing MyMathLab modules worked at home online and supported in class by instructors. The instrument provides a scale score of the anxiety of students surrounding mathematics that is test-retest reliable and can also be reliably associated to multiple factors within a mathematics course. Responses to the survey at the beginning, middle and end of the course will be recorded and associated to performance on mastery-based assessments occurring within two days of the survey. By considering the performance on assessments closest in time to survey completion we will be able to associate anxiety to both the current point in the semester and the content within the assessment. This data will provide an indication of the entering level of anxiety of the students at the beginning of the course as well as the changes in the as they progress through the material (Eden, Heine, & Jacobs, 2013). Multiple values of the level of anxiety development as indicated by the A-MARS instrument and its connection with subsequent student success and failure in the course will be analyzed for correlations.

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### Session E11

Roundtable

#### **THE FUTURE OF PROFESSIONAL LEARNING**

**Heather Alexander<sup>1</sup>, Jude Williams<sup>1</sup>, Louise Maddock<sup>1</sup>, Samantha Jeremijenko<sup>1</sup>, Leisha Browning<sup>1</sup>, Sean Duffy<sup>1</sup>, Alfred Lizzio<sup>1</sup>**

*1 Griffith University*

How do we take professional learning for teaching staff into the future, incorporating a technology-based approach? How can professional learning provide an informal inquiry-based experience and at the same time fit seamlessly with formal educational qualifications? We sought answers to these questions triggered by a cyclical review of our formal postgraduate education qualification and a concurrent review of the central university learning and teaching unit, both of which suggested that professional learning and the formal award course move to a flexible, modularised approach, be practice orientated and make the best use of technology. Gibbs (2013) has highlighted the need in educational development to engage almost with everybody' rather than a small set of regular attendees at face-to-face workshops. Our change to incorporate online delivery of learning had the potential to facilitate this.

In 2003, Kandlbinder investigated the use of technology in academic development in Australia, categorised under three approaches: (1) an information-focussed conception (seeing teaching as transmission of knowledge); (2) an activity-centred conception (seeing teaching as effective engagement of resources) and (3) an inquiry-based approach that aligns with a constructivist view of learning. As found by Kandlbinder, our previous website already contained many resources that fitted with the first approach. Our aim was to move to the third approach and provide interactive, reflective, inquiry-based modules for professional learning online, including opportunities for informal conversations to support learning (Rientes 2015). An underpinning framework was developed to guide the development. Key national and international published frameworks informed the development of that framework, which describes a series of domains of professional learning. A multi disciplinary team, including academic and a range of professional staff, developed the professional learning site, the learning modules and the online site and assessment for the formal award program. This work has been a collaboration of a learning network that goes beyond the traditional curriculum development model and is thus an example of the future learning paradigm.

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In this Roundtable we will first briefly present what we have created, describe how we have built the link between informal professional learning and formal assessment and qualifications and present preliminary evaluation data. The aim of the Roundtable will be to share our experiences with colleagues in the development and delivery of this new approach and to discuss with participants related issues: How do we maintain flexibility in the time and place of learning and at the same time build a social presence online and support reflective practice? How do we most effectively use social media to enhance peer interactions? How do we best build partnerships and collaborative approaches to the development of online professional learning?

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## Session E12

Paper

### **TAKING BIG STEPS WITH SMALL FEET: HOW WE HAVE STEPPED UP OUR SIMPLE VERSION OF FLIPPING THE CLASSROOM TO THE WIDER WORLD OF HIGHER EDUCATION**

**Catherine Snelling<sup>1</sup>**, Sophie Karanicolas<sup>1</sup>

*1 University of Adelaide*

As is so often the case with 'big' things, our first foray into the world of the flipped classroom was ironically quite small. In fact, we didn't even know we were flipping - that came much later. Over a cup of coffee between classes, we tried to figure out a strategy to help our first year students get their heads around the key concepts of our human biology subject. With a large amount of content to cover, it seemed an impossible task - and naively we thought that unless we delivered in a face to face session it couldn't be done. Using an evidence-based approach influenced by the work of Randy Garrison, Gilly Salmon and Curtis Bonk, we introduced blended learning strategies into our teaching that has revolutionised our practice.

Our approach involved making key learning concepts accessible to the students before class, not just as a passive reading or one-way recorded lecture; but as interactive learning experiences where we guided students through a number of learning 'checkpoints' that demonstrated their level of understanding of the content. What's more - the students could undertake these learning activities instead of a scheduled class. It all seemed a little outside the square of what we had been told was 'good teaching practice' - but when we reflected on the scaffolded learning approach this created, we begin to draw parallels with frameworks such as Blooms Taxonomy. This small, but significant, step has taken us to our current position of influence at the institutional, national and international level of the scholarship of teaching and learning. We have lead a number of learning and teaching projects in our own institution that have focussed on flipped and blended learning, and now jointly lead an Office for Learning and Teaching Innovation and Development grant for this pedagogical approach that has includes two other

Australian universities and some 4000 first year health science students. We have presented at a number of national learning and teaching conferences, as well as an increasing number of international fora, most significantly as key-note speakers at the Canadian eLearning Conference in 2011.

This paper will describe how this initially simple idea has given rise to a flipped teaching and learning approach that has influenced and inspired colleagues. Data gathered over the past seven years will demonstrate how the coffee conversation that aimed to solve a local teaching challenge has been stepped up to assist the effective practice of teachers across multiple higher education institutions. Specifically it will provide evidence of increased participation by teachers using flipped learning methods as well as high levels of student satisfaction and engagement, including data from a pilot study conducted at the University of Adelaide in 2013, where 2000 first year health science students provided feedback on their experiences of the flipped classroom through surveys and focus groups.,

We will discuss our plans to build capacity of teachers through the development of our Flipkit, informed by our experience as both developers of the flipped classroom at a local level, and leaders of a flipped classroom project in a multi-institutional context. Colleagues attending the presentation will be invited to peer review our evolving Flipkit, as well as share their flipping learning experiences and challenges.

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## Session E12

Paper

### **PHENOMENOLOGY OF SURPRISE IN A SOTL SCHOLARS' PROGRAM**

**Michelle Yeo<sup>1</sup>**, Karen Manarin<sup>1</sup>, Janice Miller-Young<sup>1</sup>

*1 Mount Royal University*

Introduction: How does change occur in the practices of post-secondary educators? University teaching and learning centres, invested in such change, tend to take a development approach. Our paper presents an account of transformations that happened by accident. This study is a phenomenological account of the emergence of surprise as a transformational event in the experience of faculty members engaged in a year-long SoTL Scholars' Program.

Literature: Phenomenology understands the self not to be separate from the world; rather, 'being' is to be understood through the phenomena which present themselves to us. It is the 'descriptive study of whatever appears to consciousness' Phenomenology is usually characterized as a way of seeing rather than a set of doctrines (Moran, 2002, p.1).

Phenomenology 'seeks to restore the richness of the world as experienced; it wants to be present at the birth of the world for us' (Moran, 2002, p.2). It asks that we become attentive to what appears in everyday life, its 'modes of appearing and givenness' (Dastur, p. 180).

Events, when they are unexpected, contain the possibility of transformation. The surprise of the event interrupts the flow of time, creating a disjuncture. For Dastur, this creates not simply a changed perspective, but indeed a changed existence, 'as if a new world opens up through its happening' (p. 182). This phenomenological interpretation of the experience of surprise was used to interpret the interview data in this study.

Methods & Evidence: Eighteen participants from several cohorts in a SoTL Scholars' Program, an initiative run by our university's SoTL Institute, were interviewed about the impact of the program on their teaching and research. What emerged from these interviews was an unanticipated finding: that most faculty members had encountered some manifestation of

surprise or the unexpected in the context of the program.

We use Dastur's (2000) understanding of surprise as a phenomenological event, which allows for changed perception and the possibility of a different future, through an altered state of being-in-the-world. Four different categories of surprise are explored: surprise that doing SoTL changed teaching, surprises about students, surprises about SoTL and the research process, and finally, surprises about communities and disciplines.

Conclusions: These surprises appear to be powerful forces in changing practice, both in the classroom and within scholarship practices of the participants. We argue that phenomenology allows a valuable rendering and interpretation of the notion of surprise, in turn giving us a powerful understanding of the transformations and changes reported. The faculty members interviewed for this study expressed instances of coming to breakthrough insights about teaching, learning, research, and themselves in a community of academics. This suggests that creating such opportunities for SoTL communities to form amongst faculty from disparate disciplines has a visible and potentially transformative effect on the post-secondary environment.

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### Session E13

Paper

#### FACULTY AND UNIVERSITY CHALLENGES IN LEADING THE CONSTRUCTION OF HIGH QUALITY SOTL PROJECTS

**Karen Willis<sup>1</sup>**, Janne Malfroy<sup>1</sup>

*1 Australian Catholic University*

Questions and rationale: The recent increase in teaching focused positions in Australian universities has meant a renewed interest in enhancing scholarship in learning and teaching at the Faculty, University and sector levels. One strategy to build staff engagement with SoTL is to provide annual competitive teaching development grant funds for learning and teaching projects. Grant success at this level can be used to problem solve within a discipline, provide teaching evidence in promotion and career development guidelines, and ideally provide the foundations for success with competitive external grants.

The overall aim of SOTL is to improve student learning and enhance educational quality through rigorous and systematic approaches to evidence-based inquiry. These small-scale projects are usually designed to investigate an issue relevant to the specific disciplinary teaching context, are often team based, and have clearly identified expected outcomes. However, our knowledge of the contributions to SoTL made by such grants is limited. Thus, as leaders in learning and teaching at the Faculty and institution level we pose the questions:

\* Do university funded teaching development projects advance the overall aims of SoTL?

\* If so, what strengths do they show?

\* How can we lead improvements in the construction of high quality SoTL projects

Methods: This project undertook a qualitative content analysis of 17 successfully funded faculty and 28 institutional learning and teaching grants from 2011-2014. In doing so, we investigated the stated aim/s of each grant, the scale and

scope of the project, the approach/methodology, the evaluation process and the intended outcomes. We developed a framework to identify first, the similarities between grants and second, both opportunities and challenges evident in advancing SoTL at the institutional and sector levels. Our results identify the topics of interest at the Faculty and institutional level and the scholarship upon which applications are based.

Critique and Audience Engagement: In presenting the results of our inquiry, we will propose ways in which academic and professional staff could be better supported in their framing of the Faculty and institutional learning and teaching grant proposals, and the challenges of embedding SoTL within the institution. We will invite the audience to share their experiences of both engaging in teaching and learning grants, and strategies used in other universities to improve the quality of SoTL grant applications, outcomes and dissemination.

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### Session E13

Paper

#### IDENTIFYING THE SOTL TRAINING NEEDS OF ACADEMICS WITH TEACHING RESPONSIBILITIES

**Lynne Roberts<sup>1</sup>**, Georgina Fyfe<sup>1</sup>, Helen Flavell<sup>1</sup>, Michelle Broughton<sup>1</sup>

*1 Curtin University*

There has been increasing stratification between research and teaching in the Australian higher education sector over the past five years, following the introduction/intensification of academic positions classified as 'Teaching Only' (Probert, 2013; 2014). Academic engagement in SoTL is now a requirement for academics with teaching responsibilities, and is used in performance management (Mathison, 2014) and promotion decisions (Vardi & Quinn, 2011). However, traditionally academics have not been trained in SoTL research methods. While completion of a PhD equips the individual in the skills required for disciplinary research, these skills may not necessarily translate to SoTL/higher education research, a field that has its own language, theories and methodologies (Mathison, 2014). In order to effectively develop the SoTL capabilities of academics with teaching responsibilities we first need to identify the understanding of, level of engagement with, and attitudes toward SoTL held.

In this presentation we will share the results of a survey of Teaching and Teaching & Research academics with teaching responsibilities conducted within one Australian university. Academics completed measures of knowledge of SoTL, attitudes towards SoTL (Burns, Merchant & Appelt, 2013), scholarly teaching engagement (Haigh, Gossman, & Jiao, 2011), SOTL engagement, SoTL impact (Trigwell, 2013) and academic identity (Brown, Condor, Mathews, Wade & Williams, 1986). Differences between Teaching and Teaching & Research Academics will be explored.

As part of the survey, academics indicated areas in which they perceived the need for further SoTL development. We will present on how this information has been used to develop a body of activities designed to develop the SoTL capabilities of academics with teaching responsibilities within our faculty. We will invite attendees to engage in sharing information on SoTL development activities from their own institutions.

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## Session E14

Paper

### IMPLEMENTING AND EVALUATING DIVERSITY AND INCLUSION PRINCIPLES FOR EFFECTIVE LEARNING

Stephanie Eglinton-Warner<sup>1</sup>, Nishani Singh<sup>1</sup>

*1 Faculty of the Professions, University of Adelaide*

As the diversity (including in terms of language, culture, social practices, histories of learning, gender, age, experience, socio-economic status, and in their entry pathways) of the student population of Universities continues to grow, there is a need to adopt inclusive curriculum, course design, course delivery and assessment practices which promote equal access to learning for all students, understanding and empathy.

Course designers and educators are key in developing and implementing practices which value and respect diversity in the learning environment to facilitate and optimise the learning of all University students.

Our paper outlines the collaboration of a community of practitioner researchers to develop, implement and evaluate a set of diversity and inclusion principles and resources to inform the design of courses.

The outcomes of this collaboration will be an evaluation of: a set of broad working definitions of diversity and inclusion (and associated terms) in a glossary of terms as applied within the context of the university/faculty to enable consistency when implemented in teaching and research; a set of diversity and inclusion principles to inform the design of courses; a checklist to guide self-reflection by practitioners when designing courses; and a set of resources including teaching approaches, learning activities and assessment tasks, to create a learning environment that values diversity and facilitates inclusion.

This evaluation is based on data collected from interviews with the collaborating practitioners, peer review of teaching practice as these resources are being trialled, analysis of course documentation, including assessment criteria and learning outcomes, and a review of the relevant literature.

The presentation of this paper is consistent with the conference theme 'Diversity in the academy: teachers,

students, practice, context' because it provides a framework that can be used by educators to 'identify and implement best practices for diversity and inclusiveness in a rapidly changing and increasingly diverse society.

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## Session E14

Paper

### A START TO FOSTERING KNOWLEDGE, SKILLS AND ATTITUDES TO ENSURE INCLUSIVE TEACHING ENVIRONMENTS

Meloni Muir<sup>1</sup>, Helen Drury<sup>2</sup>, Garth Tarr<sup>3</sup>, Kellie Morrison<sup>5</sup>, Fiona White<sup>4</sup>

*1 Sydney Medical School, University of Sydney*

*2 Learning Centre, University of Sydney*

*3 School of Mathematics and Physical Sciences, University of Newcastle*

*4 Faculty of Science, University of Sydney*

*5 Sydney Business School, University of Sydney*

Student diversity in Australian tertiary education has increased dramatically in the last two decades beginning with the Dawkins reforms in late 1987 in Higher education: a policy discussion paper and continuing with the response of the sector to the 2008 Review of Australian Higher Education with the development of policies related to widening participation. This increase in student diversity encompasses a cohort of more mature-aged students, indigenous students, first in family students, students from diverse socio-economic backgrounds, international students with differing language backgrounds, educational experiences and expectations, and a greater number of students with disabilities. Such diversification challenges tertiary institutions as well as their communities of teachers and students. The development of cultural competencies in these communities can better equip all students for the global workplace through pedagogies for diversity (Haggis, 2006). Academics need knowledge, skills and attitudes to develop such pedagogies and ensure an inclusive teaching environment along with their discipline specific knowledge. This support helps to encourage their passion for not only what they teach but how they teach (Williams et al, 2005; Danowitz & Tuitt, 2011).

A question that is frequently raised is 'how might institutions go about fostering knowledge, skills and attitudes needed to teach a larger and more diversified cohort?' (Budge, 2010). We will report on one initiative undertaken at a large research-focused university in the Business and Science faculties that has led to an improved understanding by academics of their student cohort diversity and more inclusive teaching practices through revised curriculum and assessment practices. The academics received a Knowing Your Student (KYS) report that provided up-to-date data about their current student cohorts at the beginning of each semester. The reports include information about student demographics, language background and previous learning experience (i.e., courses/units of study (uos) successfully completed, percent of students retaking the course/uos, specific course/uos currently enrolled in, etc.). Demographic information can often be found at the aggregate faculty or university level, however, much less is provided at the teaching coalface. An innovative feature of the KYS reports is the provision of detailed information for each unit of study in a timely fashion, which enables academics to tailor course content to specific cohorts. Furthermore, accumulation of this information over time is used to identify trends in student cohorts that helps inform curriculum renewal.

Overall, academics in both faculties had a very positive response to the KYS reports and engaged with the data

provided. The paper will share qualitative findings on curriculum renewal strategies and changes in pedagogy reported by academics in response to their new knowledge about the diversity of their cohorts. In our presentation, the authors will engage their audience by asking a series of questions regarding what information they would like to better inform their knowledge of their student diversity and how would this be useful to their teaching.

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## Session E15

Paper

### **SESSIONAL TEAM LEADERSHIP: CHANGING PRACTICE IN MODERATION AND PEER REVIEW IN A VERY LARGE FIRST YEAR UNIT**

**Katherine Bathgate<sup>1</sup>**, Kelly Prandl<sup>1</sup>

*1 Faculty of Health Sciences, Curtin University*

Moderation of assessments is an important process within the roles of academic teaching staff. The main aim of this process is to ensure that the grades awarded to students are “valid, reliable, equivalent and fair as far possible for all students and all markers” (Edith Cowan University, 2012). There has been considerable debate over the effectiveness of moderation and the various methods and approaches to the moderation of assessments (Adie, Lloyd, & Beutel, 2013; Nuttall, 2008). While it has been recognised that well supported teaching staff and transparent, consistent approaches to moderation are particularly important, this can be a challenge when coordinating large units with large teaching teams

In this presentation we will outline a new practice in moderation and peer review using sessional team leadership that was initiated in a very large (2200 student) unit in an Australian university involving a high number of teaching staff. In 2014 this unit was taught as weekly workshops by 28 interprofessional teaching staff, teaching in teams of two. With the support of six experienced tutors as sessional team leaders, pre-, intra and post assessment moderation was achieved across all staff within the specified time frame. The sessional team leaders, each supporting a small team of new and more experienced staff, also took a shared leadership role in a peer review process, involving all members of the teaching team. The peer review process identified strengths of the team, explored and identified areas of professional development that would be of benefit to the entire team, and enabled unit coordinators and team leaders to provide specific support to staff as indicated.

Results from quantitative and qualitative evaluation of the change in practice will highlight the benefits to teaching staff and students, and demonstrate the potential for this team leadership initiative to be successfully embedded into other large units across higher education. Participants will be invited to share their experiences in moderation and peer review in large units and how innovation can lead to a successful change of practice.

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## Session E15

Paper

### **HOW ASSESSMENT TASKS MAY OBSCURE CONCEPTUAL DEMANDS: ENABLING STUDENTS TO MOVE BEYOND COMMON-SENSE RESPONSES**

**Lee Rusznyak<sup>1</sup>**

*1 University of the Witwatersrand, South Africa*

Courses that seek to prepare students for professional practices make extensive use of assessment tasks that evaluate how students draw on relevant theoretical concepts to make conceptually-informed judgements in practice (Muller, 2009; Shay, 2013). Teacher educators from the University of the Witwatersrand were concerned by a tendency for student teachers to provide common sense' responses when confronted with assessment tasks that required them to link theoretical concepts with practice-based contexts.

This paper presents the findings of an empirical research project in which assessment tasks given to a cohort of student teachers were analysed according to whether they required students to focus exclusively on a theoretical object of study, a context of practice, or simultaneously to consider both conceptual object/s and practice-based context/s. Very few assessment tasks in the sample required students to examine concepts or claims in their own right. Most tasks required some articulation of a concept and then required students to apply the concept to either a stipulated educational context or make a link with their own field-based experiences.

Using illustrative examples, I present a typology (Shalem & Rusznyak, 2013) that shows how assessment tasks make the structure of a knowledge field more or less visible to students. The more visibly the conceptual objects of study are demarcated, the greater are the possibilities for students to develop their understanding of theory as a systematized body of knowledge. This constitutes an essential condition for theory to provide a non-intuitive lens on practice (Clarke & Winch, 2004). In contrast, in assessment tasks where a conceptual object is vaguely demarcated, or not demarcated at all, students needed to do much more guesswork in terms of establishing valid criteria for selecting appropriate concepts around which to construct a relevant response. This accounts in part for why students draw on their everyday knowledge when confronted with assessment tasks that require them to link theoretical concepts to contextual sites of practice. The findings emphasise the importance of lecturers explicitly considering whether students can be expected to make their own concept selection in formulating an appropriate response that requires a shift between theory and practice.

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## Session E16

Paper

### ONLINE TEACHING AND LEARNING STRATEGIES TO DEVELOP AFFECTIVE COMPETENCIES

**Tina Bhargava**<sup>1</sup>

*1 Kent State University, College of Public Health*

Learning Objectives:

- By the end of this session, participants should be able to identify challenges to developing affective competencies through online education.
- By the end of this session, participants should be able to describe potential strategies for developing affective competencies through online education.
- By the end of this session, participants should be able to identify a strategy for developing affective competencies in their own online courses

The accrediting body for public health education in the US (ASPPH) has proposed insightful and valuable Undergraduate Public Health Learning Outcomes that promote the development of several affective competencies, such as 'teamwork and leadership,' systems thinking, 'ethical decision making, and 'advocating for evidence-based social changes. In an educational environment that has an increasing dependence on technology and fully online course work, it is imperative to identify web-based teaching and learning strategies that can effectively develop such competencies in students pursuing degrees and careers in public health and other 'helping professions. 'In this session, the presenter will describe online strategies for affective competency development implemented in her own teaching practice, including op-ed writing assignments, oral examinations via video conferencing, and cooperative activities to develop public health advocacy materials. Qualitative analyses of student achievement of these affective competencies and summary data on student satisfaction with the teaching and learning strategies will be shared. Participants will have an opportunity to identify a specific strategy applicable to their own teaching practices, and to brainstorm ways to incorporate the strategy into online courses. Future directions for research in this area will be discussed.

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## Session E16

Paper

### A FOCUS ON COLLABORATION: EDUCATING SCREEN PRODUCTION STUDENTS FOR THE FUTURE

**Kath Dooley**<sup>1</sup>

*1 Curtin University, Western Australia*

The screen production industry worldwide is experiencing major upheaval as a result of fundamental changes in film production, distribution and exhibition. Finney describes how the 'international film business stands on a delicate cusp' due to changing technologies and user demands (2014:4) while Ryan and Hearn describe the rise of a new culture of entrepreneurial filmmaking driven by 'next generation filmmakers' " both aspiring and established practitioners who are approaching filmmaking in new ways' (2010: 1). Considering this situation where technology, process, storytelling structures, exhibition, and distribution outlets continue to change rapidly, one might question what University-based screen production courses teach that will

equip students for the future (Sabal, 2009: 13). Reflecting on this subject, a number of researchers (Kerrigan & Aquilia, 2013; Hodge, 2009; Sabal) have noted that effective group communication and teamwork underpins success in all areas of film and video production. Therefore, despite the upheavals experienced by the industry, being a skillful collaborator is of the upmost importance to students hoping to succeed in the screen industry.

Yet this is an area that has received little attention internationally in terms of SOTL research. It is also often overlooked in an already crowded screen production curriculum that focuses on the development of aesthetic and technical skills. As Hodge notes, inexperienced young adults are too often expected to master collaboration on their own, as if it were an innate skill, not a learned one (19). One might then pose the question of how instructors might explicitly foster students skills and self-knowledge in this area.

This presentation will draw upon the author's own research and existing literature to build a case for more attention being given to the explicit teaching of teamwork and collaboration skills in University-based screen production courses. The author will firstly present an inventory of the strategies suggested by researchers working in the area of screen production. She will then report on the early stages of a small-scale empirical SOTL research project undertaken in the Department of Film, Television and Screen Arts at Curtin University, Western Australia. This study involves the implementation of a selection of identified strategies and then the measure of student outcomes by both qualitative and quantitative means. The presenter aims to generate further discussion on pedagogy in this area.

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## Session F1

Paper

### TEACHING RESEARCH METHODS IN THE VIRTUAL LEARNING ENVIRONMENT - BLENDING PEDAGOGY WITH PRACTICE

**Anske Robinson**<sup>1</sup>

*1 Monash University, School of Rural Health*

Introduction: The provision of appropriate health care is increasingly dependent on evidence of the effectiveness and safety of health care treatments. To assess this evidence, health care practitioners undertake health research education. However, undertaking courses to learn about research methods is a daunting process for many health care students and professionals and for students learning through the virtual learning environment there is extra layer of complexity. In this forum, student learning takes place using a medium that is predominantly asynchronous and consideration needs to be given to multimedia and communication. The scholarship for

teaching research methods is not well established 6. There is a need for investigation of methods for effective teaching that incorporates the scholarship of learning and teaching. The aim of this research is to identify the key components of research methods that students have most difficulty with and describe student preferences for learning in the virtual learning environment.

**Methods:** A mixed methods approach was used for the research. The data was collected in 2013 and 2014 from 33 postgraduate students that undertook a coursework research methods unit that focused on teaching research methods. Both qualitative and quantitative data were collected. These included quantitative data from the Moodle program analytics feature and qualitative data from discussion forums, e-mails, and interviews with four students. The quantitative data was analysed with descriptive statistics while the qualitative data was analysed using thematic analysis. Ethics approval was obtained from the Monash University Human Research Ethics Committee.

**Evidence:** Findings showed that many of the students were daunted by having to use statistics when learning research methods utilising quantitative data. With research that utilised qualitative data students had most difficulty with understanding ontological and epistemological frameworks for answering research questions. The findings also showed that although visual resources through YouTube presentations were provided, many students did not access these, and appeared to be just as comfortable with print resources. The discussion and new forums were the resources accessed most. The students also expressed the need for learning exercises to enhance the on-line presentations and readings. A final finding was that students appreciated the relative anonymity of learning research methods in the VLE. Students were concerned about asking what they perceived to be 'dumb questions' and felt comfortable with e-mailing questions to the lecturer privately, without the requirement for questions to be raised in a class situation or an open discussion forum.

**Conclusions:** The teaching of research methods in the virtual learning environment requires attention to student preferences for learning, and assumptions about student preferences cannot be taken for granted. Therefore a diversity of resources needs to be provided in the virtual learning environment to enhance student learning. Resources can include both print materials and visual presentations. On-line demonstration exercises that allow the students to have more experiential learning are also useful. Students also need a forum to be able to raise questions in private.

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## Session F1

Paper

### THE EFFECT OF ACADEMICS EXPOSURE TO INDUSTRY AND ALTERNATIVE PEDAGOGICAL PRACTICES IN HIGHER EDUCATION: A PRAGMATIC PERSPECTIVE

Rosaline Sebolao<sup>1</sup>, Isaac Ntshoe<sup>1</sup>

*1 Central University of Technology, Free State, South Africa*

The higher education landscape globally is shaped by the changing role and function of a traditional university as sole custodians of knowledge production, the rise of the commercialisation, commodification and entrepreneurship in higher education. These developments require academics with both knowledge of their academic disciplines and industry environment, an alternative paradigm and innovative pedagogies (teaching and learning). Globally and in South Africa, universities are continuously striving to build

partnerships with employers in order to expand opportunities for workplace training, especially for professional and sectoral fields of practices that prioritise practical experience. These anticipated partnerships extend to the Sector Education and Training Authorities created in 1998 to contribute to production of middle- and lower-skilled individuals by offering learnerships, internships and apprenticeships in different economic sectors. The Department of Higher Education and Training in South Africa has made these partnerships possible through the Teaching Development Grant for universities to expose academics to industry in companies relevant to the different fields in faculties.

This paper reports on a case study of on-going research into the impact of industry exposure through a partnership between academics at the Central University of Technology and industry to enhance the quality of practical aspect of their teaching and learning. The paper argues that the partnership would provide space for academics to keep abreast with new developments in the industry in the context of emerging manufacturing, innovations and products. In particular, we argue that industry exposure is key in enhancing the quality of teaching and learning and the production of graduates with knowledge, skills and competences required by industries in particular contexts.

Issues raised in this paper are i) the nature of industry exposure and the process followed to engage in it; ii) benefits of industry exposure for both academics and students; iii) the challenges of the triple helix comprising university-industry-government relationship and the traditional notion of the university as the sole custodian of knowledge production; iv) challenges about absence of qualified mentorships at the university and in industry; and iv) suggestions for addressing these challenges.

Quantitative and qualitative data will be collected using questionnaires and interviews. Twelve (12) academics that have been exposed to industry would be selected purposefully in the four faculties of Engineering, Management Sciences, Humanities and Health and Environmental Sciences at CUT. SPSS and Atlas.ti software programmes will be used to analyse the data. Lastly, the paper will propose a model that may be used to implement industry exposure of lecturers in the various faculties at the Central University of Technology, Free State. In view of the significance of links between higher education and industry both nationally and internationally, it is anticipated that this model will have wider applicability at other institutions of higher learning.

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## Session F1

Paper

### BUILDING ACADEMIC CAPACITY FOR AN ONLINE FUTURE

Lynette Sheridan Burns<sup>1</sup>, Kaye Shumack<sup>1</sup>

*1 University of Western Sydney*

In the 2015 NMC Horizon Report: Higher Education, Johnson et al (2015) found that as a deeper understanding of digital literacy is emerging, higher education institutions have recognized that in order to instill this literacy in their students, they must better equip their faculty. Wilson (2007) argues that the building of academic capacity to create and deliver online learning requires synchronised support of innovation through leadership and policy from the top, together with supported bottom-up innovation and change.

Wilson's three-stage framework for faculty development informed the development of a project undertaken in the School of Humanities and Communication Arts at the



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University of Western Sydney to build capacity among academic staff to simultaneously deliver the Bachelor of Communication online and on-campus. The paper describes a model that both merges and distinguishes the two modes and explains the strategies implemented to take discipline academics through the pedagogical thinking and technical development required to transform their teaching. This required resolving the challenges identified by Yang and Cornelius (2005) as changing the role of the lecturer to facilitator, changing the role of the learner from passive to active, integrating new technologies appropriately and developing effective virtual communication and interactions.

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## Session F2

Paper

### HOW ACADEMIC LEADERS UNDERSTAND, ENACT AND ENDORSE ACCORDING TO SCHOLARSHIP OF TEACHING AND LEARNING?

Ragnhild Sandvoll<sup>1</sup>, Marit Allern<sup>1</sup>

*1 Centre for Teaching, Learning and Technology, UIT The Arctic University of Norway*

Background and aim of the study: There has been an amplified interest in leadership and management in higher education, with a focus on how leaders in formal roles can engage effectively in leading changes.

The aim of this study is to explore how academic leaders at three Scandinavian universities understand, endorse and enact according to scholarship of teaching and learning (SOTL) as an approach for development of teaching and learning. This means that leaders encourage communities of scholarly teachers and promote teaching as a scholarly endeavor worthy for research. These inquiries produce a public body of knowledge that is open for criticism and evaluations.

Methodology/research design: The study is based on semi-structured interviews with 16 academic leaders having strategic positions considering teaching and learning at different levels. The chosen universities from Sweden, Denmark and Norway, are relatively young institutions, established between 1965 and 1972, all three with some aspiration of being modern in an educational sense when established. Empirical material from more than one university gives a broader perspective on the topic.

Outcomes: Our findings so far indicate that few of the interviewees were familiar with the concept SOTL, though being familiar with some of the intentions. They emphasised that development of teaching and learning should be based on research, however, inquiry into teaching and learning practice in their institutions seemed not to be prioritised.

The leaders highlighted the importance of sharing experiences and knowledge about teaching and learning, and they gave examples of how this was organized. Many of the leaders underscored the importance of having a community where they as leaders of education could discuss and focus on the development of teaching. In addition, several leaders mentioned that interaction and information flow between different levels in the organisation was a challenge, making it difficult to support local communities of scholarly teachers.

Theoretical and Educational significance: It is reasonable to assume that leadership involvement at different levels is important in order to face the challenges of development of teaching and learning in line with SOTL principles. The way academic leaders engage in SOTL seems to reinforce and strengthen how universities give priority to inquiry-oriented academic growth.

## Session F2

Paper

### LEADERSHIP? IN THE ACADEMY: NAVIGATING TROUBLED WATERS - A PROVOCATION

Warren Sellers<sup>1</sup>, Kerri Lawrence<sup>1</sup>

*1 Deakin University*

Throughout history leaders have been held up as heroic figures, chiefly male and principally endowed with powerful command and control attributes. Lately that stereotype has been disrupted to include fewer commanding controllers, more females and others with a greater appreciation of collaborative agency. Although the more recent, more inclusive and collaborative model has had some reach in higher education, tensions exist between it and the traditional construct causing some degree of confusion and conflict. These tensions are not only around theoretical differences and understandings, but also about practical matters as to if and how what works where, and in which circumstances.

Our focus is on the role of higher education academic programme leaders, who are at the nexus of where educational promises and delivery on them, and the student's expectations and reception of them, primarily interact. With the move towards work-ready education, work-integrated learning and authentic assessment there is a greater expectation that programmes need to be lead in ways that reflect and simulate the workplace. This substantially increases the load on academics performing leadership roles and is leading to investigations showing that there are many problematic areas 'troubled waters' to be addressed (Johnston & Westwood, 2007).

Beginning by briefly reviewing the principal leadership models presently in play in higher education we discuss some of the features, qualities and contestations that we argue give rise to us characterising them as troubled waters including contingency theory (Fiedler & Garcia, 1987) and distributed leadership (Jones, Harvey, Lefoe, & Ryland, 2014).

Further, we discuss these largely uncharted troubled waters to consider ways they are being affected by the ebbs and flows of policy and regulation that manifest as potential hindrances and hazards. Deploying post-qualitative research (St.Pierre, 2011), we work to deconstruct some problematic delineations of leadership and reveal an underlying onto-epistemological problem that challenges firm beliefs and fixed ways of knowing.

In this undertaking we do not dismiss or exclude extant positions. Rather we look to map less troublesome and more efficient navigational courses and practices and show how a poststructuralist approach opens up a long-established fixture to alternative dynamic understandings that are more adequate and most necessary in 21st century education.

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## Session F2

Paper

### **ripples OF CHANGE: NEGOTIATING THE BARRIERS AND BENEFITS OF IMPLEMENTING DISTRIBUTED LEADERSHIP IN HIGHER EDUCATION**

**Jillian Hamilton<sup>1</sup>**

*1 Queensland University of Technology*

Over the past decade, Distributed Leadership has gained momentum in higher education, with a number of Australian learning and teaching projects focusing on its principles or applying it in practice (Jones et al, 2013). Enacting a shift of focus from the concept of the 'heroic' or 'charismatic' leader (with a formal role and function) to leadership as an attribute and capacity that is dispersed across an institution in 'local' leaders who innovate and share knowledge with others (MacBeath, 2005), Distributed Leadership involves a shift from leadership as a form of power to leadership as a practice of empowerment of others. Therefore, it is often cited as an enabling strategy and mechanism for institutional change. And emergent definitions tend to represent an ideal. Jones et al. (2013), for example, describe a collaborative culture characterized by trust and respect for others' contributions, strengths and expertise, in which shared, active engagement in action enables and sustains improvements in teaching and learning.

Implementing distributed leadership can be more messy on the ground. As O'Toole et al. (2003, p. 251) suggest, 'shared leadership for most people is simply counterintuitive: leadership is obviously and manifestly an individual trait and activity'. Leadership is a site of contestation, and hierarchical structures can be rigidly entrenched. Tensions can occur between 'centripetal' normative culture (official and formal discourses, processes and actions that are centralising, homogenising and hierarchizing) and 'centrifugal' strategies that destabilise the 'center' and challenge hierarchical formality. Distributed leadership may therefore be perceived as dichotomous with, or even antagonistic to, normative functions of institutions. This tension can materialize in all manner of ways.

Bolden suggests that a disjuncture between conceptual ideal and formed reality is an indication that the field that has not yet reached maturity. He goes on to argue that, to achieve the impact Distributed Leadership promises, we must investigate the experiences and aspirations of leaders, acknowledge that leadership is inherently political in nature, and recognize the dynamics of power and influence in shaping what happens within organizations (Bolden et al., 2011). In this presentation I will take up this challenge and, through the methods of the reflective practitioner (Schön, 1983), reflect on the implementation of a Distributed Leadership model in an Australian University. Setting out to resolve a 'wicked problem' namely supporting a large number of sessional academics across a variety of disciplinary contexts (with diverse cultures, processes, practices, and teaching approaches) the Sessional Academic Success (SAS) program was designed to enhance the leadership capacity of experienced Sessionals at QUT and enable them to support, share exemplary practice with, and design local academic development for, their sessional peers. While this program has been successful according to various measures of impact, its implementation has not been without unanticipated obstacles and challenges. It has also benefited from advocates in formal leadership roles, unexpected contributions and ripple effects that have extended and multiplied its impact. I will go on to propose strategies for mitigating challenges that arise, embracing opportunities, and supporting shifts in cultural practices while maintaining the integrity and intent of Distributed Leadership.

## Session F3

Symposium

### **INVESTIGATING THE TEACHING OF WRITING AS A HIGH-QUALITY HIGH-IMPACT PRACTICE**

**Jessie Moore<sup>1</sup>, Chris Anson<sup>2</sup>, Liane Robertson<sup>3</sup>**

*1 Elon University*

*2 North Carolina State University*

*3 William Paterson University of New Jersey*

Drawing from three mixed-methods SoTL studies, this symposium examines what the future holds for teaching writing as a high-impact practice. George Kuh (2008) identifies writing-intensive courses as high-impact educational practices in which students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. Ashley Finley notes, however, that a crucial challenge with high-impact practices is not that they exist on campus, but that they are done well. As this panel demonstrates, teaching writing as a high-quality high-impact practice requires being attentive to the writing knowledge that writing-intensive courses cover, the ways students understand and enact knowledge about responses to their work in progress, and students' knowledge about and use of the evolving writing technologies available to facilitate their writing (Anderson, Anson, Gonyea, & Paine, forthcoming).

**Writing Technologies: Understanding Students' Technology Use and Prior Knowledge**

Presenter #1 shares results from a multi-institutional research project on the writing lives of first-year university students, and a single-institution study of first-year students' prior knowledge about writing technologies. The studies collectively suggest that first-year students use a wide range of writing technologies. Yet students may not have prior knowledge about these technologies to use them in ways consistent with instructors' expectations. Conversely, students also use writing technologies in unexpected ways. Based on these studies, future writing pedagogies should embrace students' flexible use of composing technologies and genre/technology pairings, while remaining attentive to students' prior knowledge.

**Digitally-Enabled Peer Review: What Students' Comments Tell Us**

Student peer review is consistently presented as a high-impact writing practice, helping students to learn how to strengthen their writing through revision. But for many teachers, it often fails to live up to its theoretical promises. Why? Presenter #2 will describe a SoTL project that analyzed several thousand comments university students provided to each other on drafts of their writing using an electronic peer-review system. These analyses reveal interesting patterns in the language students use in peer review. Results suggest the need to turn the high-impact practice of peer review into a high-quality high-impact practice by teaching students shared understandings and metacognitive vocabulary to analyze their own and others' work in progress, and to help them acquire and use more effective response strategies.

**A Transfer Curriculum: Students' Success in Repurposing Writing Knowledge**

Presenter #3 will discuss multi-institutional research involving a specific curricular approach and its role in students' writing transfer. The Teaching For Transfer (TFT) curricular model (Yancey, Robertson, and Taczak 2014) offers three signature elements supporting students' learning: (1) key terms identifying critical concepts in writing; (2) systematic and reiterative reflection; and (3) development of a 'theory of writing' with which students can approach various writing situations. Findings presented will outline the efficacy of this

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curricular model in helping students develop the conceptual framework (Beaufort 2007) they need to successfully repurpose their writing knowledge and practice from the writing classroom to a range of academic writing contexts.

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## Session F4

Paper

### **TRANSFORMING ACADEMIC MENTORING: A CROSS-DISCIPLINARY CASE STUDY ON SHARED PRACTICE FOR STUDENT LEARNING**

Ana-Maria Bliuc<sup>1</sup>, Christopher Thompson<sup>1</sup>

*1 Monash University*

The paper explores the development of a cross-disciplinary mentoring relationship with its implications for the professional development of both mentee and mentor, as well student learning. The case study discussed here is part of the Peer Assisted Teaching Scheme (PATS), a very successful scaffolding program developed by educational researchers at several Australian universities (see Carbone, 2014; Carbone et al., 2014). The partnership, hosted by Monash University, includes an experienced academic from the Faculty of Science (Chemistry) as the mentor, and a relatively novice academic from the Faculty of Arts (Politics and International Relations) as the mentee. The first part of the paper will focus on discussing the experiences of change in the academic practice and teaching identity from the perspective of both mentee and mentor at different stages of the mentoring relationship. The second part will discuss how these changes are reflected in the actual academic practice and how they translate at the level of the student experience. Our discussion highlights the value of the cross-disciplinary aspect of the relationship, more specifically focusing on how strategies and principles of good academic practice not only transcend disciplinary boundaries, but they can be further enriched through effective communication between educators from very different disciplines.

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## Session F4

Paper

### **CREATING DISTRIBUTED LEADERSHIP THROUGH PEER MENTORING: A MODEL FOR IMPROVEMENT AND INNOVATION IN TEACHING AND LEARNING**

Anne Gilmore<sup>1</sup>, Jacqueline Bond<sup>1</sup>, Neil Cottrell<sup>1</sup>, Wendy Green<sup>2</sup>, Leigh McKaige<sup>1</sup>

*1 University of Queensland*

*2 University of Tasmania*

This presentation relates to the conference theme 'Leadership in the academy' and the ongoing challenges faced in research intensive universities to raise the profile of teaching and the scholarship of teaching and learning. The concept of distributed leadership is advanced as a way that universities can successfully engage all staff. Could academic peer mentoring create the necessary interaction between mentor and mentee that results in distributed leadership outcomes despite organisational hierarchy and blockages?

The School of Pharmacy at the University of Queensland introduced a peer mentoring scheme which aims to provide academic staff with feedback on their teaching and the opportunity to improve their teaching practice. An evaluation of the scheme involved in-depth interviews of academic staff in the School of Pharmacy who participated in a pilot peer mentoring program and a follow up survey probed the issue of leadership in more depth.

The initial evaluation found that staff were very positive about most aspects of the scheme but, most interestingly, they were proud and enthused about the leadership experience and outcomes. Such a scheme was expected to provide mentors with leadership development, but it was not anticipated that mentees would also be exposed to interactions relevant to becoming a leader or develop leadership aspirations. One of the most telling aspects of teaching and learning in universities is how emerging technologies have changed the nature of 'expert' vs 'novice'. Senior academics may be more expert on content however junior academics as usually more expert in the delivery and design aspects.

We now widely accept that organisational change is not effective without cultural change but workplace change is still considered to be strongly influenced by leaders and the type of leadership they exhibit (Bolman and Deal 2003). In highly professionalised organisations, including large universities where individual motivations compete with disciplinary and grand institutional priorities, leadership models need to be more sophisticated and inclusive if universities are to succeed in improving teaching (Jones et al 2012) (Tierney 1997).

The theory of distributed leadership advocates the development of a more interactive shared leadership process of engagement rather than falling back on expertise simply being equated with someone's formal position in the hierarchy (Spillane 2005) (Jones et al 2012). This presentation examines whether peer mentoring is a possible mechanism for developing a distributed leadership model and the potential this could have for building a culture that values expertise in teaching and learning.

The presenter will introduce the concept of distributed leadership by requesting the audience to identify features they consider demonstrate positive leadership in the university. These ideas will provide a gateway into the presentation and discussion.

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## Session F4

Paper

### **SHARED LEADERSHIP IN THE ACADEMY: CREATING OPPORTUNITIES AND MEETING EXPECTATIONS TO ENHANCE STUDENT LEARNING**

Justin Walls<sup>1</sup>, Jo-Anne Kelder<sup>1</sup>, Christine Caleidin<sup>1</sup>

*1 Faculty of Health, University of Tasmania*

Introduction: This paper presents a model of shared leadership (Pearce 2004) for delivering higher education award degrees (courses). At the University of Tasmania, a course coordinator is operationally responsible for standards of curriculum design and delivery and teaching quality. The Faculty of Health's Quality Evaluation Learning and Teaching (QELT) unit is responsible to monitor the quality of courses, initiate remedial action for units of courses when flagged, and report against a range of institutional and national standards and metrics. QELT

has adapted the Peer Assisted Teaching Scheme (PATS) (Carbone et al., 2014), renaming it Peer Assisted Course Enhancement (PACE). PACE is integrated with structures and processes that support learning and teaching. It is a core strategy to link academics' activities to enhance student learning to Faculty and institutional quality reporting requirements. PACE functions as a framework for teaching teams to develop a culture of shared leadership and collective responsibility for single units, with holistic decision-making on course curricula.

**Method:** In 2013 the Faculty of Health piloted and evaluated five variations of PATS. PACE was a significant innovation, focusing on course delivery and facilitated by a shared leadership model in a teaching team with individual teachers (and professional staff) taking responsibility for leading, or participating in, actions designed to improve the quality of the curricula or teaching practice. This cultural change means the course coordinator is responsible to develop shared leadership within the team, maintaining a clear articulation of the course goals and building capabilities of members to achieve them. Teachers can document their contributions and report against institutional expectations for teaching performance. Identified problems with units or teaching are the responsibility of the entire team, removing stigma and fostering a collegial, peer-led approach to remediation. Within the shared leadership, QELT provides training and professional development for course coordinators to build teaching team capacity. Participation in PACE is being linked to individual performance management with standardised processes for reporting to the Faculty. Links to institutional reward systems are articulated.

**Results:** In 2013-14, three teaching teams adopted a shared leadership model and culture of peer partnerships to build capability. Student and peer data provided an evidence-base for improvements to curricula. Individual teachers nominated to lead activities such as improvement to a unit or teaching; report against standards or analyse student, peer and self-reflection data for scholarly purposes. Outputs produced across the three teams included annual evaluation reports to the Faculty; eight peer-reviewed publications, two successful applications for Vice-Chancellor's citations for contributions to student learning with the third team obtaining an award for 'programs that enhance learning'.

**Conclusion:** PACE as shared leadership framework supports collaborative practices that enhance student learning. Shared leadership is a method to facilitate a 'teaching team' culture of collective responsibility for the standard of curricula and teaching. From the Faculty's perspective, shared leadership framework supports a systemic approach to course quality assurance in academic roles, linkages to professional development, performance management and institutional awards and grants.

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## Session F5

Paper

### THE SCHOLARSHIP OF CIVIC ENGAGEMENT: A CASE STUDY IN A POST-1992 UK UNIVERSITY

Earle Abrahamson<sup>1</sup>, Peter D'Sena<sup>2</sup>

*1 Senior Lecturer - University of East London*

*2 Academic Developer - University of East London*

Higher education's relationship with civic engagement is long and complex and the idea of those learning and researching in universities being engaged morally, intellectually and physically in the civic world is not new. In Berlin in the early to mid-nineteenth century Von Humboldt advocated the importance of wide-ranging, curiosity-driven research, in the UK, John Henry Newman in his famous lectures on the Idea of the University proposed a break with the cloistered past through the provision of a broad-based curriculum and a more liberal education. These views were refined in the early twentieth-century, most notably by John Dewey who argued the importance, for educational processes, of both social and experiential interaction. Boyer's view, much later in the century, was that universities had, however, drifted from working to achieve a civic mission, though it is only in the past two decades that civic engagement has emerged as an explicit priority for some Higher Education Institutions (HEIs).

If the history is complex, so too are definitions. In very general terms, civic engagement refers to ways in which citizens participate in the life of a community in order to improve conditions for others or to help shape the country's future. However, the terminology itself is troublesome, with some scholars preferring to define aspects of civic engagement more readily through concepts such as social capital, citizenship, 'capability' and actions associated with public agency and community building. Thus, as a concept, civic engagement is value-laden, potentially controversial, but very importantly, open to interpretation. Some HEIs have preferred to place the emphasis of civic engagement on the ways in which its research, rather than its teaching, can deliver benefits to individuals, organisations and society. Another drive, however, is that civic engagement provides a pathway to involvement in and around communities for students.

This paper investigates the scholarship of civic engagement as conceptualised and realised by practitioners in teaching and learning in one of the UK's post-1992 universities. An audit and analysis of staff perceptions and practices was followed by in-depth interviews with staff using different qualitative approaches, as informed by Ku's high impact pedagogies. Findings have contributed to debates about the inculcation and transmission of civic engagement as content area, a set of processes for skills development or a philosophy, and also its relationship to 'service learning', graduate attributes and social justice. We also consider connections and tensions with citizenship education and question whether civic engagement is a threshold concept, wherein SoTL practitioners, learn to navigate difficult spaces, conceptualisations and realisations between developing political activism at one end of the spectrum, and unthinking 'loyalty to the flag' at the other.



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## Session F5

Paper

### INTO THE FIELD: PRE-SERVICE TEACHER PERSPECTIVES OF LOCAL AND COMMUNITY-BASED PEDAGOGIES

Monica Green<sup>1</sup>, John Caldwell<sup>2</sup>

<sup>1</sup> Federation University Australia

<sup>2</sup> Bug Blitz

Rationale: The underpinning question of this conference paper: How can pre-service teacher programs equip graduate/beginning teachers to engage with local communities and local places is closely linked to the overall conference theme of Leading Learning and the Scholarship of Change. In building on these themes we identify the paper as an opportunity to engage in the type of learning and scholarship required for bringing pre-service teachers into contact with alternative ways of developing and enacting curriculum and pedagogy that is imbedded in the local.

The paper is situated in a growing body of research literature that encompasses the intersections of pedagogy, place and pre-service teacher learning and is closely associated with frameworks of place based learning (Duhn, 2012), locally responsive pedagogies and local learning (Fisman, 2005; Pike, 2011) and community learning (Smith & Sobel, 2010). In blending this literature to the wider graduate attributes, namely the Australian Professional Standards for Teachers and the expectation that beginning teachers are equipped to engage professionally with the wider community (AITSL, 2015), the paper highlights the partnership between a regional university and a philanthropic organisation that designed two field trips for pre-service teachers.

By drawing on the perspectives of pre-service teachers, the study builds on earlier research that examined the pedagogical value of 'place' and local places for pre-service teachers (Power & Green, 2014; Somerville & Green, 2012). While the earlier studies suggest the pedagogical potential of place learning in higher education, this study examines pre-service teacher's perspectives on their experience as 'learner' (first field trip), and as 'teacher' (subsequent field trip).

Conceptual framework and methods: Working within the conceptual framework of place and a place pedagogy framework that constitutes story, embodiment and contestation (Somerville, 2010), a questionnaire survey was developed to gauge pre-service teacher insights into the field trip experiences and determine the impact of the field trips for future teaching practices and ideas.

Outcomes/Results: The findings reported in this paper suggest a range of responses from pre-service teachers about their field-based experiences of teaching and learning, and in particular relate to the significance of moving beyond the confines of the traditional classroom to seek pedagogical opportunities. Emergent themes of place and local pedagogies, new learning, risk-taking (the unknown), the challenges and benefits of teaching and learning in outdoor environments, working as a collective and in partnership signal some of the ways pre-service teachers interpreted the field trip experiences.

Implications: This study is a valuable contribution to the scholarship of teaching and learning and wider discourse of teaching and learning design in pre-service teacher programs. By modelling a partnership between the university and a local environmental organisation, students were able to witness the ways in which collaboration and community engagement can occur as a curriculum endeavour. By assisting pre-service teachers to consider local communities and local contexts as critical dimensions of their future teaching repertoire, the study

would appeal to other teacher educators attempting to prepare beginning teachers to identify and engage with community.

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## Session F6

Panel Session

### DIVERSITY IN THE ACADEMY: TEACHERS, STUDENTS, PRACTICE, CONTEXT

Geoff Scott<sup>1</sup>, Chng Huang Hoon<sup>2</sup>, Kerri-Lee Krause<sup>3</sup>, Mustika Indah Khairina<sup>4</sup>, Darrell Evans<sup>5</sup>

<sup>1</sup> University of Western Sydney

<sup>2</sup> National University of Singapore

<sup>3</sup> Victoria University

<sup>4</sup> Monash University International Student Society

This interactive session will run for 90 minutes. It will feature three highly experienced academic leaders expert in the area. Each will highlight one or two key points on how they would address issues like the following:

How do we frame conversations about diversity in the academy?

How do we infuse diversity into the curriculum?

How do we identify and implement best practices for diversity and inclusiveness in a rapidly changing and increasingly diverse society?

How do we ensure that today's and tomorrow's students, teachers and administrators possess the requisite capabilities to navigate their communities and the globalised world?

After each speaker has presented their key points on the first issue (about 3 minutes each) there will be 10 minutes of open Q&A from the floor. This process will be repeated for the remaining three areas. In the final 10 minutes of the session the convenor of the panel will summarise the key themes that have been raised in the discussion and suggest one or two key areas for follow-up.

## Session F7

Paper

### **DEVELOPING AN INTEGRATED UNDERGRADUATE FILM CURRICULUM THROUGH A COLLABORATIVE AND CROSS-DISCIPLINARY APPROACH: CHALLENGES AND OPPORTUNITIES**

**Sabina Hussain**<sup>1</sup>, Matthew Campora<sup>1</sup>, Emily Simmons<sup>1</sup>

*1 Australian Film Television and Radio School*

This paper discusses challenges and benefits of developing an integrated undergraduate degree by considering the Australian Film Television and Radio School's process of creating its Bachelor of Arts (Screen) degree, which officially commenced in March 2015. By maintaining its close links with the film, television and radio industries, the school has sought to combine its practical emphasis with a more theoretical and academically oriented curriculum in order to further raise the school's international profile.

By outlining the rationale of the degree, the paper provides insight into the innovative model of curriculum design employed. Led by a formal brief from the school's management, design committees comprised of teachers, education specialists, and industry professionals met over a period of time to discuss industry expectations, define subject-specific content, and consider academic and educational components in order to align aims, learning outcomes and assessments of individual subjects to the program as a whole.

The process commenced in 2013 by trialling the collaborative approach to curriculum design in the development of one subject, The History of Film, which was subsequently translated to the development of the entire first year of the degree. Based on a conceptual approach, the main objective of the degree is to provide students with a comprehensive education in the screen arts that enables them to become critical, reflective, and flexible practitioners. The interesting aspect of this curriculum is that it blends theoretical and practical perspectives as well as topics across subjects, in order to create a degree that is distinctive among undergraduate courses in film.

By analysing documents and documentation produced during the development process, individual observation and reflection by committee participants, and the research undertaken in learning and teaching in higher education as well as the course subjects, the paper focuses on two aspects of the process: the challenges arising from a distributed leadership model and the benefits a cross-disciplinary approach offers to the learning experiences of students. The paper will explore the challenges of negotiating diverse perspectives into the program as well as managing external constraints such as mode of delivery and timetabling. Furthermore, it will consider how the shared leadership process enabled a clear focus on the quality of learning and teaching. The outcome of the process will guide the curriculum design approach of the subsequent years of the degree.

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## Session F7

Paper

### **THRESHOLD LEARNING OUTCOMES (TLOS) FOR AUSTRALIAN SCIENCE DEGREES: INTEGRATIVE SCHOLARSHIP IN ACTION**

**Elizabeth Johnson**<sup>1</sup>, Susan M Jones<sup>2</sup>

*1 Deakin University*

*2 University of Tasmania*

Graduate learning outcomes describe what a graduate should know, understand, and be able to do as a result of learning.

Graduate learning outcomes developed by national consensus guide curriculum design, create external benchmarks for student achievement and provide standards to underpin quality assurance of higher education awards. However, if such standards are to be fully embraced by a disciplinary community, they must be developed via an integrative and collaborative process involving a wide range of disciplinary stakeholders, both specialists and non-specialists. The construction of consensus graduate learning outcomes for higher education therefore requires collaborative leadership that embodies Boyer's scholarship of integration (Boyer, 1999).

A number of national and international projects have constructed descriptors for graduate learning outcomes: Tuning process, QAA Benchmark Statements and the Learning & Teaching Academic Standards (LTAS) project. The LTAS project was a 'demonstration project' that aimed to support 'disciplines setting standards': it showed that, for the first time in Australia, national disciplinary communities could work together to develop consensus threshold learning outcomes (TLOs) for specified awards. The Science TLOs (Jones, Yates and Kelder, 2011), constructed as part of LTAS, are a set of five statements that describe the minimum learning outcomes for a Bachelor of Science graduate. They are high-level learning outcomes, applicable across the range of sub-disciplines within science and mathematical sciences.

This paper explores the elaboration and contextualisation of the original Science TLOs by science-related sub-disciplines. To date, seven sub-disciplines have adapted the Science TLOs to create threshold learning outcomes for their graduates. The first group of projects began shortly after the LTAS Project: biomedical science, biology, chemistry, mathematical sciences and physics. A more recent group, Agriculture and Environment & Sustainability focus more on application and relationship to other forms of knowledge. All these projects have employed an integrative process, emphasising shared leadership and collaboration in the development of discipline-specific TLOs. Construction has fostered peer networks that now provide national leadership of disciplinary pedagogy.

Comparison of the original Science TLOs with the sub-discipline learning outcome statements shows, first, that the Science TLOs are robust in translation to more specific disciplinary contexts. This is most likely attributable to the comprehensive consultation during the original LTAS project. Secondly, all disciplines have included new elements or further elaborated the original Science TLOs. These adaptations can be grouped into three categories: additional ways of thinking not specifically included in the Science TLOs, further specification of particular Science TLOs and introduction of (sub)disciplinary-specific knowledge and skills.

The scholarship of integration encompasses connections across sub-disciplines that shape a 'more coherent and integrated use of knowledge' (Hofmeyer, Newton & Scott, 2007: p. 3). From this case study we conclude that over-arching disciplinary learning outcomes adapted through consultative collaboration across the disciplinary spectrum can be successfully contextualised to a specific sub-discipline while retaining clear connections to the original consensus statement. We further conclude that learning outcomes will continue to evolve as new areas of specialty emerge, particularly in the multidisciplinary space.

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## Session F7

Paper

### LEADING NEW COURSE INNOVATION AND DEVELOPMENT: CONTEMPORARY CHALLENGES IN AUSTRALIAN BUILT ENVIRONMENT EDUCATION

David Jones<sup>1</sup>

*1 Deakin University*

Leadership in the academy can take on many forms and manifestations. While most leadership drives policy and structural change retrofitting existing university teaching and learning infrastructure and or micro-level units and course themes, little research has examined change and the learning and teaching complexities of involved in new course 'package' invention. This paper considers the challenges in the design, internal accreditation and development of new courses in the planning and landscape architecture disciplines in Australia, together with major renovations in the architecture, landscape architecture and planning disciplines in ensuring both internal and external learning, teaching and operational compliance. While much of the academy operates within university policy and Australian Qualification Framework (AQF) compliance expectations and requirements, these disciplines are additionally professionally and economically dependent upon external policy and accreditation compliance with their respective professional institutes. In part, several were also learning and teaching outcome policy-expectation and criteria in advance of the drafting of AQF standards, as previously noticed by the former Australian Learning & Teaching Council (ALTC). Drawing upon first-hand examples at RMIT, Adelaide, TSIT, UTS, Canberra and Deakin universities, this paper considers and offers directions as to the complexity of leadership, course structural strategies and formulation, the necessary infrastructure and dis-infrastructure issues, and outcome creations for new built environment course 'packages'. Implicated in this analysis is a translation of the role, standards, and evaluative criteria of the Australian Institute of Architects (AIA) and respective state architects' registration boards, the Australian Institute of Landscape Architects (AILA) and the Planning Institute of Australia (PIA).

This paper is relevant to the ISSOLT because it offers, in contrast to unit, thematic and sweeping examinations of teaching and learning, an upper-level perspective about the pedagogical, market comprehension, scholarship strategies, and internal and external hurdles involved in new course design and scaffolding, and major course renovations in the built environment sector. Apt in this discourse is the desire to incorporate and advance design-informed scholarship, scaffolding quality teaching and learning environments, bringing to bear and enhance design-based research inquiries and approaches, the formulation of course structures that promote and enshrine cross-disciplinary collaboration of students and staff, the parallel external professional accreditation requirements, and the incorporation of applied learning to align with and confirm to built environment education agendas and structures to comply with both internal and external accreditation regimes. And, therefore, what leadership and the support mechanisms that are necessary to enable quality and creative outcomes through these internal and external accreditation and policy expectations and processes.

## Session F8

Symposium

### PUTTING THEORY TO WORK IN LEADERSHIP FOR SOCIAL EQUITY

Sue Webb<sup>1</sup>, Jeffrey Brooks<sup>1</sup>, Penny Jane Burke<sup>2,3</sup>, Jane Wilkinson<sup>1</sup>, Peter Lawler<sup>4</sup>

*1 Monash University, Australia*

*2 University of Roehampton, UK*

*3 University of Newcastle, Australia*

*4 University of Manchester, UK*

This symposium considers how we use theory and what theories we draw on to understand the work of leadership for social equity in learning and teaching in schools and universities. Drawing on a range of funded research projects on institutional and/or curriculum change in education in different countries, the symposium will consider how theory has been put to 'work' in leading learning and teaching for social equity. Arguably, successful organisational change requires an understanding of the policy context and environment in which the organisation is located, as well as an understanding of how the institution is organised, structured and understood by those engaged in its practices. This symposium argues that we need to make explicit the theorisations and conceptualisations that inform our understandings because as Rizvi and Lingard (2011) argue neoliberal imaginaries have linked the purposes of education to the market and rearticulated the meaning of social equity. In leading change and enacting practice in learning and teaching, contemporary professionals are caught betwixt and between the 'economy of performance' (typically manifesting as the audit and market culture) and the 'ecologies of practice' (or the various professional dispositions and identities collectively and individually developed through practice) (see Stronach et al. 2010). Therefore, there is a need to reveal the radically different ways social equity and institutional change might be thought about and practiced if we wish to make a difference to practice and the economy of performance.

Three papers investigating different aspects of institutional change present different theoretical and conceptual understandings of organisations and equity. The studies include:

- \* Educational Leadership and Racism: How Practice is Undermined by Racism;
- \* Formations of Gender, Emotion and Higher Education Pedagogies;
- \* A Struggle to Keep Up: Strategic Management of Widening Participation in Higher Education.

The three studies are drawn from Australia, England and the United States. Jeff Brooks draws on the concepts of leadership and (mis)leadership in relation to race in American high schools in order to identify theoretical and methodological insights for analysing institutional leadership in school settings. Penny Jane Burke, who is researching in both Australia and England, brings the lenses of feminist theory and critical pedagogies to the analysis of equity in the shifting landscape of learning and teaching in higher education. Sue Webb discusses the institutional struggle to widen participation in a highly selective entry research-intensive university in England. She draws on Bourdieu's theory of practice to understand tensions and contradictions in the learning and teaching practices and identities of professionals from across different positional levels in the institution in this policy enactment.

The discussant, Peter Lawler, Director of the University College, University of Manchester, UK and Chair of the Universities Network for Curriculum Broadening, a network of university

leaders engaged in curriculum change in the UK and Europe, will reflect on the ways the different presenters' understandings of leading learning and teaching change in organisations might 'work' for him and his colleagues.

### Session F9

Symposium

#### THE SCHOLARSHIP OF ACADEMIC INTEGRITY AND MISCONDUCT IN TIMES OF CHANGE

**Debra Bateman<sup>1</sup>, Wendy Sutherland-Smith<sup>2</sup>, Michele Ruyters<sup>1</sup>, Anne-Lise Ah-Fat<sup>1</sup>, Laurel Mackenzie<sup>1</sup>, Sonia Martin<sup>1</sup>**

*1 MIT University*

*2 Deakin University*

This symposium focuses on the important themes of Academic Integrity and Student Misconduct, amidst changing times and contexts in Tertiary Education. Drawing upon a range of scholarly initiatives, interrogated and implemented in a large interdisciplinary setting, each of the presenters problematises aspects of their local data in relation to the identification and management of referrals of students to hearings and then subsequent penalties or counselling. Through narrative methodologies, presenters unpack the policy and practical implications of increased access to information, and blurring of what is acceptable to be sourced as a scholarly reference, the presenters will argue for increased scholarship and professional learning in these areas.

The specific questions which guide the presentations and discussions, consider:

1. How is the concept of original thinking and acknowledgement of ideas an innate part of how we understand Academic Integrity?
2. How do we think about academic literacies and requirements amidst changing and diverse student cohorts?
3. What are the literacy demands and knowledge bases required of academic staff and students in navigating a global information economy?
4. What are the tensions and contradictions existing amongst institutional policies and processes?

This symposium intends to navigate the complexities associated in the people and processes associated with matters of Academic Integrity and Misconduct. Presenters will draw upon the texts they have produced to scaffold staff engagement in this topic, and renew the orientation of this work from risk mitigation to capacity building and scholarly discussion around what it means to be academically literate.

In response to each presentation, the discussant will facilitate an activity or discussion, such as an interpretation of data or moderation of materials previously presented at a hearing, to provoke reflection and collegiate contrasting of institutional practices.

Title of each individual's presentation:

1. 'Teaching' Turnitin Anne-Lise Ah-Fat and Debra Bateman
2. What you bring to Turnitin Laurel MacKenzie
3. CCTV:Matters of Collusion, Collaboration and Trust Debra Bateman, Laurel Mackenzie
4. Academic judgment, administrative processes and policy shifts Michele Ruyters, Sue West, Anne-Lise Ah-Fat

### Session F10

Paper

#### CASE STUDIES IN INNOVATIVE TEACHING: TABLET TECHNOLOGY IN THE EAP CLASSROOM

**Kay Gallagher<sup>1</sup>**

*1 Zayed University, United Arab Emirates*

This paper investigates how innovative teachers use tablet technology to enhance teaching and learning in an English for Academic Purposes (EAP) program in the United Arab Emirates (UAE), an emerging centre for technology-enhanced pedagogy. Described by Prensky (2012) as some of the most useful learning tools that have ever been available, the use of tablets as a pedagogical tool is premised on the belief that 1-to-1 mobile learning increases individual student motivation and engagement (Dahlstrom & Warraich, 2012; Shepherd & Reeves, 2011), two factors which have frequently been identified as barriers to effective learning in the Arabian Gulf region (Alsheik & Elhoweris, 2011; Khamis, Dukmak & Elhoweris, 2008).

Taking a multi-teacher case study approach, the paper focuses on the practices of expert teachers who are advanced users of tablet technology in an intensive language program which prepares students for future university study through the medium of English. Case study (Yin, 2013) has been characterised as an appropriate method for studying educational innovation in general (Stake, 1995; 2000), and for studying technology-enhanced pedagogy in particular (Sembi, 2102). Case study method harnesses naturally occurring sources of knowledge (Hyett, Kenny & Dickson-Swift, 2014), in this case the day-to-day work of innovative instructors in the classroom, and the researcher's routine access as a program leader to their instructional practices. Standard ethical protocols have been observed in the use of data from classroom observations, and from follow up interviews with instructors.

Borrowing from Appreciative Inquiry (Cooperrider, Whitney & Stavros, 2008), the aim is to seek out the best of what is to help ignite the collective imagination of what might be (Cooperrider, Whitney & Stavros, 2008, p. xi). Driven by Hutchings' (2000) taxonomy of questions for SoTL research (What is, What works? What can be?, and What can this contribute to theory?), two questions underpin this investigation:

\*What innovative pedagogical practices do expert instructors employ in the EAP classroom, using tablet technology?

\*What contribution can such practices contribute to the development of the teaching and learning of EAP?

Results from the study indicate that tablet technology is being used innovatively in a number of areas that are germane to the developmental needs of learners of English for general academic purposes. This paper focuses in particular on three specific areas where tablets are transforming EAP pedagogy: a) online feedback and collaboration on writing b) integrated language skills development through digital project-based learning, and c) gamification of vocabulary learning. By locating and disseminating instances of such transformational classroom practice, exemplars are offered that other practitioners might wish to emulate. In so doing, the paper contributes to the emergence of a technology-enhanced pedagogy for the teaching and learning of EAP.



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## Session F10

Paper

### **SCHOLARSHIP OF TEACHING FOR TRANSITIONS: BUILDING A RESOURCE AND IMPACT ON PRACTICE**

**Bettie Higgs<sup>1</sup>**, Catherine O'Mahony<sup>1</sup>, Donna Alexander<sup>1</sup>

*1 University College Cork*

Navigating the pathways in, through and out of higher education can be challenging for students, as well as a challenge for those who teach them. In Ireland, a nationally-funded research project focusing on mapping 'Scholarship of Teaching for Transitions' has been undertaken to uncover and disseminate existing scholarly resources. This is one of a series of projects funded by the Irish National Forum for the Enhancement of Teaching and Learning that focuses on the Scholarship of Teaching and Learning. The purpose of this research is to provide recommendations on how we can leverage scholarship to have greater impact and inform current and future practice that is, to underpin practice with scholarship. Collaboration between the funded projects has allowed a rich picture to emerge.

The methodology used is a systematic review, based on searching standard databases, and the production of an annotated bibliography. The systematic review was supplemented by key authors that were known to the wider research team and external experts. Viewshare, an open access tool for researchers available from the U.S. Library of Congress, is being used to facilitate flexible multi-field searching and sorting of data. In addition, three focus groups were held with academic staff, students and central services, to help gain insights into the impact of scholarship on the practice of teachers in relation to key transitions in the student journey. The outcomes of these focus groups enhanced the evidence base.

Many questions can be asked of the database constructed. This presentation will focus on what was uncovered in national and international scholarship relating to 'pedagogies of transition'. Which pedagogies are used, studied and promoted? What counts as pedagogy and what as 'activity'? Which countries are leading the way? The answers are complicated, and the resource is enriched, by the distinctiveness of disciplinary cultures and the diversity of pedagogies used to aid entry and exit pathways. Interestingly, a proportion of the scholarly work uncovered refers to transitions in the teacher's journey and the perception of adapting to continuing change (including policy changes, national and international drivers, transitioning to the digital classroom, growing internationalisation, and calls for greater accountability and professional development).

The presentation will also focus on the robustness and suitability of the methodology in capturing a snapshot of scholarship of teaching for transitions, an overview of effective pedagogies for supporting student transitions, and the potential impact that a scholarship of teaching for transitions can have. A demonstration of Viewshare will be carried out. Participants will be invited to access the resource and provide feedback. The open access annotated database is available for colleagues wishing to undertake their own research on teaching for transitions or to inform the development or revision of policies and practices based on supporting changes in the students journey.

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## Session F10

Paper

### **DISRUPTION AND CHANGE - INTRODUCTION OF**

## **BLENDED LEARNING IN THE STUDIO SPACE**

**Karin Oerlemans<sup>1</sup>**, Andrew MacKenzie<sup>1</sup>

*1 University of Canberra*

University programs are under pressure to adopt blended learning technologies into design education studios, almost exclusively taught in face-to-face modes in Australia. The implications of the increased use of blended learning include new methodologies, time pressures, and changing student and staff expectations. Similarly, the digital creep in technologies extends - not just for digitising drawings and project work-but also for instructions, marking, feedback, and quality compliance. In this paper we explore the use of technologies in the studio space, the use of digital tablets and touch screen technology, and the use of online rubrics within a learning management system to give students feedback.

Research suggests feedback is the most powerful method of engaging with students, and can be used to improve learning (Hattie and Timperley 2007, Hattie 2009). But other research seemingly contradicts this finding and states that students actually seldom access their feedback and learn very little from it for a number of reasons. These included a lack of understanding, relying on their memory of what was said, and because they are more focussed on their grades than on the feedback (Carless 2006; Higgins 2000; Weaver 2006). More recent research by Blair and associates (2012) suggests that immediacy of feedback in written form, timely and accessible, and using a wider range of feedback mechanisms would enhance the student learning experience.

Using an action research approach (Stringer, 2013), the paper describes a small pilot study conducted in first year design studio, conducted in 2014, the pre-cursor of a larger whole cohort study in 2015 that will include all design studios on the use of online rubrics for feedback and e-portfolios as an assessment tool. For the pilot study we collected information on students' access to their e-portfolios, their feedback and their final grades from the LMS to discover if the use of the online rubrics had an effect on student's final results. We then also surveyed the students and asked them to report on their behaviour for using feedback and whether they felt it changed their submissions. Finally, we interviewed studio teaching staff, and sought their views on the use of technology to give feedback, rather than relying on more traditional methods. And we asked, what affect did they believe the use of the technology have on their practice in the studio space and their engagement with students.

Outcomes showed that the level of access and views of feedback online declined over the semester, and students indicated in the survey that they valued face-to-face feedback in the studio environment. Yet, despite this, a correlation analysis of the views of feedback with the final results showed that those students who accessed and viewed their feedback online over the semester achieved a better outcome for the final assessment. Whilst a critical reflection on the findings from tutor comments showed a need for them to be more intentional in instructing students of the value of online feedback to improve their practice in studio.

Findings from the pilot are being used to inform changing practice in other studio units. The opportunity exists for ISSOTL conference participants to offer feedback on the generalisability of the findings in design education. The larger

research project will continue to explore these findings and further refine the use of technology and online feedback in studio assessment and will be reported in future papers.

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### Session F11

Paper

#### **FORMATION BY DESIGN: INTEGRATING WIDER LEARNING OUTCOMES INTO TEACHING, LEARNING AND INSTITUTIONAL CHANGE**

**Randall Bass<sup>1</sup>, Daniel Bernstein<sup>2</sup>**

*1 Georgetown University USA*

*2 University of Kansas USA*

This proposal links two papers together as complementary perspectives on how a broader more holistic approach to learning ('formation') can be effected at both the level of teaching and learning, as well as institutional strategies for renewal and reinvention.

(1) 'Designing the Future(s) of the University around formational outcomes (Bass) addresses the broad concept of formation and its role in an institutional change context at Georgetown University that is using 'institutional design' to reinvent core educational models and practices of a selective research university. At the heart of this process is the identification and activation of a set of wider outcomes that are being applied at multiple levels, from student intake data to curriculum redesign to assessment strategies. The five broad outcomes are: Learning to Learn, Well-Being, Resilience, Empathy, and Integration. These outcomes informed one major institutional instrument as well as evaluation practices crossing academic and student affairs. The instrument and implementation will be described along with first-year data. The final portion of this paper will put these measures in the context of a major institutional effort at reinvention that engages a wide range of stakeholders in a distinctive institutional design process.

(2) "Designing learning opportunities that develop students' ability to demonstrate skills and understanding integrated with whole-person goals" (Bernstein) addresses the challenges of providing students with a range of learning opportunities that will enable them to develop and demonstrate the formational outcomes. While most faculty members are familiar with a range of learning activities that yield reasonable performance on traditional measures of cognitive understanding, there is much less experience with helping students acquire the understanding implied in full formational development. Given that many of the goals of the formation program are outside the particular fields of the instructors (or at least across multiple fields), instructors will need to undertake a new form of "backward design" to construct courses targeting the formation program goals. As a first step the instructors will need to understand personally the five broad outcomes of the program, and explore how those characteristics intersect with or are instantiated within their own field of knowledge and understanding. Just as with courses having a disciplinary goal, it will be important to distinguish between being competent about the knowledge that will be used in performing the goal and being able to take advantage of both knowledge and interdisciplinary habits of mind to enact the outcomes.

This paper will unpack an example of how formational goals might be integrated into a psychology course, beginning with designing indicators of success to complement the larger program-based assessment instruments. Using the basic insights of backward design, the paper will identify what forms of practice are feasible to include in course-based learning that could receive feedback and develop in an iterative fashion. The

example will include community engaged learning along with up-to-date forms of on-campus learning, demonstrating how important it is to analyze complex performances as aggregates of component parts that can be identified and developed individually.

See: Bass, et. al., Formation by Design: Progress Report. Georgetown University.  
<https://futures.georgetown.edu/formation/>

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### Session F11

Paper

#### **CLARA-FYING LEARNING - DEVELOPING THE LEARNING POWER OF SCIENCE STUDENTS USING GROUP COACHING AS A NOVEL STRATEGY FOR LARGE SUBJECT SCALING**

**Alison Beavis<sup>1</sup>, Georgina Barratt-See<sup>2</sup>, Andy Leigh<sup>1</sup>, Peter Meier<sup>1</sup>, Simon Buckingham Shum<sup>3</sup>, Ruth Deakin Crick<sup>3,4</sup>**

*1 Faculty of Science, University of Technology, Sydney*

*2 Student Services Unit, University of Technology, Sydney*

*3 Connected Intelligence Centre, University of Technology, Sydney*

*4 Faculty of Arts and Social Science, University of Technology, Sydney*

Building learning power is critical for fostering the lifelong learning skills of students, ensuring they are equipped to embrace complexity and evolve as resilient, self-aware and assured learners. This journey often starts with engaging students in an exploratory discourse about learning using a reflective, self-assessment questionnaire. The Crick Learning for Resilient Agency (CLARA) questionnaire tool was selected for this purpose and implemented into a large enrolment (n=770), first-year science subject at an early point in the semester. The CLARA tool reports on eight identified dimensions: curiosity, creativity, sense making, belonging, collaboration, hope and optimism, mindful agency and openness to change. These dimensions represent the essential personal dispositions that allow students to engage deeply as learners (Deakin Crick et al., 2015). The results of the questionnaire are presented on a profile chart as a visual representation of learning power.

Following the questionnaire, a coaching conversation is conducted to create the 'pace' for students to identify their unique sense of identity as a learner and to begin to 'own' their learning journey and formulate a particular purpose or desired outcome. The coaching conversations are a critical post-questionnaire activity as students are encouraged to embrace learning power as being malleable. However, the typical approach involving individual conversations are a time consuming activity at scale, limiting the implementation in large enrolment subjects.

In this project we explored group coaching conversations utilising trained mentors as a viable strategy for achieving scalability. Second and third year science students were recruited as mentors and trained in the fundamentals of mentoring, and more extensively in the CLARA tool and the website we designed to support both mentor and student self-guided exploration of the learning dimensions. The training workshops were centred on preparing mentors for guiding a group conversation about the learning profiles of fictional students generated by the project team. The purpose of using fictional profiles was to remove any potential anxiety students may feel if asked to explore their personal learning profile in a group environment. The fictional profile discussion was designed as an initial step for preparing students to then feel empowered to engage in a self-guided exploration of their

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own profile. The profiles also made it manageable and safe for the mentors, to avoid burdening them with potentially complex 1:1 coaching.

In this presentation, we will report on the outcomes from this pilot study including how the CLARA learning profiles have been used to shed light on how students come to learn, with this new insight informing our preparation of targeted resources and activities that are relevant and contextualised for science students. The outcomes of the group coaching conversation will also be explored and we believe the outcomes of this approach will inform practices associated with scaling the use of the CLARA tool for large class sizes.

Reference

Deakin Crick, R., Huang, S., Goldspink, C. & Shafi, A. (2015, In Press). Developing Resilient Agency in Learning: The Internal Structure of Learning Power. *British Journal of Educational Studies*.

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## Session F11

Paper

### LEADING AND CHANGING LEARNING THROUGH ENGAGING STUDENTS IN RESEARCH-BASED EXPERIENCES

Angela Brew<sup>1</sup>, Lilia Mantai<sup>1</sup>

*1 Learning and Teaching Centre, Macquarie University*

Questions and Rationale: What does the future hold for our teaching, our learning and our students? Growing interest and practice internationally in engaging undergraduates in research addresses the need to prepare students for professional life when knowledge is uncertain and the future is unclear. However, it challenges institutions to change how students, teachers, and professional staff collaborate and presents opportunities for academics to implement new forms of student learning.

Benefits to students have been well documented in the literature. They include personal and professional skills such as: increased confidence; intellectual development; critical thinking and problem solving skills (see eg, Laursen et al, 2010; Lopatto, 2006). There is evidence that research experiences have high impact in engaging students (Kuh 2008). However, while there is considerable research on students' responses, research on institutional challenges is less well developed. Our research therefore addresses:

\* How academics work to implement research-based undergraduate experiences?

\* What are the challenges and barriers to doing so?

Theory and Methods: This paper reports on a study of academics' experiences of implementing research-based experiences for undergraduates both within and outside the curriculum. Academics work to implement new pedagogies within particular institutional contexts. As such, they interpret the situations they find themselves in as constraining or enabling. Following Archer, this paper focuses on understanding how, 'in the light of their objective circumstances' (Archer, 2003: 5), individuals' perceived constraints and enablements affect their capacity to effect change; specifically, how they implement research-based experiences for students.

Semi-structured interviews with twenty academics from different disciplines in a large research-intensive Australian university explore academics' experiences and perceived challenges. Recognising that decisions are made at a number of different levels, perceptions of senior and more junior faculty have been sought. Interviews have been transcribed

and analysed thematically.

Outcomes: Findings demonstrate what facilitates change and what constrains or discourages it, offering new insights about the experiences, value, benefits and challenges of implementing research-based experiences for students. Specifically, how time is structured and workloads calculated are important to how teachers respond and adapt to this evolving learning paradigm. Also important is how physical and virtual spaces are arranged. How academics define undergraduate research and their attitudes to its benefits appear to determine what they seek to do. Negative or uninformed attitudes provide the greatest challenge to implementation. Some practices have involved undergraduates engaging in scholarship of teaching and learning projects. The implications of this are also explored.

Reflective Critique: We ourselves have been working to implement undergraduate research experiences. Our critical reflections have played an important part in setting up the study and in analysing the data. Our concern is to assist the university to move forward so our reflective critique is important.

Audience Engagement: We will invite participants to reflect on and share their own experiences. These reflections will inform the next stage of the study in interviewing academics in other universities.

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## Session F12

Paper

### A WHOLE INSTITUTIONAL APPROACH TO CURRICULUM REFORM; FLIPPING PRACTICE

Alastair Robertson<sup>1</sup>

*1 Abertay University, United Kingdom*

Teaching and learning in higher education is going through a period of significant transformation driven by changes to university funding, increased student diversity, increased demands from learners and policymakers for increased flexibility and choice, significant advances in technology and, critically, the evolving global context and complex challenges faced by society. Abertay is a modern Scottish University but with a long history of educating students; it was founded as the Dundee Technical Institute in 1888 and gained University title in 1992. With a reputation for developing innovative, exciting courses, Abertay has become well-known internationally in the fields of computer games technology, computer arts, environmental management and biotechnology. There are approximately 4500 undergraduate students and 200 academic staff across the four Schools.

Although examples of good practice and scholarship have always existed at Abertay, over the course of the last two years, the university has taken a much more joined up strategic approach undergoing transformational change in its learning, teaching and assessment policies and practices, driven by the University's new Teaching and Learning Enhancement strategy (2013). This strategy aims to maintain and improve the university's future competitiveness and distinctiveness, supporting fresh ideas, facilitating a systemic change in practices and engendering an institutional culture which embraces the changing context. The three key strategic objectives are: 1) reforming our curriculum", 2. "Incentivising student performance" and 3) "raising the status of teaching".

This paper presents the philosophy behind the new TLE strategy and the accompanying pedagogic model which has been informed by contemporary academic literature and a range of strategic drivers including the changing nature of higher education, Government policy, demands from learners,

demands from employers and advances in technology. The strategy is mid implementation, however, reflections on the strategy's development and change management approach so far will be presented along with details of key features of the strategy's subsequent implementation including:

- \* Whole institutional curriculum reform including portfolio review
- \* New suite of interdisciplinary electives
- \* New set of Abertay Graduate Attributes founded upon the four dimensions of "Intellectual", "Professional", "Personal" and "Active Citizenship"
- \* New Assessment policy and literal grading scale (including GPA)
- \* New staff-centred approach to Continued Professional Development, accredited by the Higher Education Academy (HEA)
- \* Supporting a strong institutional-wide community of practice (Network for Teaching and Learning Enhancement, NetTLE)
- \* Building capacity for scholarship in teaching and learning, including involving undergraduate students as pedagogic researchers

This is a live case study and the full impact of the new strategy is not yet realised, however, it is clear that although there was recognition of the need for transformational change and it has been broadly welcomed across the institution, the extent and subsequent pace of implementation has presented some challenges, particularly amongst academic staff. As a result, curriculum reform for some of our provision has been more incremental, to date, than originally hoped.

The audience will be asked to reflect on recent changes and processes adopted within their institution and to share their experiences during discussion.

Keywords

Strategy, curriculum reform, assessment, CPD, communities of practice

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## Session F12

Paper

### UNIVERSITY-WIDE CURRICULUM TRANSFORMATION AND EPORTFOLIO IMPLEMENTATION: CLOSING THE SOTL LOOP FROM EARLY ADOPTION TO INSTITUTIONAL EMBEDDING

Sarah Lambert<sup>1</sup>, Marcus O'Donnell<sup>1</sup>, Margaret Wallace<sup>1</sup>

*1 Learning, Teaching, Curriculum, University of Wollongong*

The University of Wollongong's (UOW) Curriculum Transformation Project (CTP) is centered around three curriculum design principles: Transition; Synthesis; and Broadening. Developed through a consultative research process with UOW academics these principles are heavily influenced by the stream of SOTL which highlights, what Barnett (2008) calls an 'ontological turn' a focus on student being and becoming to foster the necessary skills for an age of 'super complexity'. These principles link to four curriculum themes that characterise the UOW student learning experience as one that is intellectually challenging, research/inquiry led, technology enriched with a real world focus. This rich learning experience is delivered through five transformational practices: a focused first year experience; integrated whole-of-course eportfolios; connections subjects which explore intercultural/interdisciplinary perspectives; hybrid learning strategic combinations of face-to-face, online and blended learning; and a capstone experience for every course. These approaches align with an extensive body of research on what best delivers

engaging student experiences and relevant lasting impact (Huber and Hutchings 2004; Kuh 2008). This emphasis on curriculum as a framework for student experience rather than on disciplinary content, marks our commitment to life-long and life-wide learning as an active, investigative and reflective process. ePortfolio is a lynch-pin in this approach. Early UOW ePortfolio practice and scholarship highlighted opportunities and challenges with student and staff engagement with ePortfolio and a preference for an institutional approach (Lambert 2006, Lambert 2007). This led to UOW involvement in the first national ePortfolio project (Hallam et al 2008). However at the time UOW did not have the institutional framework to support widespread implementation. This paper reports on a recent university-wide consultation process, including a staff and student survey, exploring expectations and readiness to engage with ePortfolio in an institutionally supported way guided by CTP principles. This research simultaneously sought to explore technical options and needs, understand attitudinal and resource barriers to implementation and develop a broader understanding within the academic community of ePortfolio as a process-oriented pedagogy rather than a technological-driven solution. As such it presents a narrative of the local evolution of ePortfolio scholarship within an institution as it negotiates the move from early adopter enthusiasm to institution-wide implementation.

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## Session F13

Paper

### ENHANCING THE SCHOLARSHIP OF TEACHING AND LEARNING THROUGH INTEGRATED NETWORKS OF PRACTICE

K. Lynn Taylor<sup>1</sup>, Natasha Kenny<sup>1</sup>, Nancy Chick<sup>1</sup>

*1 University of Calgary, Alberta, Canada*

Using the University of Calgary (UCalgary), Alberta, Canada as a case study, this presentation will document the outcomes of how integrated networks of practice are being used as a framework for building capacity for teaching, learning and the scholarship of teaching and learning (SoTL) at a large, research-intensive post-secondary institution. UCalgary's ambitious Eyes High (2011) vision committed to "apply the same research and knowledge translation that we undertake in all research areas to create an exemplary teaching environment." The institution established a framework for developing a strong culture of practice, scholarship, and leadership for teaching and learning, encouraging the community to strengthen academic programs, enhance teaching practices, and enrich the quality of student learning through systematic, specialized and research-informed approaches. UCalgary has also established an institutional initiative to grow both scholarly teaching and the scholarship of teaching and learning

Core to the development of this initiative is sustaining integrated networks of practice. This developmental approach draws on research which suggests that educators have impactful conversations about teaching and learning with a few trusted colleagues (Roxå & Mårtensson, 2009), and that these small, significant networks are critical to building teaching and learning capacity. Roxå, Mårtensson, and Alveteg (2011) and Williams et al. (2013) suggest that one of the best means to create a culture of teaching and learning is to influence communication pathways, within, between and amongst these significant networks of practice. Kenny, Watson and Desmarais (in press) and Williams et al. (2013) highlight how educational development programs and initiatives can foster integrated networks of practice to enable the scholarship of teaching and learning through multiple levels.



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To date, literature related to creating integrated networks of practice has remained largely theoretical. This case study will offer specific examples of how this theory has been put into practice, as well as a preliminary evaluation of the effectiveness and impact of this implementation at a large, research-intensive institution. The presentation will equip participants to develop integrated networks of practice to support the scholarship of teaching and learning in their specific institutional contexts.

Kenny, N., Watson, G. P. L., & Desmarais, S. (in press). Building Sustained Action: Supporting an Institutional Practice of SoTL at the University of Guelph. *New Directions for Teaching and Learning*.

Roxå, T., & Mårtensson, K. (2009). Significant conversations and significant networks—exploring the backstage of the teaching arena. *Studies in Higher Education*, 34(5), 547-559.

Roxå, T., Mårtensson, K., & Alveteg, M. (2011). Understanding and influencing teaching and learning cultures at university: a network approach. *Higher Education*, 62(1), 99-111.

Williams, A. L., Verwoord, V., Beery, T. A., Dalton, H., McKinnon, J., Strickland, K., Pace, J., & Poole, G. (2013). The power of social networks: A model for weaving the scholarship of teaching and learning into institutional culture. *Teaching & Learning Inquiry*, 1(2), 49-62.

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## Session F13

Paper

### **SOTL AS THE SIGNATURE PEDAGOGY OF EDUCATIONAL DEVELOPMENT**

**Peter Felten**<sup>1</sup>, Nancy Chick<sup>2</sup>

*1 Center for Engaged Learning, Elon University*

*2 Taylor Institute for Teaching and Learning, University of Calgary*

Our interactive presentation will consider educational development through the lens of Shulman's notion of signature pedagogies, or teaching that reflects "the personality of a disciplinary field—its values, knowledge, and manner of thinking—almost, perhaps, its total world view" (2005). We argue that the scholarship of teaching and learning (SoTL) is the signature pedagogy of educational development.

Drawing on Felten's (2013) five principles of good practice in SoTL, we will explore how effective educational development shares SoTL's deep structures:

1. Although their proximate focus is on teaching, both are ultimately aimed at student learning.
2. Both are grounded in but not limited to their specific contexts. Educational developers and SoTL practitioners are responsive to their institutional needs and contexts. They also bring "cosmopolitan" perspectives and experiences to their institutions (Bernstein, 2013), translating what's shared within the larger scholarly community to local circumstances. Both are also attentive to the contours of specific disciplinary contexts (Chick, Gurung, & Haynie, 2009; Taylor, 2010).
3. Both use intentional and systematic methods, ranging from their "scholarly foundations" (Poole and Iqbal, 2011) to assessments based on rich and varied types of evidence.
4. Both are ideally, but too rarely, conducted in partnership with students (Healey, Flint & Harrigan, 2014; Cook-Sather, Bovill & Felten, 2014).
5. Finally, as the professionalization of teaching and learning (Shulman, 1999), both SoTL and educational development are shared publicly at on- and off-campus events, as well as through peer-reviewed publications.

Just as Shulman's signature pedagogies framework does for traditional disciplines, this analysis aligns the teaching practices of educational development with its ways of knowing, doing, and valuing—and thus suggests how the full integration of SoTL into educational development would create a more proactive, evidence-based, and theorized field.

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## Session F13

Paper

### **DEVELOPING, PILOTING AND EVALUATING A COLLABORATIVE SYSTEM TO PROMOTE INNOVATION IN THE AUSTRALIAN AND UK HIGHER EDUCATION SECTORS; FOCUSING ON THE REWARD AND RECOGNITION OF TEACHING**

**Patrick Crookes**<sup>1,2,3</sup>, Steve Outram<sup>4</sup>, Sara Booth<sup>5</sup>, Fabienne Else<sup>6</sup>

*1 Faculty of Science, Medicine and Health, University of Wollongong*

*2 (Visiting Prof) Faculty of Health & Social Sciences, University of Huddersfield*

*3 (Visiting Prof) School of Nursing, University of Stavanger, Norway*

*4 Higher Education Academy (UK)*

*5 University of Tasmania*

*6 Faculty of Science, Medicine and Health, University of Wollongong*

This paper will provide a commentary of a significant international collaborative project, to set up an effective system for promoting innovation in the Australian Higher Education sector. The project became the pilot Transforming Practice Programme (TPP) which was run in Australia in 2014 by the first named author. The TPP can be seen to be a fairly sophisticated (and effective) Knowledge Translation methodology.

The pilot TPP was influenced heavily by the UK's Higher Education Academy's (HEA) Thematic Change Programmes and benefited hugely from the support of HEA staff, in particular, the second author. The pilot TPP was supported by the first author's secondment to the Commonwealth Government's Office for Learning and Teaching (OLT) in Australia. A condition of the secondment was that the pilot TPP must focus on 'enhancing the reward and recognition of good teaching in Australian Higher Education (HE)'. A recently signed MoU (2014) between the OLT and the HEA was a major facilitator of the project.

The proposed paper will explain the intention(s) of what was to become the TPP and how it was conceptualised and run in conjunction with the HEA in both Australia and the UK. Thirteen (13) Australian Universities/HE institutions took part in the pilot, whilst 9 UK universities took part in the UK version of the programme (The HEA's Thematic Change Programme Promotion, Process and Policy) in 2014. Having briefly detailed the content and process of the pilot TPP, the paper will then present details of feedback received via web-based surveys and formal interviews with TPP participants (ethics approval having been granted by the University of Tasmania) and close with some evidence-based conclusions as to what seemed to have worked in the pilot TPP and why. Some recommendations will then be made as to what people in other Higher Education sectors might learn from the pilot TPP.

We believe this paper will be of interest and utility to a wide range of people; from individual academics, through to academic developers and educational leaders and policy-makers. It is particularly pertinent to the overarching conference theme of Leading Learning and the Scholarship of

Change and to this theme in particular, because it will explore how institutional initiatives related to enhancing reward and recognition for teaching were successfully implemented and embedded in a number of HE institutions. It will also demonstrate that in some cases, such initiatives have been influenced and/or facilitated by high quality SoTL work. It will be seen that this project speaks to ways in which SOTL processes and outputs have been influential in changing practice at the institutional and sector levels, internationally.

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### Session F14

Paper

#### **CAPITAL A FOR ABORIGINAL PLEASE: CAN STUDENTS PERSPECTIVES BE TRANSFORMED IN A LARGE COMPULSORY INDIGENOUS AUSTRALIAN CULTURE AND HEALTH COURSE?**

Jonathan Bullen<sup>1</sup>, Helen Flavell<sup>1</sup>, Louise Austen<sup>1</sup>, Joanne Jordan<sup>1</sup>, Marion Kickett<sup>1</sup>, Julie Hoffman<sup>1</sup>

*1 Curtin University*

Teaching compulsory Aboriginal and Torres Strait Islander content to non-Aboriginal students is challenging (Gunstone, 2009) and its meaningful delivery to a large cohort of first year students increases the complexity (Flavell, Thackrah, & Hoffman, 2013). Most non-Aboriginal students knowledge of Indigenous Australians comes from the media often reinforcing negative and racist stereotypes reflective of Australia's colonial past and postcolonial present (Mickler, 1998); this, combined with a lack of adequate preparation of students to critically reflect on nationalist discourses such as egalitarianism and a 'fair go' means that Indigenous Australian content often presents a significant challenge to dominant Australian ideology. Students need to synthesise new, challenging information about Australia's formation as a nation state, and critically reflect on their racial and ethnic identity as part of developing their cultural capability. Within health disciplines, Aboriginal and Torres Strait Islander conceptualisations of wellbeing can also stretch students through questioning the biomedical model of health.

A course titled Indigenous Cultures and Health (ICH) has been part of Curtin University's common interprofessional first year since 2011. Typically, the course has over 3,000 students annually (in both internal and external modes) and in 2014 the ICH team received a national teaching award from the Office of Learning and Teaching in recognition for teaching excellence. Up to date, over 11,000 students from 23 professions have completed the course. Anecdotal evidence as well as qualitative data from the university's online student feedback survey suggests that the learning experience is 'transformative' for the majority of students (Kickett, Hoffman, & Flavell, 2014). Key aspects of the course's success is the partnership model that underpins both the content and delivery; the course is taught and coordinated by Aboriginal and wadjela (European/white Australians) with input from community and Elders and jointly owned by Curtin's Faculty of Health Sciences and Centre for Aboriginal Studies (Flavell et al., 2013). This paper reports on a qualitative study that aimed to determine if, indeed, students did undergo a transformative learning experience and, if they had, how that manifest over the fourteen week teaching period. Mezirow's (2000) steps to transformative learning were used as the framework for a deductive and inductive (Bryman, 2012) analysis of 22 student reflective journal summaries submitted for assessment in week seven and fourteen of the teaching period. A key aim of the research was to better understand the stages of learning and to identify strategies to assist the process. For example, some wadjela students report feeling angry about being 'made to

feel guilty; if recognised and responded to appropriately this phase can be pivotal in the development of cultural capability. If, however, the tutor responds with annoyance or frustration at students' anger learning can stall. Findings from the qualitative analysis will be presented, as well as approaches to teaching compulsory Indigenous Australian content gained from experience in ICH and the literature. Attendees will be engaged in some of the learning activities used in ICH as a mechanism to create a 'disorientating dilemma,' which is a central pedagogical entry point for transformative learning.

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### Session F14

Paper

#### **DECOLONISING THE CURRICULUM: EMPOWERING BUILT ENVIRONMENT STUDENTS WITH INDIGENOUS PROTOCOLS AND KNOWLEDGE**

Darryl Low Choy<sup>1</sup>, David Jones<sup>2</sup>, Richard Tucker<sup>2</sup>, Scott Heyes<sup>3</sup>, Grant Revell<sup>4</sup>

*1 Griffith University*

*2 Deakin University*

*3 Canberra*

*4 University of Western Australia*

Built Environment and Planning graduates are often required to work with Aboriginal and Torres Strait Islander peoples. However, they do not always have sufficient understanding of Indigenous culture or protocols for working 'on country'. This paper will report on the findings of an Australian Office of Learning & Teaching-funded (OLT) project that sought to research and find practical solutions to this issue.

Universities have shown a commitment to ensuring graduate cultural competency, however, research conducted during the project has revealed that few have risen to the challenge. This paper will explain how the research team used a decolonising methodology to develop a comprehensive, nationally applicable resource that exposes students and educators to cultural systems and protocols for working with Indigenous Australians on their lands.

The research has been directed by a mostly Aboriginal team, and has been reviewed by Indigenous stakeholders around Australia. There are immediate impacts that result from this decolonising methodology. "Decolonising practices include reorientation away from problematising Indigenous peoples to a focus on strengths, capacity and resilience, and stress the importance of proper process, including allowing the time and opportunity to develop relationships and trust" (Sweet et al 2014: 626). It is a starting point for reconciliation as it recognises the self-determination of Indigenous peoples. This includes their rights to contribute to the production of knowledge within the academy and to the management of land.

This presentation will actively engage audiences by asking them to question their own knowledge of Indigenous Australia and expose the invisibility of whiteness. It will provide recommendations for addressing the lack of Aboriginal and Torres Strait Islander knowledges in built environment and planning curricula. Participants will also receive a copy of the teaching resource.

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## Session F14

Paper

### LEADING THE LEARNING OF GLOBAL JUSTICE: EXPLORING THE POTENTIAL OF AN INTERDISCIPLINARY, COMMUNITY-ENGAGED INQUIRY COURSE

Beth Marquis<sup>1</sup>, Abraham Redda<sup>1</sup>, Louise Twells<sup>1</sup>

*1 McMaster University*

Recent scholarship has emphasized the ways in which higher education can contribute to the pursuit of social and global justice in part by helping students develop their capacities to appreciate difference, recognize inequality, and engage in meaningful, well-founded social action (Adams, Bell, & Griffin, 2007; Shultz, Abdi, & Richardson, 2011). According to this view, colleges and universities not only have a responsibility to help students navigate a diverse and globalized world, but also must prepare students to participate ethically and responsibly in acknowledging and attempting to redress current injustices and inequities. This is a challenging task, however, and best practices for global justice education have not been fully defined. While several approaches have been proposed, including learning communities (Kingston, MacCartney, & Miller, 2014), study-abroad opportunities (Richardson, De Fabrizio, & Ansu-Kyeremeh, 2011), and contemplative pedagogies (Kahane, 2009), evidence of their efficacy is mixed.

Against this backdrop, our university recently developed a novel 'Global Justice Inquiry' course (authors, forthcoming). This course, which is housed in a small, interdisciplinary program but open to enrollment from students across campus, involves a wide range of faculty and community partners as members of the instructional team. Each week, one class session is facilitated by a guest faculty member or community partner who engages students in exploring a central justice issue (the right to water in the first iteration of the course) from a different disciplinary or experiential perspective. A second weekly session, led by the primary instructor, provides students with an opportunity to reflect on and integrate the perspectives presented. Students are also required to pursue self-directed inquiry into global justice topics with the support of alumni, faculty, and community mentors. As such, the course aims to help students develop knowledge and skills of relevance to global justice by bridging boundaries between disciplines, cultures, and constituencies (including the university and the community) and encouraging students to take responsibility for leading their own learning.

This session presents the results of a study that aimed to assess the experiences of students taking this class and to uncover the ways in which they understand and engage with global justice issues. A qualitative design, involving in-depth interviews with participants early in the course and after its completion, as well as close readings of student assignments, was employed. While not without its limitations (e.g., it does not permit us to directly observe the impact of the course on students' actions long-term), this approach allowed us to gather rich data about the ways in which students' comprehension of and approach to global justice issues developed over the course of the semester. We will present preliminary findings from this study, and use these to initiate a facilitated discussion about the extent to which interdisciplinary, community-engaged, student-led pedagogies can contribute to the development of ethical, globally-responsible students. As such, we will engage attendees in exploring ideas closely connected to the conference sub-themes of engagement and diversity in the academy.

## Session F15

Paper

### TRANSFORMING LOCAL PRACTICE INTO A FORCE FOR CHANGE - WHY SCHOLARSHIP OF TEACHING AND LEARNING IN UNDERGRADUATE MATHEMATICS MATTERS

Joann Cattlin<sup>1</sup>, Deborah King<sup>1</sup>

*1 School of Mathematics and Statistics, The University of Melbourne*

More than ever before, modern society relies on the application of mathematics. The technology we use in daily life, advances in science and medicine, the mathematical models critical for tackling serious global challenges, including climate change and reducing the spread of infectious diseases, all fundamentally depend on mathematics.

In order to provide the skilled workforce required to meet these challenges, large numbers of graduates with high-level mathematical skills are needed. However, the number of Australian students studying advanced mathematics in senior secondary school has been declining for over a decade, shrinking the pool of potential candidates. The Chief Scientist and others have referred to this situation as a crisis, which threatens to undermine the Nation's scientific capabilities and economic future[1-3].

Tertiary mathematics educators, particularly those teaching first-year students, are keenly aware of the need to motivate students to continue their study of mathematics. A number of studies highlight how difficult this is due to many factors, including students' under-preparation for tertiary level mathematics study[4]. To address these challenges, academics develop new initiatives and innovative teaching practices at the local level, specifically for their own student cohorts, based on the particular circumstances of their own institutions[5-6].

Many innovations came to light during 2012-2014 when the First Year in Maths project (funded by the Office for Learning and Teaching) collected qualitative data about the teaching of undergraduate mathematics through semi-structured interviews at 26 universities in Australia and New Zealand. The project ran a series of events aimed at disseminating best practice and developing a network of first-year mathematics educators. While many individuals had assumed their problems were unique to their institutions, sharing of practice revealed that the challenges were broadly experienced, with many being sector-wide. With this new understanding, participants were keen to take advantage of opportunities provided through networking and sharing of information, which could lead to collaboration and dissemination of their initiatives.

A vibrant community of practice has now emerged, armed with an agenda for change within undergraduate mathematics education, built on the weight of evidence collected from local teaching initiatives. Many participants had not been previously engaged in scholarship of teaching and learning (SoTL) activities, since, as recent research by the authors shows, mathematics educators are more likely to ask a trusted colleague for advice about teaching practice, than they are to consult the literature [7]. Hence results of evaluations, outcomes and impacts of local initiatives are rarely reported in scholarly literature or shared beyond the institution.

This young community, representing mathematics educators from across Australia, has already made an impact on tertiary mathematics education through shared projects, competitive grants, attracting media attention to the issue of 'assumed knowledge', and has established strong connections with important national peak bodies in mathematics, science and education. These advancements show that dissemination of

local activities through networking and collaboration is a powerful force for change and the development of SoTL in undergraduate mathematics is a critical component in growing local initiatives.

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### Session F15

Paper

#### MARKING MODERATION IN A SCIENCE VOCATION

Rosanne Coutts<sup>1</sup>, Kade Davison<sup>2</sup>, Louise Horstmanhof<sup>1</sup>, Jim Lee<sup>3</sup>, Maarten Immink<sup>2</sup>

*1 Southern Cross University*

*2 University of South Australia*

*3 Charles Darwin University*

**Literature:** In a climate of standards-driven quality review, universities need to ensure that assessment practices are reliable. Benchmarking provides a basis for comparison and best practice. Unreliability is one factor influencing the overall quality of an assessment. It is suggested that the task itself and the characteristics of both the candidates and those scoring, combine as contributors. Marking reliability research outcomes suggest that it is difficult to conclude on actual reliability. This study evaluated inter-rater variability in a moderation activity with a cross section of science sub discipline areas.

**Methods:** Four science academics, three from within the same institution (B, C and D) and one external (A), participated in a cross-institutional marking comparison of their four sub-discipline areas. Each was selected for its primary focus on the generic academic skills of writing, application of evidence, critical appraisal and information synthesis. An independent researcher randomly selected five marked assessment pieces from each student cohort. The original grading was recorded, the scripts de-identified and de-marked and distributed to each of the participating academics. Based on the written information provided, each participant then graded all of the assessment pieces and submitted results to the independent researcher who compiled and prepared them for analysis.

**Evidence:** Overall, the key finding from this study was the high level of inter-rater variability that occurred across assessments. The variation among assessor means (fixed effect) was found

to be significant ( $p = 0.000$ ). Multiple comparison tests, adjusted for their multiplicity by the Bonferroni method, found Assessor A to have provided a significantly lower mean score ( $\pm$  SE) over assignments ( $62.0 \pm 4.70$ ) than Assessors B ( $79.5 \pm 2.4$ ,  $p=0.02$ ) and D ( $82.4 \pm 2.1$ ,  $p=0.003$ ); both assessors B and D provided a significantly higher mean score than assessor C ( $70.6 \pm 2.1$ ,  $p=0.05$ ;  $p=0.003$  respectively). The estimated variation of the assessors over assignments (after extraction of the assessor means) was partitioned among the assessors A:B:C:D as 61.5%, 16.3%, 11.0%, 11.2% respectively.

**Conclusion:** In each case, assessors may have held a measure of expertise greater than other assessors despite working in similar fields and having at least comparable experience. We suggest that assessors, depending on their relationship to the material may have unintentionally adopted different marking strategies for differing assignments and the sub-disciplines. This may account for the reason that inter-rater variability did not appear to be consistent across sub-discipline areas and assessment types. Regardless of the reason for the variation, the findings are consistent with previous research and remind us that it is difficult to know what actually influences reliability. The value of this exercise lies in the degree of understanding about marking reliability that was made evident to the assessors, and the level of personal awareness gained about their own practices. It is this awareness that drives assessors to deliver better assessment experiences for their students. It also reinforces the role and value of moderation among assessors and institutions that deliver similar curricula.

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### Session F15

Paper

#### EVIDENCE-BASED TEACHING PRACTICES IN SCIENCE DEPARTMENTS: COMMON PRACTICES OR STILL JUST THE CHAMPIONS?

Michael Drinkwater<sup>1</sup>, Kelly Matthews<sup>1</sup>

*1 University of Queensland*

There is extensive literature about effective teaching approaches in the sciences with robust evidence demonstrating the positive benefits for student learning (Freeman et al, 2014; Handelsman et al, 2004). Getting scientists, beyond 'the champion', to change their teaching practices has proven difficult, particularly in research-intensive institutions (Hendersen et al, 2011; Wieman et al, 2010). One facet of this issue is a lack of information on how much evidence-based teaching practices are being used across science departments. The Teaching Practices Inventory (Wieman & Gilbert 2014) was created to address this problem through a survey instrument that measures teaching practices in science and mathematics courses (unit of study). The brief questionnaire asks the main lecturer for each course to report what evidence-based teaching methods are being used. The results provide a baseline of current practices within departments and points toward areas for improvement.

In this study, we adapted the Teaching Practices Inventory for the Australian context and surveyed the teaching staff of all Semester 1, 2015 Bachelor of Science courses (143 courses). The response rate was 91% ( $n=130$  courses with combined enrolments of 26,900). The average total score for the Australian courses was not significantly different to the sample of five different North American universities measured by Wieman & Gilbert (2014). Analysis by the eight sub-categories of evidence-based teaching practices (e.g. feedback, in-class activities) revealed differences between the Australian and North American scores. The results will be interpreted in terms of contextual differences in science higher education across the two countries. The overall results suggest that evidence-based teaching practices are common in



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the science departments involved in this study, extending beyond the realm of a few champions. Implications of how these data can be used to further the implementation of evidence-based teaching practices will be discussed.

The audience will be invited to discuss the use of evidence-based teaching practices in their own teaching and across their departments.

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## Session F16

Paper

### STUDENTS' PERSPECTIVES ON DEVELOPING EMPLOYABILITY SKILLS IN AN EMPLOYMENT SHORTAGE

Margaret Jollands<sup>1</sup>, John Smith<sup>1</sup>

*1 RMIT University, School of Civil, Environmental and Chemical Engineering*

Research into graduate employability has focused on what employers want, more than the perspectives of students. Since 2008 the employment outcomes for engineering graduates, like many other disciplines, have decreased significantly (GCA 2014), as well as the number of work placements. Hence many graduates are missing the opportunity to develop employability skills in a work placement. New work is needed to assess the effectiveness of graduate employability learning experiences at university, in particular from the perspectives of students. This work is needed to inform curriculum renewal to promote students' acquisition of employability skills, knowledge and attributes within their field.

This study explored engineering students' perspectives of employability, their views on skills needed by employers, and their suggestions of how curriculum and assessment can be improved. This study used the CareerEDGE framework (Dacre Pool and Sewell 2007), originally devised from an employer perspective, to analyse student perspectives of employability. The CareerEDGE framework presents employability knowledge, skills and attitudes in terms of five general categories (career development learning, experience, degree subject knowledge, skills and attitudes, generic skills and emotional intelligence) qualified by a number of sub-categories (including knowledge of the industry, work experience, communication, and self-awareness).

This paper presents findings from a larger Australian study into employability (Jollands et al. 2015), on the perspectives of engineering students studying at RMIT University. The study

used a qualitative research methodology, with data collected through a series of small focus group discussions. Three focus groups were conducted with 20 students from the penultimate and final year of two engineering disciplines, civil and chemical. Some students had undertaken work experience placements, others had not. Focus group questions were semi-structured and presented informally to promote discussion on:

1. Student perceptions of the current employability skills required;
2. Aspects of their degree that develop their employability skills;
3. Student self-directed activities to enhance their employability; and
4. Ways in which the university could improve the chances of students gaining employment.

The focus groups were recorded, transcribed verbatim and then analysed thematically through the lens of the CareerEDGE framework.

The students readily identified a wide range of relevant employability concepts. Their broad knowledge covered concepts even beyond the framework, including networking, professionalism and ethics. The students showed understandings of employability that ranged in sophistication. Some students could identify complex interactions and apply multiple employability concepts to a work scenario. Students' comments indicated that work experience is effective in developing employability; and further, that project based learning offer effective learning affordances for employability.

The paper concludes by presenting students' ideas for employability curriculum and assessment. The audience will be encouraged to engage in a discussion on pathways to implementation of key outcomes from the presentation.

Dacre Pool, L. & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education + Training*, 49(4), 277-289.

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## Session F16

Paper

### WHAT DOES THE FUTURE HOLD FOR OUR TEACHING, OUR STUDENTS AND OUR LEARNING? A SKILLS-BASED FUTURE FOR HIGHER EDUCATION: A PRACTICAL AND EVIDENCE-BASED APPROACH TO INTEGRATING COMMUNICATION SKILLS INTO UNDERGRADUATE SCIENCE DEGREES

Lucy Mercer-Mapstone<sup>1</sup>, Louise Kuchel<sup>2</sup>

*1 Sustainable Minerals Institute, School of Biological Sciences, UQ*

*2 School of Biological Sciences, UQ*

The introduction of generic skills into undergraduate science degrees is becoming increasingly common in higher education to create a stronger link between education and employability (Bath et al., 2004; Cummings, 1998). One skillset consistently highlighted by multiple stakeholders as integral for science graduates is communication. Accordingly, communication is being included as a required learning outcome for science degrees across the UK, the US, Canada, and Australia (AAAS,

2009; AQF, 2013; Jones et al., 2011; OCGS, 2005; QAA, 2007). However, the integration of teaching and learning of diverse communication skills has met with mixed implementation success.

This study designed, piloted, and evaluated a set of 'template package' tutorial activities for undergraduate science that scaffold the explicit teaching and learning of science communication with non-scientific audiences. The activities teach science communication at a conceptual level, giving students a transferable skillset that allows them to adapt their communication of science effectively to a range of modes, audiences, and purposes. Each activity is supported by a range of adaptable 'template' teaching resources such as PowerPoint presentations, teaching notes, student handouts, activity worksheets, and marking criteria. These resources allow science academics to integrate science content into the activity and teach communication skills alongside science in a discipline-specific context, with minimal preparation. Activities range in time from 10-30minutes with the option of either shortening or extending the time requirements, and are easy to implement, thus facilitating integration of explicitly-taught skills into existing classes.

Activities were implemented in second and third year undergraduate science courses from biology, chemistry, and physics at an Australian research-intensive university addressing 294 students. A mixed-methods triangulation of data sources was used to evaluate learning gains. Self-reported learning gains were gauged using student surveys with Likert-scale and open response questions. Semi-structured interviews were conducted to provide insight into the perceptions of academic course coordinators. Finally, student performance was evaluated by marking of relevant assessment tasks using constructively-aligned marking criteria. Qualitative and quantitative data analyses were conducted. Overall, 95% of students perceived improvements in their ability to do all communication skills across all courses and 94% perceived improvements in their confidence in communicating science to non-scientific audiences as a result of the activities. Academic teaching staff reported improvements students' communication skills and understanding of core science content, and indicated that the tasks were explicit, engaging, and sustainable for use in future years. Students successfully transferred their learning from the activities to their assessment tasks demonstrating on average, a 'good', 'excellent', or 'outstanding' standard for each science communication criteria.

The provision of tested and validated science communication template package activities that can be adapted to a diverse range of contexts is a promising approach to integrating communication into undergraduate science degrees. This approach addresses the need to keep up with an evolving higher education sector with a future that is increasingly skills-focused. The further trialling of these activities will be important, and conference attendees will be invited to provide discussion and constructive feedback on facilitating the dissemination and implementation of such evidence-based resources.

## Session F16

Paper

### TARGETED SKILLS-BASED RESOURCES: ADAPTING TEACHING APPROACHES FOR A NON-TRADITIONAL STUDENT COHORT IN AN ONLINE ENVIRONMENT AT THE UNIVERSITY OF TASMANIA

Andrea Price<sup>1</sup>, Abbie Grace<sup>1</sup>, Andrea Carr<sup>1</sup>

*1 Wicking Dementia Research and Education Centre, University of Tasmania*

This presentation examines a successful intervention to reduce high rates of plagiarism and improve academic study skills in students studying a fully online course.

The online Bachelor of Dementia Care (BDemCare) has attracted a non-traditional student cohort with many who are mature age, from linguistically diverse backgrounds, geographically isolated, working fulltime, and whose previous schooling finished at Year 10. Foundation units in the BDemCare provide an introduction to studying at university and aim to equip students with knowledge of requirements for academic writing. However, the translation of this knowledge into first-year level study has been difficult for some students, who find academic writing challenging. Of concern was that students struggled to maintain academic integrity, with initial assessments in first-year units showing an unacceptably high plagiarism rate of nearly 60%. It was recognised that the response to the plagiarism issue needed to be prompt and tailored to the unique characteristics of the student cohort. Using elements of the Learning Environment, Learning Processes and Learning Outcomes (LEPO) conceptual framework (Phillips, McNaught & Kennedy, 2012), academic skill development resources (ASDRs) were developed as an adjunct to core subject material, to address plagiarism issues, and to support students in their transition to first-year study.

The ASDRs are recorded lectures integrated in the online learning environment and available in each of the core first-year units. The learning environment for the ASDR was designed to address identified characteristics of the student cohort, and was contextualised to student learning within the units, with equitable and easy access supported through use of a familiar format to reinforce learning within the online environment. The ASDRs comprise twelve separate topics such as critical analysis, writing short research summaries, using supporting material, and interpreting and applying feedback. The range of topics is matched to skills for specific learning activities, including formative and summative assessment tasks. Students were given access to lectures via an ASDR folder in the online unit and also, where relevant for upcoming assessment work, within the unit module.

The initial ASDR lecture, Academic Sources and Academic Integrity was released prior to students submitting their second assessment items. The plagiarism rate for these assessments was less than 3%, a significant reduction from the rate of 60% identified in the initial assessment. In the second and subsequent iterations of the first year units, the plagiarism rate has remained steady at less than 3%.

Total student views were measured to investigate the frequency and timing that students accessed each resource by both type and location. This investigation showed that lectures released early in the semester and directly in the module pages were viewed by almost all students, with fewer views for lectures released only via the ASDR access-point and in busier parts of the semester.

The ASDR intervention adapted teaching practices to meet the learning needs of students in accordance with their unique learner characteristics. Using digital technology, the ASDRs

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provide an effective approach to help support the transition of non-traditional students to university study.

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## Invited Speaker

### **SOTL LEADERS AND COMMUNITIES OF PRACTICE DRIVING CHANGE IN TEACHING AND LEARNING**

**Manjula Devi Sharma<sup>1</sup>**

*1 The University of Sydney, Sydney*

In universities, we find champions of teaching and learning ranging from those who continuously improve their practices to those in formal leadership roles engaged in delivering university strategic goals. Most are keen to use new technologies and/or approaches. Too few draw on literature, or seek to generate evidence demonstrating improved student learning outcomes aligned with SoTL. Why is this so? Of the many reasons, two most compelling are that academics struggle to balance teaching and research, and that teaching leadership is enacted differently to research leadership. I draw on two national endeavours to illustrate how SoTL can shift large numbers of academics towards adopting evidence based teaching and learning. The first, an OLT National Teaching Fellowship, models a SoTL leader engaging with academics struggling with balancing teaching and research. The Fellowship had three arms:

- \* Engaging positional leaders with evidence from pre and post testing utilising validated concept tests to demonstrate changes in student learning outcomes - twenty courses with ~ 6000 students.

- \* Interviewing 10 positional leaders who had successfully implemented large scale changes to examine factors which facilitated the change.

- \* Establishing a Peer Review of Teaching program attracting 30 early careers lecturers.

The persistent message is that academics are willing to engage with SoTL but need to be supported. The second, an OLT Leadership for Excellence in Learning and Teaching project addresses the difference between research and teaching leadership styles. The project established the Science and Mathematics network of Australian university educators - SaMnet comprising 100 SaMnet scholars undertaking 28 action learning projects in carefully crafted teams. Utilising distributed leadership, the scholars were morphed into SoTL communities of practice, supported by critical friends, and involved in a range of activities including specific workshops on organisational change, leadership and networking opportunities. Impacting on 25,000 students and 400 academics over a 2 year period, SaMnet's efforts will continue under the Australian Council of Deans of Sciences Teaching and Learning Centre.

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## Session G1

Paper

### **BELIEFS AND PRACTICES RELATED TO PRESENCE: LEARNING FROM THE WORDS OF TEACHERS OF DISTANCE AND ON-CAMPUS COURSES**

**Sarah Stein<sup>1</sup>**

*1 University of Otago New Zealand*

The notion of presence in online learning has provided important insights into the nature of effective learning

communities in higher education settings (Garrison & Akyol, 2013), including how these communities support and enhance learning. For Garrison, Anderson and Archer (2000), effective online social learning communities demonstrate three types of presence: cognitive (supporting discourse, selecting content); social (setting climate, supporting discourse); and teaching (selecting content, setting the climate). Within a Community of Inquiry (CoI) framework, these three elements predict as well as describe behaviours of those involved in any community. This framework thus provides a theoretical basis (Garrison & Anderson, 2002) from which to reflect on ways teachers create presence to ensure that students experience online community environments that are satisfying, effective and supportive of learning.

At the University of Otago, New Zealand, a predominantly on-campus, face-to-face institution, most teachers involved in distance teaching also teach on-campus courses. Anecdotal evidence suggests that these teachers can become consciously aware of teaching and learning presence in ways that may not easily happen when teaching on-campus courses only. For example, distance in time and space prompts distance teachers to think deeply and often creatively about how to support student engagement and understanding. In on-campus situations, because students are well-positioned to ask immediate questions of clarification and teachers can draw on visual clues, assumptions about student understanding can be, rightly or wrongly, taken for granted and not questioned.

As part of a larger project exploring the distance learning and teaching context at the University of Otago, this beginning study aimed to investigate presence as expressed by teachers engaged in distance and on-campus teaching. Using a content analysis process (Mayring, 2000), written portfolios of eight New Zealand national tertiary teaching awardees who taught both distance and on-campus courses were examined, to identify evidence of teacher beliefs and practices in relation to presence. Results, framed around the three aspects of presence (Garrison & Anderson, 2002), highlight attributes and behaviours that the teachers claimed to be important indicators of their success and effectiveness. These perspectives are then compared and contrasted with student perceptions of effective teaching in the two modes as documented by Delaney, Johnson, Johnson & Treslan (2010).

Conclusions are drawn about opportunities for professional development around presence that experiences of teaching in two modes can present for teachers and a plan for furthering the wider investigation is outlined.

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## Session G1

Paper

### FACULTY ENGAGEMENT WITH BLENDED LEARNING - A STUDY BASED ON THE THEORY OF PLANNED BEHAVIOR

Johanne Huart<sup>1</sup>, Pascal Detroz<sup>1</sup>, **Dominique Verpoorten<sup>1</sup>**

*1 University of Liege, Belgium*

The paper presents the methodology and results of a survey research conducted at the University of Liege (Belgium) about blended learning (Garrison & Vaughan, 2012). It investigates the level of use of this instructional practice and elicits determinants that predict or prevent its implementation.

Methodology: The instrument is a questionnaire designed in strict accordance with the Theory of Planned Behavior (TPB, Ajzen, 1985, 2011), which forms the conceptual background of the study. In short, TPB pinpoints 3 universal antecedents of intention (attitudes, control, norms), each of them influenced by specific beliefs tied to the object of the intention [here: to practice blended learning]. Out of 680 invitations, 114 faculty filled in the questionnaire.

Results: As for current usage, findings show that 70 respondents claim to already practice some form of eLearning. However, this use remains, for a vast majority, very basic and hardly akin to full-fledged BL.

As for predictors of future engagement with BL, regression analyses reveal that the 3 universal determinants of intention identified by TCP are significantly active regarding BL:

- attitudes ( $p < .001$ ), significantly mediated by 2 specific beliefs: BL fosters motivation ( $p < .001$ ) and exercising ( $p = .027$ );

- perceived control ( $p = .003$ ), significantly mediated by one specific belief: the eLearning platform of the university is powerful and user-friendly enough ( $p < .001$ );

- norms ( $p = .029$ ), significantly mediated by one specific belief: colleagues think that BL should be used ( $p = .038$ )).

Interestingly, a prior use of technology-enhanced learning has a significant influence on several positive beliefs towards BL, among which that it supports work steadiness, motivation and deep learning.

Value for practitioners: By providing insight into what stimulates or inhibits faculty's resort to blended learning, the study has relevance for staff development teams dealing with this major trend in higher education (Johnson, Adams Becker, Estrada, & Freeman, 2015).

Additionally, TPB presents as a conceptual framework helping to capture personal/contextual factors of academics' pedagogical intentions and behavior regarding the evolution of their courses. In this respect, it gives a valuable hook on levers that can be activated to support change and innovation in a SOTL perspective.

The paper addresses firstly the conference topic 2 - Future students, future pedagogies, future learning paradigms, and secondly topic 5 - From local scholarship to changing practice.

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## Session G2

Roundtable

### ENGAGING STAFF IN PROFESSIONAL DEVELOPMENT AS AN INCLUSIVE LEARNING ACTIVITY: A DISTRIBUTED LEADERSHIP APPROACH

**Sandra Jones<sup>1</sup>, Marina Harvey<sup>2</sup>, Heather Davis<sup>3</sup>**

*1 RMIT University*

*2 Macquarie University*

*3 L.H. Martin Institute, University of Melbourne*

The objective of this Round Table is to explore how the conundrum of practicing distributed leadership as part of an active professional development learning process can be achieved.

The rationale for this Round Table lies in the challenge of developing a new generation of academics with leadership skills to enable them to participate more actively in addressing the complex situation in which higher education is placed. Faced with this complexity, it is not surprising that new approaches to leadership in higher education are being mooted that are more inclusive of the breadth and depth of expertise that exists within the sector.

Distributed leadership is being discussed globally as a leadership approach that provides opportunities for a broad range of employees, with diverse strengths, to contribute towards effective leadership. While distributed leadership is not a new concept in higher education, the need for a more structured approach is emerging as complexity challenges traditional ways of working. In Australia, faced with this challenge, the Office for Learning and Teaching has, over the last 10 years, funded projects that are underpinned by a distributed leadership approach to learning and teaching improvements. In the UK, the Leadership Foundation for Higher Education has funded a series of Stimulus papers to encourage the proliferation of ideas about new approaches to leadership. In emerging Asian economies the need for significant change in the governance of universities to ensure graduates have the skills for emergent futures is also resulting in reconsideration of traditional leadership approaches.

As a result of the Australian empirical research, a number of resources to assist implementation of a distributed leadership approach have been designed. This includes a conceptual model of distributed leadership, an enabling tool for distributed leadership and benchmarks to assist self-evaluation of distributed leadership have resulted. These resources are available to assist professional development for distributed leadership (see [www.distributedleadership.com.au](http://www.distributedleadership.com.au)) and are included in the practice section of a recent Stimulus Paper funded by the UK Leadership Foundation for Higher Education to encourage the spread of more shared approaches to leadership. While these are important developments that can assist the proliferation of understanding of distributed leadership, design of professional development opportunities to use these resources needs a more systematic approach to ensure impact.

This Round Table will engage participants in activities to identify how they can use these resources to conceptualise, enable and evaluate a distributed leadership approach to change in learning and teaching. These activities draw on recent positive feedback from participant engagement in



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similar activities at a National Summit on distributed leadership in Australia in 2014. A key outcome of this feedback was evidence that professional development for distributed leadership can itself be effectively designed using principles of distributed leadership.

The outcome of the Round Table contributes to the conference theme of Leading learning and the scholarship of change by spreading understanding of how a distributed leadership approach can build leadership capacity across the higher education sector, locally and internationally.

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## Session G3

Roundtable

### THE INFORMAL CURRICULUM AS A TOOL FOR STUDENT ENGAGEMENT

**Martin De Graaf<sup>1</sup>, Benjamin Cooke<sup>1</sup>, Belinda Johnson<sup>1</sup>, Angela Hassell<sup>1</sup>, Sedat Mulayim<sup>1</sup>, Jose Roberto Guevara<sup>1</sup>, Anne-Lise Ah Fat<sup>1</sup>**

*1 School of Global, Urban and Social Studies, RMIT University, Melbourne*

Academic and professional staff in universities regularly reflect on how hard it is to sustain student engagement in the classroom and more broadly in university life. Researchers attribute this decline to the increasing pressure for students to seek paid work, juggle family commitments and other extra-curricula activities. Students argue that lectures are recorded and readings are accessible anytime online but this fails to recognise the value of the informal curriculum in their development as competent graduates. One of the challenges for us is then to draw students into interconnected spaces early in their studies so they can recognise the benefits of ongoing engagement in both formal and informal curricula.

Our team reviewed some of the literature available in this area and sought to find an alternative way forward. Sally Kift provided a useful principle: "Course delivery should be reconceptualised in terms of a holistic approach to fostering student engagement by bringing together the academic, administrative and other support programs available under the organising device of the curriculum (Kift, 2004). Krause and Coates, like Kift, looked at the question from an Australian Higher Education perspective (Krause and Coates, 2008). Linda De Angelo reinforced that any engagement frameworks need to take in more than just the first few weeks or months (De Angelo, 2014). While Soria and Stubblefield noted the need to provide spaces for student's to explore their own strengths (Soria and Stubblefield, 2014).

Traditionally orientations focuses early in the student experience and then again at the capstone point before they leave a program. However, if we take the metaphor of a hamburger, this only creates the bun and leaves out the filling of the student experience 'hamburger'. How might we think differently about orientation so it provides a 'filling' for the student experience, supporting and engaging students at critical junctures of their academic journey? How might online platforms be combined with face-to-face curricula delivery to facilitate student support in useful ways?

Academic and administrative staff from the School of Global, Urban and Social Studies at RMIT will share a number of initiatives they have developed. These were guided by the following principles: (i) A holistic curriculum with a shared understanding of a relevant narrative is the starting point of successful student engagement. (ii) Engagement involves both staff and students sharing in co-creating and sustaining engagement opportunities. (iii) Early assessment can motivate early engagement.

The purpose of this roundtable is to invite both academic and administrative staff to share informal curriculum initiatives that can facilitate ongoing and meaningful student engagement. In considering these varied initiatives we seek to identify an extended set of key principles that can be applied in different contexts.

In the round table we will also reflect on how we hope to evaluate the effectiveness of our approaches. We have preliminary evaluation from other stakeholders in the University and students who are expressing satisfaction with the holistic approach but to move forward a more robust and formal evaluation processes will include: (a) retention data comparisons, (b) an anonymous survey, and (c) guided discussion during the program's Student Staff Consultative process.

Questions to be asked at the roundtable include:

\* What initiatives have you trialled that seek to engage students through informal curriculum?

\* Where were the points of success in these initiatives?

\* Considering the range of initiatives presented, what principles emerge?

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## Session G4

Paper

### TRANSITIONING OF ACADEMIC IDENTITY TO EDUCATION-FOCUSED AT A RESEARCH INTENSIVE UNIVERSITY

**Sharon Flecknoe<sup>1</sup>, Julia Choate<sup>1</sup>, Yvonne Hodgson<sup>1</sup>, Elizabeth Davis<sup>1</sup>, Priscilla Johannesen<sup>1</sup>, Janet Macaulay<sup>1</sup>, Kim Murphy<sup>1</sup>, Wayne Sturrock<sup>1</sup>, Gerry Rayner<sup>1</sup>**

*1 School of Biomedical Sciences, Monash University*

Over the past decade, the academic role in higher education has undergone considerable change. The increased dependence of universities, particularly research-intensive institutions, on competitive research grants has generated a bias toward the recruitment of academics based on their research output. The massification of higher education and the call by governments for greater accountability of teaching quality have presented additional challenges (Probert, 2013). Some universities have attempted to address these issues by introducing Education Focused (EF) academic roles, which focus on educational excellence, with additional requirements for teaching innovation and pedagogical research, including SoTL.

When it introduced EF roles in 2010, Monash University stated that it sought to continue to build upon its reputation for research excellence while attracting, supporting and retaining outstanding educators who are committed to high-quality student experiences and outcomes (<http://www.adm.monash.edu.au/workplace-policy/recruitment/appointment-existing/>). This paper reports on the experiences of a group of nine bioscience academics in their transition from a traditional academic role to an EF role. Through the use of reflective written narratives, they explored their common concerns and opportunities.

The participants belonged to a SoTL community of practice that met on a monthly basis and represented 53% of the EF staff in their respective departments. The narratives were written independently but were guided by three open-ended questions; (1) Why did you apply for an EF academic position; (2) What do you perceive to be the opportunities/benefits of transitioning from a traditional teaching-research position to an EF academic position; (3) Do you have any concerns regarding this new type of appointment? The narratives were analysed using NVivo 9 software to identify and determine the frequency of themes.

The narrative essays revealed a number of issues relating to these EF academic positions. A strong theme was participants urgent need for mentorship and/or opportunities to establish supportive learning communities of practice. Participants also expressed a strong desire for acknowledgement of their passion and dedication to high quality teaching and that they should not be viewed as 'failed researchers'.

In planning for the future, departmental and faculty leaders should champion EF academics and provide them with opportunities to take leadership roles in education at the institutional, national and international level. While it is important that EF academics deliver equivalent output to their research-intensive peers via SoTL and pedagogical research and dissemination, a major challenge is for these roles to be more greatly accepted and respected by the broader university community.

Given the global trend for EF roles, we believe that these experiences are not unique and may be helpful to others undergoing a similar transition and provide valuable perspective to University management considering the future introduction of EF roles at other higher education institutions.

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## Session G4

Paper

### RESEARCH-LED EDUCATION AND RESEARCH CAREERS: THE ROLES FOR SOCIAL ENGAGEMENT AND PERCEIVED LEADERSHIP

Lillian Smyth<sup>1</sup>, Thomas Sloan<sup>2</sup>, Federico Davila<sup>2</sup>, Stephen Jones<sup>3</sup>

<sup>1</sup> Medical Education Unit, Australian National University

<sup>2</sup> Fenner School of Environment and Society, Australian National University

<sup>3</sup> Science Teaching and Learning Centre, Australian National University

This study draws together the pedagogical literature on the value of research-led education (e.g. Brew, 2012; Christ, van Dick, Wagner, & Stellmacher, 2003; Lopatto, 2004; O'Donnell & Tobbell, 2007; Robertson & Blackler, 2006; Seymour, Hunter, Laursen, & Deantoni, 2004; Valter & Akerlind, 2010). and

educational psychology literature on social engagement, leadership and career decisions. Using the conceptualisation of tertiary education as induction into a community of scholars, the paper explores the social engagement dimensions of RLE and the resulting impact on further study and career decisions.

One of the questions the study sought to explore was how- and how well- students were being prepared for and directed toward possible research careers in science. A second area of inquiry, building on work exploring what students gain from RLE and the impact on career decisions, we examine the ways in which student access to and experience of RLE can be scaffolded and improved. Using data on student experience and perceptions, we tease out the main themes to build a framework of access to and experience of research in a tertiary context.

The data provides insights into what aspects students value, what was missing from their experience and ways in which the process could be improved. An online survey was conducted in the science undergraduate population at a medium-sized Australian university (n= 190, 61% female, M age = 22.5, across 12 science disciplines). Both quantitative and qualitative questions were asked of students, exploring their experiences of research-led education, their career and study intentions and the ways that their personal experience of and access to undergraduate research-led education could have been improved. Results indicated that the quality and nature of undergraduate research experience, as well as perceived social support, contributed significantly to student future intentions.

A key finding that emerged, and the one that is the focus of this paper, was that student perceptions of a receptive social environment, an open and engaged academic staff, and the possibility of building an identity for themselves as a researcher were key areas for improvement in existing RLE. One of the core findings from the qualitative analysis was the ways in which students felt that key aspects of leadership (such as accessibility, open communication, knowledgeable and inclusiveness) from academic staff were lacking.

These findings, taken together, indicate the key roles for both social engagement and academic leadership in determining student attitudes to pursuing a research career. While our findings are, at this stage, indicative, owing to the methodology and sample used, they serve as a valuable entry point for considering the role of social engagement and leadership is scaffolding student research involvement. These insights can provide anchor points, not only for policy review at the institution in which the data were collected, but also for the broader literature on the ways in which undergraduates can be included in the research process.

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## Session G5

Paper

### **ANALYZING THE IMPACT OF COLLEGE LIFE ON ACADEMIC AND POST ACADEMIC OUTCOMES**

**Daniel Diaz Vidal<sup>1</sup>**

*1 Wabash College*

This research represents a response to the necessity to identify and study the dimensions of college life at Wabash College that have an influence in the academic and post academic outcomes of our students, including fraternity affiliation, participation in clubs, student leadership, community service, participation in collegiate sports and other measures of engagement, in order to efficiently allocate resources, to promote a changing college experience that adapts to the global environment and to assure prospective students, and their parents, that coming to Wabash will have a positive influence in their long term success. This project has integrated, expanded and analyzed currently available data in order to produce historical results from information pertaining to current alumni.

This study relies heavily on applied statistics and I now turn to a brief review of the literature which was helpful in identifying useful methodologies and a number of important determinants of academic performance and of 'success' after college.

Douglas and Ramin-Gyurnek (1994) provide a brief summary of important variables that affect student learning outside the classroom and that may thus influence student outcomes. Astin (1993) and Pascarella and Terenzini (1991) highlight the fact that the undergraduate learning experience transcends academic activities and in-classroom activities. Kuh, Schuh, Whitt and Associates (1991), underscore the importance of promoting educationally purposeful activities outside the classroom. Ehrenberg and Sherman (1987) use a utility maximization model and statistical framework to analyze the effects of employment while in college on earnings, academic success and degree completion rates. Crossman and Clarke (2010) study the effects of international experience on employability. They highlight the value placed by employers on language acquisition and on a broad spectrum of soft skills that could be acquired through immersion trips and study abroad programs. Davidson (2010) studies the effect of the location and length of a program in determining student second language acquisition. Lastly, Asel, Seifert, & Pascarella (2009), and of DeBard and Sacks (2010,2011) study the effect of greek life on academic and post academic student outcomes.

This paper presents the results of a research project which created a database with student characteristics, student involvement in academic and non-academic programs, events and opportunities at Wabash, to gauge their influence on alumni professional, community involvement, donation to the college, graduate school and economic outcomes after

College.

Lastly, I would like to point out that I believe this work to be particularly relevant to themes 1 and 4 of ISSOTL 2015. As it pertains to the first theme, I directly address the effect of student leadership positions, while in college, on academic and post academic outcomes. Furthermore, this paper is part of an ongoing project that will guide our college leaders in provoking change and perpetuating a philosophy of adaptation to the demands of the changing global environment. As it pertains to the fourth theme, this project has examined how student engagement in activities beyond the classroom has affected their success and degree of involvement with the college and their communities well after their graduation date.

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## Session G5

Paper

### **LEARNING OUTCOMES OF AN INTERNATIONAL ONLINE DISCUSSION FORUM AMONG PRE-SERVICE SECONDARY TEACHERS IN THE UNITED STATES AND FINLAND**

**Erin Mikulec<sup>1</sup>**

*1 Illinois State University*

There has been considerable work conducted on the learning outcomes of students participating in online discussion boards and forums (Blackmon, 2012; Harmon, Alpert, & Histen, Lee & Markey, 2014; Luyt, 2013; Milheim, 2014; 2014; Stack, 2013). This work has examined cognitive and social presence (Lee, 2013), critical thinking (Hall, 2015), student perceptions of learning outcomes (Nielsen, 2013) and different levels of interaction. Current technologies not only make it possible for students to interact with one another in a different space, but also with peers in other parts of the world. Such interactions can lead to the development of intercultural competence, a skill needed in the 21st century (Bennett, 2004; Ryan, Heineke & Steindam, 2014). Therefore, with the continued emphasis on technology in the classroom, it is important to consider what students actually take away from such experiences.

This presentation will describe the results of a study in which students in the United States participated in an online discussion experience with students in Finland. Students in the United States were enrolled in a general teaching methods and assessment course for pre-service secondary teachers. The students in Finland were also pre-service secondary teachers and were enrolled in a course focusing on online and distance education. While the online discussion served as a practicum experience for the students in Finland, it was an international experience for the students in the United States. Both sets of participants engaged in discussions about their own specific content areas, schools in their respective countries, and responded to questions such as the challenges that teachers face. The students in the United States also completed a post-experience reflection in which they discussed their interactions and described their own learning outcomes. The results of the study will be presented in terms of the learning outcomes identified by the U.S. students, what they learned about teaching in other countries, and what they have in common with their peers in Finland as well as getting to know their own classmates better.

This study supports SoTL research in the sense that it provides pre-service teachers with the opportunity to interact with their peers in another part of the world, which not only informs their professional development, but their own future teaching as well. By considering factors relevant to teaching and learning in different global contexts, pre-service teachers are

challenged to incorporate different perspectives into their own teaching and lesson plans, which may also lead to developing international experiences for their own future students. According to Hutchings, Huber, and Ciccone (2011), “the scholarship of teaching and learning suggests a particular developmental trajectory for faculty and their role as teachers: one that includes attention to emerging pedagogies and serious work on curriculum and assessment, but also means continuing to develop as a learner about learning along the way” (p. 64). Although the authors are referencing college faculty, these same ideas are central to teacher education, teacher educators and pre-service teachers. By engaging in this kind of work, pre-service teachers can develop their own intercultural competence, reflect on their own professional development, and begin to imagine how they might carry out the same work in their own future classrooms (Alfaro & Quezada, 2010; McCalman, 2014)

In addition to reporting the results of the study, the presenter will also provide guidelines for designing and implementing an international online discussion. Tips for encouraging meaningful interaction, as well as lessons learned for the next iteration of the experience, will also be discussed.

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### Session G6

Paper

#### **INTERNATIONAL SUITCASE: DEVELOPING TRANSNATIONAL TEACHING COMPETENCIES THROUGH AN ONLINE RESOURCE AND COMMUNITY OF PRACTICE**

**Ruth Moeller<sup>1</sup>**, Melanie Brown<sup>1</sup>, Meredith Seaman<sup>1</sup>, Dallas Wingrove<sup>1</sup>

*1 RMIT University*

Transnational teaching presents varied and complex challenges for educators. As the literature identifies, (Dunn & Wallace 2006, Smith 2012) educators are required to bridge more than a geographical gap. They must also rise to the challenge of facilitating quality learning in potentially unfamiliar cultural contexts. Academic staff tasked with transnational teaching identify a need for professional development that has a specific focus on facilitating learning in this setting (Dunn & Wallace 2006). From our own teaching experience and as academic developers working with other educators over many years at one Australian institution, we surmised that systematic and focused support was lacking and that teachers were isolated from others experiencing the challenges of teaching transnationally. Institutional support is vital to ensuring educators develop the specialised knowledge and skills required to design and deliver effective instruction that is responsive to the diversity of the transnational student cohort. Opportunities to share and learn from others are also critical to support staff in their experience of transnational teaching.

In response to this need we developed an online International Suitcase resource to provide practical, evidence based teaching tools to support transnational teaching staff. A community of practice methodology is well established in the higher education sector as being effective in professional development contexts (Buckley, 2012; Buckley & Du Toit, 2012; Cox, 2013; Green, Hibbins, Houghton & Ruutz, 2013; Warhurst 2006). Consistent with this methodology we approached those with experience in teaching offshore to reflect on and share their experiences and expertise with other colleagues. Our intent was that the development of the resource, and the final resource itself, would provide opportunities for transnational teaching staff to network and learn from others.

The initial resource captured this experience and expertise in series of filmed interviews and teaching resources. It was however a static website, not particularly collaborative in nature or supportive of a long term learning community. The interview materials highlighted the importance of sharing experience and we needed a resource that could facilitate this in keeping with the principles of a community of practice network. We are currently redeveloping the resource with a stronger focus on facilitating interaction to support an evolving learning community of transnational educators. We will reflect on this process, the underlying principles of the project, and share the tool with audience members for engagement, feedback and contributions. We will reflect on how our community of practice methodology, and feedback from practitioners and analysis of their narratives, has informed not just the development and content of the resource but also informed its purpose and design. Through this presentation we seek to further reflect on and refine the resource, as well as demonstrating its value as a responsive, practical and evidenced based professional development support tool.

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### Session G6

Paper

#### **RECONCEPTUALISING AND EVALUATING THE ACADEMIC ROLE IN THE SCIENCES**

**Pauline Ross<sup>1</sup>**, Philip Poronnik<sup>2</sup>, Hamish Coates<sup>3</sup>

*1 School of Science and Health, University of Western Sydney*

*2 School of Biomedical Science, University of Sydney*

*3 Centre for the Study of Higher Education, University of Melbourne*

Higher education and academics are under an onslaught of pressures. Key pressures include the rise of performance based funding in both research and teaching, disruptive technologies changing both pedagogy and curricula, and stronger controls regulating quality and standards in a way which was previously thought untenable. Academics, appointed because of research track record are becoming increasingly less relevant in this reconfiguring higher education context. Increased demands on academic time have seen a much smaller proportion of academics finding the time to do original research and writing. Even those academics aspiring to a research career now spend most of their time doing teaching. It is reasonable to contend that the current conceptualisation of the academic role and career structure based on research no longer meets the operational needs of the current higher education environment. The academic role which has been remarkably stretchable needs to change and differentiate. The lack of differentiation in the academic role is being felt acutely by the Science, Technology, Engineering and Mathematics disciplines (STEM) where the pervasive emphasis has been on research. Declining enrolments and perceived falling standards of STEM graduates, both nationally and internationally, raise concerns about the future pipeline of STEM graduates and a public who are well disposed towards science. This presentation will report on conversations between academics in science research and science teaching and learning on conceptions of the academic role as part of National Teaching Fellowship funded by the Office for Learning and Teaching. Although various projects have been launched in an attempt to redefine the changing academic role, most of these dichotomise the academic career into either research or teaching. Coates and Goedegebuure (2012) published a framework where academics could ‘differentiate’. Such differentiation frees academics to structure more freely their careers allowing conceptions of academic roles which move flexibly between research, teaching and administration. While we have metrics which evaluate research



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in terms of journal rankings and grant successes, and criteria and standards which separately evaluate teaching, we have limited metrics which holistically evaluate the academic role and build the flexibility we need for the future. This presentation will showcase a metric to more holistically and flexibly evaluate the academic role in STEM. We need flexibility in the academic role if we are to ensure Australia has excellent researchers and academic teachers of STEM in the future.

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## Session G7

Paper

### **COURSE HANDOVER: A TOOL TO SUPPORT COURSE COORDINATORS**

David Birbeck<sup>1</sup>, Andrea Chester<sup>2</sup>, Colleen Smith<sup>1</sup>, Tracy Levett-Jones<sup>3</sup>, Kuan Tan<sup>1</sup>, Scott Copeland<sup>1</sup>, Charlotte Rees<sup>1</sup>

1 University of South Australia

2 RMIT University

3 The University of Newcastle

Course coordinators are leaders who are responsible for ensuring that the courses they coordinate support program outcomes and that there is alignment between the intended and taught curriculum. The way that course coordinators are prepared and courses are handed over is crucial in this process. Jones and Ladyshevsky (2009) highlight that this preparation typically relies on the 'wisdom of experience' or 'on the job learning' rather than a thoughtful and planned transition process. Academics are often expected to intuitively know, or learn very quickly, with little formal support. Researchers have noted that academics new to the course coordinator role are rarely formally prepared for the role and as a result lack confidence, particularly in their knowledge of policy and of their own responsibilities. As a consequence some have turned to the personalised help provided by a coach or a mentor (Goos & Hughes, 2010). More experienced academics may not feel they need a mentor, but nevertheless find themselves sometimes stepping into coordination of courses at short notice, or with relatively little knowledge about the course and its purpose.

This Course Handover project sought to address these issues. A collaborative, multi-institutional, multi-disciplinary approach using a qualitative case study method was used to gather data. Purposeful sampling identified information-rich cases in the disciplines of Health, Design and Business at three Australian universities. Interviews and focus groups were conducted with 33 staff in total, including course coordinators (new and experienced), program directors and heads of schools. Interviews focused on the experiences of staff either receiving or providing handover of a course and consequently the information they deemed as critical.

Support for a tool to collate information for the incoming coordinator was unanimous and six major themes emerged: Critical events and traps, History, Assessment, Teaching quality, Staff and Students (CHATSS). 'Critical events' relates to both the timing and identification of key administrative and learning activities. 'History' establishes the historical context of the course and any major modifications. 'Assessment' covers all aspects of assessment and, in particular, the learning that needs to be supported and measured. The emphasis on clarity of learning was deemed particularly important by new coordinators who found formally written course objectives of little help. 'Teaching quality' relates to course evaluations and reflections from previous coordinators. 'Staff' identifies key people and their role in both the teaching and the administration of the course. The last theme, 'Students', relates to reasonable expectations about students' knowledge

and abilities.

Follow up workshops were held with academic staff from the three universities to trial the tool and enhance its design. Despite strong support participants noted that the process of engaging in a structured handover process requires time and commitment of both the outgoing and incoming coordinator. The session will offer an opportunity for participants to discuss how the tool might be best used and implemented in their own context.

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## Session G7

Paper

### **DISTRIBUTED LEADERSHIP: AN ESSENTIALLY CONTESTED 'CONCEPT' THAT IS LOSING ITS POPULARITY AS ITS COMPLEXITIES ARE REVEALED**

Moira Cordiner<sup>1</sup>

1 University of Tasmania

'The idea that leadership should be distributed, i.e. spread throughout an organisation rather than restricted to the individual at the top of a formal hierarchy ... goes back to the hunter gatherer societies' (Grint, 2005:139). Distributed leadership (DL) therefore is a very old idea. It has no shared meanings and multiple definitions, which makes it an 'essentially contested concept' (Gallie, 1956). For example, it is a model of change (Bolden, 2007), strategy (Triegaardt, 2013), style (Spillane, 2006), method and philosophy (Grint, 2005), concept (Bento, 2011), or framework (Jones et al. 2012; Timperley, 2005)? According to Churchland (1989: 382-3) DL is 'a set of vague notions flying in loose formation', and is hence contestable.

Based on a review of 50 years of research, Grint concluded that DL is 'an alternative method of leadership not a utopian alternative to it' (Grint, 2005: 143). Educational research into DL started appearing in the 2000s giving the impression DL was new (Thorpe, Gold, & Lawler, 2011) and was mostly in schools and colleges. Subsequently, DL was embraced enthusiastically and uncritically by higher education (HE) as it seemed to offer a 'persuasive discourse that embeds collegiality and managerialism' (Bolden et al. 2009: 273) and 'promote(s) a more participative perspective on leadership' (Bolden & Petrov, 2014: 408). Nationally-funded HE projects proliferated over the last 15 years, e.g. in England (Bolden, Petrov, & Gosling, 2008), and Australia (e.g. Jones, Harvey, Lefoe, Hadgraft, & Ryland, 2013). However, because there is no agreement about what the DL 'concept' is, determining comparability of implementation in different institutions proved challenging.

In the last few years, leading DL authors in HE have become disillusioned and more critical of DL, claiming it is 'a fashionable' leadership model that universities use 'as a cloak to hide an increasing lack of consultation with staff' (Gill, 2008); 'has serious practical challenges in implementation especially with formal leaders letting go some control and authority to the informal leaders' (Bolden, 2007: 6); and research to date does not describe what is distributed or what is an effective 'configuration of leadership practice' (Bolden &

Petrov, 2014: 415). This paper strongly recommends that academics rigorously critique examples of using DL to implement institutional change 'in terms of action taken, support needed and outcomes' (Jones, 2014: 133). However, because DL is still a 'conceptual and empirical muddle' (Lakomski, 2008: 162) that is in 'the adolescence phase' of development (Richard Bolden, 2011: 264) and possibly cannot work in an audit culture (Zepke, 2007), perhaps its popularity phase is now passing.

Preliminary results from a case study using DL to implement a change in assessment practices across an Australian university will be presented to illustrate some of the complexities referred to above. Twenty-seven of the forty informal leaders were interviewed about their perspectives and challenges as they faced increased institutional demands for higher research output and grant applications. Eight Associate Deans (Learning and Teaching) were also interviewed to find out what they thought of the DL approach. The four-year project had mixed success.

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## Session G8

Roundtable

### UNDERSTANDING THE ROLE OF PROFESSIONAL DEVELOPMENT IN UNIVERSITY TEACHING

**Melissa Neave<sup>1</sup>, Ana Maria Ducasse<sup>1</sup>, Paul Battersby<sup>1</sup>, John Whyte<sup>1</sup>, Chris Ziguas<sup>1</sup>, Anne-lise Ah-fat<sup>1</sup>**

*1 School of Global, Urban and Social Studies, RMIT University*

University lecturers are increasingly being asked to engage in professional development practices that are designed to enhance their teaching capabilities. These practices are presented as opportunities for staff to build strategic capabilities and ultimately seek to increase the quality of the student learning experience. But how do staff perceive these practices? To what extent do university lecturers actively engage in professional development around learning and teaching and what are the perceived benefits (from the perspective of those participating) of such engagements? This research explores how lecturers in the School of Global, Urban and Social Studies at RMIT University in Melbourne, Australia interpret the role of professional development within the context of their working environments. Lecturers from several program areas within the School were asked to discuss the concept of professional development and its contribution to their strategic planning and course delivery. These conversations were held at the discipline level to assess whether individual disciplines responded differently to professional development opportunities. The round-table discussions were recorded and transcribed with the permission of the participants. The research team then undertook a content analysis of the data to identify themes and differences between individuals and disciplines. These analyses were then compared with targeted institutional documents to assess whether the institutional objectives around professional development were being achieved.

The materials identified in this research will be considered in a roundtable discussion that seeks to consider the implications of the findings for Teaching and Learning practices. This will contribute to Conference Theme 6. Leading SoTL in the Disciplines and/or across the institution by identifying the apparent effectiveness of professional development expectations and outcomes.

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## Session G9

Roundtable

### CAN KNOWING THE LITERATURE BE SUFFICIENT FOR DIVERSITY? FINDINGS FROM A BLACK MALE STUDENT-FACULTY LEARNING COMMUNITY

Jody Horn<sup>1</sup>

1 Asst. Dir. Ctr. Excel. Transformative Teaching & Learning, Univ. Central Ok

As a faculty member is it enough to know the literature or be well-read in issues of diversity? In particular, this study focuses on a black male initiative on our campus. This author has designed a qualitative study to determine what areas emerge from the lived experiences of students, as compared to what literature has revealed. It is important to conduct a qualitative study in order to allow categories to emerge from the data because part of the research question for this study is that in the interaction process involved in a faculty-student learning community surface new issues related to success for black males in the classroom. Part of the data collected is the critical reflections of faculty attendees. This study arose as a result of a student-faculty paired learning community where lengthy conversations revealed unbeknownst issues relevant to inclusivity and support of black males in the classroom. Of particular interest is why faculty that reported substantial familiarity with research on inclusivity reported surprise and more fervent understanding of these issues after being in this learning community. If one could understand a mechanism for moving this understanding to a higher thinking level, it would seem that diverse classrooms could substantially benefit.

Discussion questions: One of the central questions I would like to discuss in a roundtable is whether merely reading literature/research in an area can be sufficient for addressing issues of inclusivity in the classroom? A larger question is, when one reads research in an area, is it a result of lower order thinking skills, i.e., according to Bloom's concepts like knowing or understanding such that one would not sufficiently grasp real meaning? What have others discovered in conducting qualitative research with black males on their classroom experiences? How have others reconciled their findings with the research? Is there a social-psychological component missing in the research?

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based on a sample of black college males. *Journal of Black Psychology*, 34(4), p.452-478 Session

## Session G10

Paper

### USING SOCIAL MEDIA TO ENHANCE LEARNING OUTCOMES IN ENGINEERING COURSES

Hussein Dia<sup>1</sup>, Rayya Hassan<sup>1</sup>, Elizabeth Chong<sup>2</sup>

1 Swinburne University of Technology, Hawthorn, Victoria, Australia

2 Swinburne University of Technology, Sarawak, Malaysia

This paper presents the findings from a study which evaluated the potential of LinkedIn, as a flexible and mobile social media platform, in contributing to high quality and engaged collaborative learning in higher education. Specifically, the study examined how LinkedIn could be used in transport engineering courses to enhance learning outcomes in sustainable transport practices by engaging students through student, faculty and industry learning collaboration. The project also investigated whether students perceived LinkedIn had contributed to enhancing their critical thinking and knowledge of global sustainable transport practices.

Context and Rationale: The potential for social media as a facilitating tool in achieving higher level learning outcomes through collaboration is supported by the literature. Previous studies showed that social media in higher education is not only valuable for the transfer of knowledge, but also as a support tool for the development of higher-level cognitive skills like reflection and metacognition (Ertmer et al., 2011 and Lárusson and Alterman, 2009). However, some studies have also shown that while participatory technologies and social media have become essential parts of university students' daily lives, students still do not perceive a connection between their online activities and institutional learning (Greenhow and Robelia, 2009). Learning platforms based on social media paradigms, such as LinkedIn, place the control of learning into the hands of learners, making social media tools attractive to students and motivating their participation in the learning process. These platforms also allow students to engage and interact with international domain specialists which is something that would otherwise be difficult and costly to achieve using face-to-face teaching.

While the literature supports the notion that social media hold great promise to create learner-centred education, their potential benefits are yet to be exploited and many fundamental questions remain to be investigated:

\* What types of students expect to benefit the most of the use of social media in higher education?

\* Are the learning benefits different for undergraduate and postgraduate students? Sarawak and Hawthorn students? Introvert and extrovert students?

\* How do the socio-economic and cultural backgrounds affect students engagement with the learning technology and other participants on social media platforms, and what can be done to ensure that the benefits reach a wider cohort of students?

This study addressed some of these questions and investigated the added value of using LinkedIn for collaborative learning.

Investigation Methods: This project was essentially a social media attitudes and usage study to enhance engagement with students and deliver industry and professional news to enhance student learning in sustainable transport. The project included setting up a LinkedIn group to which all students, academic and industry specialists were invited to join and participate. Every week, discussions were initiated and

moderated around a topic in the units of study allowing students to participate and collaborate with their classmates at both campuses and with the domain specialists.

Outcomes: Project evaluation consisted of two parts: a quantitative assessment relying on LinkedIn group analytics and built-in tools, and a qualitative assessment through online observations and student questionnaires distributed at the end of study. Preliminary results showed that the project has achieved its overall aim of improving engagement with the students. LinkedIn analytics showed a growing interest in the evolution of the project with the nine articles generating 4,756 views and 477 interactions between March and June 2015. It was also observed that students engaged the most with the articles that contained interesting, exciting or controversial content.

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### Session G10

Paper

#### THE USE OF ANIMATION TO PROMOTE STUDENT LEARNING ABOUT THE IMPORTANCE OF MENTAL WELL-BEING FOR TERTIARY STUDY SUCCESS

Rachael Field<sup>1</sup>, Will James<sup>2</sup>, James Duffy<sup>1</sup>, Anna Huggins<sup>1</sup>, Kylie Pappalardo<sup>1</sup>

<sup>1</sup> QUT

<sup>2</sup> Griffith University

It is now widely acknowledged that student mental well-being is a critical factor in the tertiary student learning experience. The issue of student mental well-being also has implications for effective student transition out of university and into the world of work. It is therefore vital that intentional strategies are adopted by universities both within the formal curriculum, and outside it, to promote student well-being and to work proactively and preventatively to avoid a decline in student psychological well-being. This paper describes how the Queensland University of Technology Law School is using animation to teach students about the importance for their learning success of the protection of their mental well-being. Mayer and Moreno (2002) define an animation as an external representation with three main characteristics: (1) it is a pictorial representation, (2) it depicts apparent movement, and (3) it consists of objects that are artificially created through drawing or some other modelling technique. Research into the effectiveness of animation as a tool for tertiary student learning engagement is relatively new and growing field of enquiry. Nash argues, for example, that animations provide a "rich, immersive environment [that] encourages action and interactivity, which overcome an often dehumanizing learning management system approach" (Nash, 2009, 25). Nicholas states that contemporary millennial students in universities today, have been immersed in animated multimedia since their birth and in fact need multimedia to learn and communicate effectively (2008). However, it has also been established, for

example through the work of Lowe (2003, 2004, 2008) that animations can place additional perceptual, attentional, and cognitive demands on students that they are not always equipped to cope with. There are many different genres of animation. The dominant style of animation used in the university learning environment is expository animation. This approach is a useful tool for visualising dynamic processes and is used to support student understanding of subjects and themes that might otherwise be perceived as theoretically difficult and disengaging. It is also a form of animation that can be constructed to avoid any potential negative impact on cognitive load that the animated genre might have. However, the nature of expository animation has limitations for engaging students, and can present as clinical and static. For this reason, the project applied Kombartzky, Ploetzner, Schlag, and Metz's (2010) cognitive strategy for effective student learning from expository animation, and developed a hybrid form of animation that takes advantage of the best elements of expository animation techniques along with more engaging short narrative techniques. First, the paper examines the existing literature on the use of animation in tertiary educational contexts. Second, the paper describes how animation was used at QUT Law School to teach students about the issue of mental well-being and its importance to their learning success. Finally, the paper analyses the potential of the use of animation, and of the cognitive strategy and animation approach trialled in the project, as a teaching tool for the promotion of student learning about the importance of mental well-being.

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### Session G11

Paper

#### THE FUTURE OF LEARNING AND TEACHING BASED ON AUSTRALIAN ICT STUDENTS' VIEWS OF EMPLOYABILITY

Angela Carbone<sup>1</sup>, M Hamilton<sup>1</sup>, C Pocknee<sup>1</sup>, M Jollands<sup>2</sup>

<sup>1</sup> Monash University

<sup>2</sup> RMIT University

Improving the employability of graduates has been a nominated priority area for successive Australian Governments. While there has been extensive research into what industry requires of graduates in the workplace, little research is available about students' perceptions of their own employability skills required when they graduate. This study provides new research on the student view of employability; their expectations on what skills are needed by industry, perceptions of how curriculum can be enhanced and what their own role is in enhancing their employability. This student view provides insights that will influence the future of teaching pedagogies and learning paradigms and so move closer to meeting the ever increasing expectations of employability.

Many frameworks have been developed for employability skills, primarily for educators to inform curriculum design. This study selected the Dacre Pool and Sewell (2007) CareerEDGE framework to use as a lens to view current student views of employability. The CareerEDGE framework presents a set of graduate capabilities that are highly valued by employers specifically; career development learning, work and life experience, degree or discipline knowledge, generic skills and emotional intelligence (Dacre Pool & Sewell, 2007).

This paper presents preliminary findings from a larger Australian study into employability (Jollands et al. 2015), specifically the view of students studying information, communication and technology (ICT). Three focus groups were conducted with 20 ICT students from two Australian universities. The students represented three distinct cohorts;



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undergraduates with little work experience, undergraduates who had completed a period of industry-based learning (IBL) and students who had returned to study from the workforce to complete a Master's degree in ICT. The questions addressed in the focus groups centred on:

1. Student perceptions of the current employability skills required;
2. Aspects of their degree that develop their employability skills;
3. Student self-directed activities to enhance their employability; and
4. Ways in which the university could improve the chances of students gaining employment.

The focus groups were recorded, transcribed verbatim and then analysed thematically using a qualitative open coding approach linked to the research questions. Using the CareerEDGE framework to view the responses, preliminary findings indicate that ICT students expected to develop professional practice (career development learning) and interpersonal skills (generic skills), as well as relevant technical abilities valued by industry (degree skills). Undergraduates who participated in IBL spoke of 'soft skills shock' that occurred during their industry placement, the strong realisation for the need to develop soft skills required for effective workplace performance. The Master's students appeared to be more proactive in developing soft skills throughout their post-graduate studies. However, the undergraduate participants with no industry experience placed greater emphasis on obtaining technical abilities and failed to recognise the value of soft skill development. The results outline four key skills students believe employers are looking for and explain what students are doing both inside and outside of the classroom to enhance their employability. The paper concludes by presenting some potential future actions for employability-centric pedagogy, which will be explored further with the audience.

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#### Session G11

Paper

##### **HOW CAN ONE TEACH SO THAT WHAT ONE IS TEACHING ENGAGES WITH A LIFE: TOWARDS A LEADERSHIP TRANSFORMATION EXPERIENCE IN AN EXECUTIVE EDUCATION PROGRAMME IN SINGAPORE**

**Paul Meng-Huat Chua<sup>1</sup>**

*1 National Institute of Education, Nanyang Technological University, Singapore*

Much in line with the objectives of an executive education in the 21st century as argued by Conger and Xin (2000), the four and a half months Management and Leadership in Schools Programme seeks to develop leadership excellence as well as to expose the heads of department participants to strategic global and local issues pertaining not just to education, but also social, economic and cultural ones. Besides learning vehicles such as overseas learning journeys, visits to non-

educational contexts, fireside chats with top leaders from a wide variety of sectors, a key plank of the strategy to transform the leadership competencies of these participants is through the practice of reflection, journaling and giving of formative comments by instructors and peers, as well as active participation in leadership reflection seminars (NIE, 2015). The objective of this presentation is to discuss the results of an exploratory study of the efficacy of such a reflection-based approach to the transformation of leadership competencies. The elements of the leadership development approach that have been found to have made a difference to the leadership transformation experience will also be discussed. In short, it was found that the leadership transformation experience made meaningful sense to the participants for their future work-based issues and problems. Additionally, the participants found the learning experience inched them towards a greater dispositional attitude towards adopting a reflective stance and being open-minded to allow for the examination of one's beliefs, theories-in-use and assumptions. Features of the learning experience that enabled these types of growth include use of frameworks and tools that guide reflection as well as designs of the reflection seminars that allowed for "live" and yet safe experiences in the challenging of the participants' assumptions and theories in use. Data for this exploratory was collected through end-of-course feedback comments, a focus group discussion of purposively-sampled informants, as well as samples of participants' reflection entries. Data for this project has been thematically analysed (Boyatzis, 1998). Implications for theory and the practice of leadership development executive education will also be examined. A story-telling approach will be adopted to present the findings in order to engage the session participants.

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#### Session G12

Paper

##### **STUDENT ENGAGEMENT WITH GRADUATE CAPABILITIES AND COURSE LEARNING OUTCOMES**

**Beverley Oliver<sup>1</sup>**, Susan Bird<sup>1</sup>, Trina Jorre de St Jorre<sup>1</sup>, Siobhan Lenihan<sup>1</sup>

*1 Deakin University*

Graduates need to be aware of the skills, understanding and personal attributes that they gain through the completion of courses so that they can articulate evidence of those capabilities to employers. Universities commonly describe the generic capabilities that their graduates are expected to develop (Oliver, 2011). However, previous research suggests that students find university level outcomes too generic and abstract (von Konsky & Oliver, 2012). Moreover, it is often not clear how Graduate Learning Outcomes are embedded at a course level. This study was conducted as part of a fellowship designed to find new ways to assure student achievement of graduate capabilities, with a focus on evidencing learning and standards for employability. During this presentation, we will describe the impact of strategies designed to communicate Course Learning Outcomes to students to ensure that they understand graduate capabilities and the standards expected of them.

A course enhancement process was implemented at an Australian University to contextualise and embed Graduate Learning Outcomes. Graduate capabilities expressed as 'Course Learning Outcomes and Standards' were specified, assessed and evidenced in all courses. Consistent language and icons were used in communication strategies including; linking unit guides to Course Learning Outcomes; student-friendly versions of outcomes on course sites; and access to unit and course resources, and profiling and employability tools through the

university's student portal. Students were provided with digital spaces where they could curate evidence of their achievements, and a profile-building initiative (Me in a Minute) was implemented to support them in sharing a one minute video showcasing their graduate capabilities to prospective employers. We investigated the impact of these initiatives on students through semi-structured group interviews.

Eighteen undergraduate and postgraduate students from a range of disciplines participated in this exercise. Student responses were recorded and subjected to qualitative analysis for commonly recurring themes. The analysis showed that most students were aware of the Graduate Learning Outcomes but less so their own more specific Course Learning Outcomes. Students reported focusing on the achievement of Unit Learning Outcomes because they were highlighted by teachers, were associated with assessment, and were perceived as more practical or relevant to disciplines. Once students were shown their Course Learning Outcomes and Standards, they agreed that this information was helpful for understanding connections across the curriculum, and would help them to evidence their capabilities to employers. The students were generally aware of the 'Me in a Minute' strategy, but some had hesitated to participate because of privacy concerns. This case study highlights the importance of consistent student-focused communication across subjects to ensure students adopt strategies to evidence their learning.

Oliver, B. (2011). *Assuring Graduate Capabilities: Good Practice Report*. Sydney: Australian Learning and Teaching Council.

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## Session G12

Paper

### USING CONVERSATION MAPS TO COLLECT SOTL DATA AND ENGAGE LECTURERS

**Theda Thomas**<sup>1</sup>, Joy Wallace<sup>2</sup>, Pam Allen<sup>3</sup>, Jennifer Clark<sup>4</sup>, Bronwyn Cole<sup>5</sup>, Adrian Jones<sup>6</sup>, Jill Lawrence<sup>7</sup>, Lynette Sheridan Burns<sup>5</sup>

*1 Australian Catholic University*

*2 Charles Sturt University*

*3 University of Tasmania*

*4 University of New England*

*5 University of Western Sydney*

*6 La Trobe University*

*7 University of Southern Queensland*

There are many ways of collecting qualitative data, with interviews, semi-structured interviews, focus groups or open-ended questions in surveys being the most common. This paper describes the use of conversation maps as a way of collecting qualitative data while also engaging lecturers in sharing ideas and thinking more broadly about the topic.

Conversation maps have been used in business to generate discussion, collect ideas and share experiences. They are usually used in workshops. The facilitator will place a circle with the "topic" in the middle of a sheet of butcher's paper. The topics will be placed on tables around the room. Each participant is given a coloured marker and asked to contribute to the conversation by linking to the central topic or to the "conversation" that has taken place previously. They will read what is there and then add bubbles with their ideas to the previous conversation.

This paper reports on how conversation maps were used to

engage lecturers and collect ideas for a project that focussed on the skills we should develop in first years in order to ensure that they could meet the learning outcomes we wanted them to achieve by their final year. A series of workshops was held with lecturers from each of five discipline areas and the conversation map was one of the techniques used to collect qualitative data and stimulate thinking among the participants.

The learning outcomes for the discipline were used as the starting point for the conversations. Participants were asked to read what others had written and then add their ideas about the skills that students would need to develop at first year or the strategies that we might use. Some asked questions or put smiley faces or ticks to show their agreement with others.

As an example, in the history workshop, one of the eight learning outcomes we wanted to achieve by final year was to "Construct an evidence-based argument or narrative in audio, digital, oral, visual or written form". Someone linked to the topic suggesting that "Debates allow for immediate and supportive feedback". Others then expanded on this by saying things "Large numbers of students can be a problem with debates" and "Allow time for discussion of what worked and did not work in the debate". Another asked the question "Why do students think that analysing an argument means that you should criticize it?" To which people responded with "They may need to learn that different perspectives or approaches can be used" and "A good point maybe we should make this clearer to them". The latter comment then generated the suggestion that you could use "Reading for meaning exercises".

The project team analysed the conversation maps to determine the skills and strategies suggested. We have found the conversation map to be a great way of collecting SOTL data because it engages lecturers, stimulates their thinking and allows us to integrate the collection of data with the improvement of practice.

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## Session G13

Paper

### BUILDING SOTL CAPACITY ACROSS MULTIPLE INSTITUTIONS: FOSTERING KNOWLEDGE AND SKILLS FOR THE DEVELOPMENT OF APPLICATIONS FOR TEACHING AWARDS AND GRANTS

Gavin Sanderson<sup>1</sup>, Helen Stephenson<sup>2</sup>, **Deborah West**<sup>3</sup>

*1 University of South Australia*

*2 Flinders University*

*3 Charles Darwin University*

The South Australia/Northern Territory Promoting Excellence Network (SANTPEN) receives project funding from the Australian Government's Office for Learning and Teaching (OLT) to work collaboratively to promote engagement with OLT's programs, particularly teaching awards and grants. SANTPEN's six institutions (four universities, one institute and one college) are diverse in size and in their missions and several thousand kilometres separate the South Australian institutions from those in the Northern Territory. Between the institutions, also, are varying degrees of experience and success with OLT programs. In addition, the substantive work of SANTPEN team members at each institution is approached quite differently with some being in senior academic roles with wider responsibilities while others are in more narrowly defined professional and administrative roles. All this presents the team with challenges and opportunities when it comes to their project work.

While the Scholarship of Teaching and Learning (SoTL) is a foundational feature of the OLT programs promoted by

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SANTPEN, the team has also chosen it to be the underpinning framework for SANTPEN's leadership work in the strategic development, promotion and facilitation of the various activities that are offered to academic and professional staff to assist them to construct competitive OLT applications. This paper considers the leadership role SANTPEN plays in promoting SoTL across and within institutions and it does this through appraising its work in relation to the six areas identified by Glassick, Huber and Maeroff (1997) as being integral to Boyer's forms of scholarship, namely (1) Clear goals, (2) Adequate preparation, (3) Appropriate methods, (4) Significant results, (5) Effective presentation, and (6) Reflective critique.

Given the professional development nature of SANTPEN's work, its 11 significant public activities since 2012 have been workshops on developing applications for the range of OLT's competitive teaching awards and grants for learning and teaching projects. Drawing on data collected over the life of the project, the paper considers the degree to which the SANTPEN team is achieving its aims and how a SoTL approach is informing its leadership work in the area. One particular challenge the team has had to respond to is how to create awareness in workshop participants that there is a strong SoTL basis to learning and teaching awards and grants and successful applications invariably demonstrate this. While some participants come to the table with applied and conceptual SoTL understanding and experience, many do not and the SANTPEN team has effectively had to 'teach SoTL' by subterfuge, as it were, and all the while 'use SoTL' principles (Glasser et al. 1997) to gauge its success in developing workshop participants' knowledge and skills to build robust OLT applications. The paper will also outline how using a SoTL approach to guide SANTPEN's work over time has resulted in the development of strong team cohesion and relationships and a sense of purpose when it comes to its unique work of building SoTL capacity across multiple institutions.

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## Session G13

Paper

### LEADING SOTL IN AND ACROSS THE DISCIPLINES VIA A SOTL RESEARCH FELLOWS PROGRAM

**Beth Marquis**<sup>1</sup>, Trevor Holmes<sup>2</sup>, Konstantinos Apostolou<sup>1</sup>, Dan Centea<sup>1</sup>, Robert Cockcroft<sup>1</sup>, Theomary Karamanis<sup>1</sup>, Kris Knorr<sup>1</sup>, John Maclachlan<sup>1</sup>, Sandra Monteiro<sup>1</sup>

*1 McMaster University*

*2 University of Waterloo*

Embedding the Scholarship of Teaching and Learning (SoTL) within macro-level institutional contexts can be challenging. Heavy workloads (Brew, 2010), confusion about SoTL (Boshier, 2009), and a widespread undervaluing of teaching and teaching-related inquiry (Chalmers, 2011; Walker, Baepler & Cohen, 2008) can dissuade faculty from engaging in such scholarship. This is exacerbated by the need to cultivate a new sense of scholarly identity as one begins working in a new field or leadership role (Galloway & Jones, 2012; Manathunga, 2007; Simmons et al., 2013; Tremonte, 2011). Strategies for actively supporting SoTL scholars and creating institutional contexts that acknowledge and value their work thus must be created and refined.

Our participant-led research assesses an initiative designed to support the development and institutional recognition of scholars who might become SoTL leaders within their

departments and across the institution as a whole. The [institute name] Research Fellows program established a new type of academic appointment on our campus. Cross-appointed Research Fellows are responsible for teaching, research and service in their home departments, but also have a portion of their positions officially dedicated to conducting SoTL research of their own design in the central teaching and learning institute. Following a modified learning community model (Cox, 2003), Fellows meet regularly to discuss project progress, exchange feedback and ideas, examine literature in the field, and offer peer support. Uniquely, this program was initially facilitated by a visiting scholar with experience in both faculty development and identity formation, in collaboration with the Associate Director (Research) and a Research Coordinator. By such means, the initiative aims to facilitate the development of community amongst Fellows, to support and celebrate their SoTL work, and to create time, space, and recognition for SoTL within academic positions. As such, it hopes to contribute to the development of a community of informal SoTL leaders on our campus.

In order to explore the perceived benefits and challenges of the Research Fellows model, initiative participants co-developed a series of reflective prompts to which we responded individually at set points within the first year of the program. Subsequently, we convened for a focus group at which we further discussed our experiences and perceptions of the Fellows model. Working as a team, we analysed these data via constant comparative analysis (Merriam, 2009). While this methodology does not permit an 'objective' assessment of the impact of the Fellows program on our campus, it does allow us to systematically gather and analyse rich data that provide insight into the experiences of individuals navigating these new positions of informal leadership. This session will share some of our preliminary findings, using these to initiate a facilitated discussion of the potential and limitations of the Fellows model and its possible transferability to other institutional contexts.

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## Session G14

Paper

### BEYOND INTERNATIONALISATION: FRAMING CONVERSATIONS AROUND 'INTERCULTURALISATION OF THE CURRICULUM'

**Michelle Barker**<sup>1</sup>, Kathleen Lilley<sup>2</sup>, Amanda Daly<sup>1</sup>

*1 Griffith Business School, Griffith University*

*2 Griffith Asia Institute, Griffith University*

Global mobility initiatives have led to ever-increasing numbers of international students on short or long-term sojourns. Diversity, especially in terms of the presence of students from culturally and linguistically diverse (CALD) backgrounds is evident in higher education contexts around the globe. Conversations in the academy about diversity tend to swing between discussing the impact of international student numbers on the formal and informal curriculum, and agendas around widening participation. The challenge for academics is how to use this diversity as a resource to create a culturally inclusive classroom where students are encouraged to respect and learn from each other's perspective and to develop the attributes of a global citizen.

Discussion of concepts such as "internationalisation of the curriculum" and "internationalisation-at-home" has tended to focus more on international students, and has not incorporated the perspectives of indigenous knowledge and indigenous students. In some institutions, specified graduate attributes address becoming competent in CALD and international environments, as well as having awareness of and respect for the values and knowledges of Aboriginal and Torres

Strait Islander First Peoples. For the most part, however, internationalisation and indigenisation strategies exist as if in parallel tracks within learning and teaching theory and practice. As such, an holistic approach to diversity is sidelined through the separation of these agendas.

This paper reflects on outcomes of a two-year Office of Learning and Teaching priority project on “internationalisation-at-home” and doctoral research on global citizenship, and questions whether a focus on “interculturalisation of the curriculum” might be an effective way forward to incorporate both indigenous and CALD/international perspectives within the same institutional strategy. The paper explains how “interculturalisation of the curriculum” presents the challenge of identifying and implementing best practices for diversity and inclusiveness in the formal and informal curricula that encompasses indigenous and international perspectives.

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## Session G14

Paper

### CHANGE AND LEARNING - HOW THE CHANGE PROCESS RESHAPES STUDENT LEARNING OVER TIME?

Jinqi Xu<sup>1</sup>, Christopher Sykes<sup>1</sup>

*1 SMOM, Faculty of Business, University of Wollongong*

Chinese students studying in higher education institutions in the West face significant change in many areas of their lives. Students are expected to quickly adapt to a very different culture, language and pedagogical practices that re-position their former learning practices. In general, Chinese students are still frequently caricatured pejoratively as ‘Chinese learners’ who utilise ‘rote learning’ (Biggs, 1996). However, as this paper shows these generalised assumptions are problematic due to differences in ways of knowing (Hall & Ames, 1995) the differences between national educational systems (Biggs, 1998) and students’ naturalised learning practices commensurate with such systems.

In this paper, we focus on two related questions: first, what are some of the ways of knowing and naturalised learning practices used by Chinese students; and second, how do they adapt to new ways of knowing and practices in Australian institutions? We examine the different ways of knowing and learning used by students as they adapt their learning practices to this new context. The paper is underpinned by theoretical understandings of learning based on the metaphor of becoming (Hager & Hodkinson, 2009). Many discussions of learning and change draw upon notions of reality that privilege stability and equilibrium based on metaphors such as transmission and collaboration (Hager & Hodkinson, 2009). In contrast to such approaches, the metaphor of becoming is underpinned by a process approach that emphasises reality is in a constant state of becoming and change (Rescher, 1996). We argue that this ontological move to process supports alternative conceptions of learning and pedagogy that are commensurate with the Chinese students’ learning experience. In this view students’ learning occurs in practices (Boud, 2009; Reich & Hager, 2014; Sykes & Dean, 2012) that appear stable but are nevertheless shown to continually change over time and in different contexts.

Ethnographic methods were used to collect data over 18 months identifying the practices used by six students in their learning. A range of methods used in this research including the use of interviews, participant observation and focus groups; the collection of artifacts, documents, and photographs, as well as the field notes and reflections. Several brief vignettes are presented to illustrate students changing

practices in which students are shown to adopt different practices to adapt to the new curricula and pedagogy depending on their way of knowing, their naturalised learning practices, their personal history and their contextual understandings.

The findings suggest that student learning practices are changing and becoming over time and that therefore there is value in conceiving them temporally or in relation to their past practices as well as present pedagogical expectations and teleologically in anticipation of future hopes and commitments. The paper contributes to ISSTOL by focusing on the scholarship of change extending conceptualisations of change and learning for diverse students. We recognise the limitations of the paper in that it does not provide a detailed discussion of the theoretical work in the area, nor does it provide a strong empirical study. Its aims are more modest in that we wish to introduce this issue as way of discussing the tension and its outworking within the classroom.

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## Session G15

Paper

### GRADUATE TEACHING ASSISTANT DEVELOPMENT IN A PRACTICE-AND-THEORY FRAMEWORK

Guopeng Fu<sup>1</sup>, Will Valley<sup>1</sup>, Cyprien Lomas<sup>1</sup>

*1 University of British Columbia*

Graduate Teaching Assistants (GTAs) play a pivotal role in undergraduate education. They stand at the frontier of enhancing high quality instruction in undergraduate education because GTAs are responsible for an increasing amount of instructional responsibilities and extensively interact with university students (Nicklow, Marikunte, and Chevalier 2007; O'neal et al. 2007; Commander, Hart, and Singer 2000). In addition to the influences on undergraduate students, GTAs also have potential impacts on faculty members' instruction through exemplifying high quality teaching practice (Milner-Bolotin 2001). Further, Prieto (2002) believes that “teaching



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assistantships are the foundation of faculty development" (2). Given the impact that GTAs have on undergraduate student education and faculty development, GTA training should hold priority in higher education.

GTAs often receive insufficient or no education or professional development to prepare them for effective teaching (Gardner and Jones 2011; Nyquist, Abbott, and Wulff 1989).

Researchers have reported that a large proportion of GTAs receive little or no meaningful pedagogical training even when training programs are offered (Luft et al. 2004; McComas and Cox-Petersen 1999). This is also the case at the University of British Columbia based on the interviews conducted with a group of thirteen GTAs. Effective GTAs development programs need to be ongoing, focus on immediate issues and practical skills, and building strong relationships within the teaching team (Young and Bippus 2008; Darling-Hammond et al. 2009).

With the suggestions and recommendations from the literature in mind, our research team designed and implemented a term-long GTA training program that draws on a practice-and-theory framework (Russell et al, 2013) and creates a collaborative learning community among the GTAs, students, and instructors in the Faculty of Land and Food Systems. The GTAs professional development program was implemented in two courses with large enrolments (more than 200 students each and with 15 GTAs between the two courses). GTAs lead small tutorial room sessions (approximately 30-35 students) with pedagogical autonomy and used the weekly teaching team meeting as a professional development platform where GTAs shared their success and challenges within the teaching team. Students were asked to provide mid-course feedback to GTAs in addition to email and office hour communication. The Learning Centre in the faculty provided technological and on-line resource support. At the end of the term, we interviewed thirteen of fifteen GTAs in the two courses and solicited their feedback on the program. We also collected written feedback from students with regard to the courses including their GTAs' teaching performance.

Most GTAs reported that their confidence and teaching skills were improved through the courses. They appreciated the "learning from first-hand experience" model. The success and challenges in teaching motivated them to actively connect theories to and reflect upon their practice. The plenary sessions allowed GTAs to observe and learn from the instructors as model teaching and the teaching team meetings created opportunities for GTAs to socialize with other GTAs and the instructors. Novice GTAs felt safe to seek help from senior GTAs during or after the teaching team meetings. GTAs held mixed views on autonomy in the breakout room session. Some appreciated the autonomy while others looked for more structure. Students appreciated that GTAs constantly inquired their feedback and modified teaching practice. Students felt valued by GTAs and thus felt more connected to the courses. From themes emerging from GTA interviews and feedback from course instructors, we have further articulated and refined our GTA development model to inform on-going GTA professional development in our Faculty. We hope to share our local practice at the 2015 ISSOTL conference and stimulate discussion among delegates who are also interested in GTA professional development.

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## Session G15

Paper

### THE AFFORDANCES OF TUTORIALS IN ENHANCING STUDENTS' UNDERSTANDING OF A THRESHOLD CONCEPT: A CASE STUDY

Lee Rusznyak<sup>1</sup>

<sup>1</sup> University of the Witwatersrand, South Africa

Since the advent of democracy, South African higher education institutions (HEIs) have needed to find ways to provide quality learning opportunities to increasing numbers of students who differ in their levels of university preparedness. Large class pedagogies have been at the forefront of discussions about using available staffing resources efficiently although concerns are expressed about compromising the provision of student support (Hornsby, Osman, & De Matos-ala, 2013). HEIs are currently under pressure to do away with class tutorials that place a high demand on available staff capacity. Although tutorial systems play a pivotal role in supporting students as they transition from school to university (Underhill & McDonald, 2010), there is very little literature on the extent to which they promote epistemological access to threshold concepts that potentially open up a new and previously inaccessible way of thinking' (Meyer & Land, 2003, p. 1).

This paper reports on an empirical research project that investigated the extent to which a tutorial enabled a cohort of student teachers to gain enhanced understanding of a 'threshold' concept located in an Education course on learning theory. A diagnostic assessment was developed by the lead lecturer in conjunction with the research team, but was not made available to staff tutoring on the course. Participants in the study were a cohort of first-year student teachers at the School of Education, University of Witwatersrand, South Africa. On three occasions, participants completed the diagnostic assessment tasks: First, at the end of a compulsory large class lecture with 500 students; second, having done individual reading preparation for a tutorial task but before the tutorial itself; and third, at the end of the scheduled class tutorial session where students were in classes of 40 students. Shifts in students' understanding of the core knowledge are tracked across time and compared with the intended conceptual learning. Comparisons in the shifts in student understanding are made across different tutorial groups.

Preliminary findings suggest that class tutorials have the potential to enhance student understanding in relation to the concept studied, especially for those who found it difficult to extend their understanding through tutorial preparation activities. However, the variability of the shifts within and across tutorial groups was uneven. The results of this study will be used by teacher educators to improve the coordination of tutorials across staff and make more considered decisions about whether, when and how to use tutorial activities to support student learning.

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## Session G16

Paper

### **EXPERT VS NOVICE: CAN UNDERGRADUATES EVER BECOME EXPERT PROBLEM SOLVERS?**

**Tina Overton**<sup>1</sup>, Christopher Randles<sup>2</sup>

*1 Monah University*

*2 University of Hull*

Active approaches to learning in the laboratory or the classroom invariably require students to use problem solving skills. Problem solving is one of the skills prized by employers of science graduates but the type of problem solving developed through traditional teaching approaches rarely develops the ability to solve the complex, real-life problems that graduates meet in the workplace. 'Real' problems are rarely algorithmic, rarely provide a complete data set and rarely lead to a single 'correct' answer. These complex problems are more likely to be encountered through inquiry-based and active approaches to teaching and learning. This paper describes the results of a qualitative study that investigated the different approaches used by undergraduates to tackle these complex problems using a grounded theory approach. The study involved undergraduate, industry and academic participants from the chemical sciences who individually answered complex problems using a think aloud protocol.

Complex problems are defined here as problems where not all the required data is given, where there is no single possible strategy and no single correct answer to the problem. The audience will be invited to engage with some of these problems. The qualitative data identified a limited number of different approaches used to solve these problems, such as framing the problem, identifying information needed, using algorithms, and others. The relative quality of solutions developed by each group was also analysed via both a traffic lighting system and a numerical score. Analysis identified the characteristics exhibited by novice, transitional and expert problem solvers. Expert problem solvers used a greater range of approaches and exhibited more evaluation and more confidence, whilst novices used a limited number of approaches and lacked confidence. Even students who had studied on a degree delivered entirely by problem-based learning did not show expert-like behaviour. Although the sample size was limited and in one discipline, these results have implications for how academics conceptualise problem solving in their teaching and how students are supported in those activities. Whether students can be 'accelerated' towards expert-like behaviour will be discussed.

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## Session G16

Paper

### **DESIGNING WORK READY STUDENTS FOR 21ST CENTURY EMPLOYERS WITH AN 'ENGAGE', 'CONNECT', 'PULL DON'T PUSH, 'ONLINE AND MULTIFACETED APPROACH'**

**Jonny Wells**<sup>1</sup>

*1 University Of Technology, Sydney*

Designing work ready students for 21st Century employers with an engage, connect, pull don't push, online and multifaceted approach.

For the demands of 21st century workplaces and the changing face of employment, university students must ensure that they possess effective communication skills in order to look for work; as well as operate efficiently when employed. Employers frequently comment (Jackson & Chapman 2010, Barrie 2007, Kivunja 2014) that graduates often lack the essential skills (language, teamwork, leadership and initiative) that 21st century workplaces demand. As a result many universities are increasingly focusing their energies on initiating programs and services that are developing the needs of their students to become better equipped graduates, with more effective workplace communication skills and with the embedded skills that employers demand/industry requires. With a shift to a more flipped teaching style and enhanced utilisation of technology in teaching, UTS is designing a non-credit bearing online program to aid 'work ready students for 21st century employers with better employment focused communication skills and skillsets that workplaces demand.

UTS Careers Service have designed an online program combined with face to face feedback sessions and additional support to help students enhance their communication skills 'around enhanced workplace and employability skills and their associated language and communication strategies. The online program is focused on soft skill development and enhancing students' communicative abilities in the workplace and for achieving better employability outcomes generally. Employers argue that Australian university students often lack the language needed 'on the job' (Jackson & Chapman 2010, CIHE 2008) or at the recruitment process in order to pitch themselves in an already crowded and highly competitive graduate recruitment process. Our program of communication

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development fits within UTS's commitment to engaged learning ('learning.futures'), quality teaching, enhancing the student experience, as well as adding value to students' degree programs.

Attempting to improve the communicative skill set of our students and 'soon to be graduates' is a positive reflection of UTS's commitment to professional practice. In helping to develop the workplace and employability communication skills of domestic and international students, we are hoping to address the skills gap that employers lament (Gray & Murray 2011, Schulz 2008, Kassim & Ali 2010, Crosling & Ward 2002). Participating students should begin to realise the benefit that enhanced workplace communication brings in terms of securing new roles/promotions and longevity in their careers. The online communications program and associated face to face interaction will allow students to understand and develop appropriate, professional and relevant communications in the workplace; while developing their employability skills in the process. This is an exciting initiative that has potential for further embedding within curriculum and further engagement of community, industry, professional body and associated industry figures.

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## Session H1

Paper

### THE JOURNEY NOT THE DESTINATION: ASSURING QUALITY VIA COURSE LANDMARKS

Scott Beattie<sup>1</sup>

<sup>1</sup> CQ University

The current emphasis on course quality assurance through indexation of course outcomes has proven to be cumbersome and does not produce easily visualised data regarding the student experience. It may well be that a narrative approach, based around student engagement with 'course landmarks' would provide an alternative, or at least complementary vision of course quality. In addition, new technologies such as digital badging may support and scaffold this parallel vision of student learning, creating space for student voice.

Current models that focus on 'mapping' via aggregation of outcome data produces a shallow and flat course visualisation, containing so much information that it is difficult to visualise or to differentiate between different course experiences. Further, this approach is highly descriptive, tends to be implemented via a compliance-oriented process and becomes disconnected from everyday experience through a focus on curriculum structure rather than practice.

Instead it is suggested that a narrative approach to mapping based on specific course 'landmarks' would allow for ready visualisation, provide a framework for making decisions around the balance of outcomes and also allow for course comparison through each program's distinctive and unique qualities and experiences. Digital badging provides new opportunities to assemble a framework that not only validates learning but also creates space for student voice through choice and curation in credentialing landmark activities.

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## Session H1

Paper

### WHAT'S UP WITH THE AUSTRALIAN BA?

Deanne Gannaway<sup>1</sup>

<sup>1</sup> University of Queensland

The Bachelor of Arts (BA) is the oldest degree program in Australia graduating thousands of students since 1856. In

2012, it was still one of the larger single degree programs offered in Australia with over 48,000 students enrolled in BA programs. Yet, the BA is increasingly coming under pressure. In the contemporary higher education context, higher education programs are increasingly pressured to meet the needs of a knowledge economy (Blackmore, Brennan, & Zipin, 2010). Marketization, managerialism and performativity pressures question the traditional perspective and place of a generalist, humanities Arts program in Australia.

Do these pressures mean that the future holds no place for a BA? In the face of these pressures, will future students, future pedagogies and future learning paradigms exclude a generalist Arts program?

This paper argues that the Arts program is adapting to the new context. It draws on the findings from a study that mapped the planned curricula (Lattuca & Stark, 2009) of Australian BA programs. Publicity materials, official curriculum documentation, and personal perspectives were collected for Arts programs offered at all 39 Australian universities in 2007 and 2011. Data were analysed in an iterative manner across five stages of analysis using techniques typical of comparative historical analyses. Using a framework of common curricula elements - purpose, content and sequencing data were analysed horizontally across institutions and time and vertically within institutions (Creswell & Plano Clark, 2007). Findings from this analysis were verified against findings emerging from a detailed, focused ethnographic study of curriculum and processes at three institutions.

The study indicated a tendency among Australian Arts programs to embrace the rhetoric of preparing work-ready graduates. Discipline offerings have narrowed and curriculum structures become increasingly prescriptive. Curricula in generalist Arts programs are increasingly operationalised and constructed at the level of program, rather than at the level of discipline or major. The study also established that changes made in response to the external and internal pressures did not follow a common trend. Despite having the same title, four distinct models of Arts programs were identified. These models were found to be in operation within single institutions and across the sector. Individuals with different levels of responsibility for curriculum within the same institution were found to hold different views of the program. Despite evident differences, interviewees assumed a consensus of opinion within their institution and across the sector about the purpose and construction of Arts degrees; revealing conflicting viewpoints and an absence of a shared understanding, both within individual institutions and across the sector, of what constitutes an Arts program in the contemporary context. This paper considers these findings and explores a view of an Arts program that is in a process of metamorphosis; morphing, rather than moribund.

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## Session H1

Paper

### TRANSCENDING PEDAGOGIES: STRATEGIES FOR DISRUPTING LEARNING AND TEACHING SPACES

Joy Higgs<sup>1</sup>

*1 The Education For Practice Institute, Charles Sturt University*

Teaching and learning strategies, or pedagogies, can retain traditions, acquiesce to educational market forces or disrupt the complacencies and hegemonies of unquestioned practices in the pursuit of good learning and teaching practices. The purpose of teaching and curricula is to facilitate learning, while the purpose of the scholarship of learning and teaching is to make transparent and credible strategies for the facilitation of learning. The paper will argue the value of recognising pedagogies as comprising both purposes and activities; further, pedagogies encompass and can be enriched by educational technologies and creative learning environments.

This paper reports on the development of a research-generated pedagogical model: transcending pedagogies, that has been created in these dual disruptive spaces of teaching and scholarship. The paper will present the research and theory underpinning transcending pedagogies, critical appraisal of the model during the research and from previous presentations, a review the value of transcending pedagogies for contemporary learning and teaching spaces, and reflections on future directions for SoTL.

The goal of the research was to identify and interrogate pedagogies that transcend the mode of courses (e.g. distance, on campus), the type of curricula (e.g. professional and liberal education), and notions and spaces of teaching and learning. This project examined the nature of teaching and learning spaces and professional and higher education pedagogies that can be implemented across these spaces. The research focussed on the evolution of new pedagogies and blendings of pedagogies that successfully transcend all of these spaces.

As the research sought to deepen understanding and to appraise current practices and emerging pedagogies, a qualitative paradigm utilising hermeneutic strategies was chosen to frame the research. A blend of two research strategies: appreciative inquiry (see Stowell, 2013) and critical transformative dialogues (see Trede, Higgs & Rothwell, 2009) with hermeneutic analysis strategies, were adopted. Hermeneutic texts were constructed from survey data, researchers' observations, field notes, a review of websites and relevant literature, interview and focus group transcripts, and blogs generated on Internet sites. Hermeneutic text interpretation strategies were adopted including the use of dialogue of questions and answers plus fusion of horizons following a Gadamarian tradition (Gadamer, 1977).

The audience will be invited to reflect on the transcending pedagogies model and the value of this interpretation and framing of pedagogies for contemporary disrupted higher education spaces.

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## Session H2

Symposium

### LEARNING AND LEADING IN INTERNATIONAL COLLABORATIVE WRITING GROUPS: STUDENT, ACADEMIC, FACILITATOR, AND COORDINATOR PERSPECTIVES

Kelly Matthews<sup>1</sup>, Lucy Mapstone-Mercer<sup>1</sup>, Jacquie McDonald<sup>2</sup>, Beth Marquis<sup>3</sup>, Mick Healey<sup>4</sup>

*1 The University of Queensland, Australia*

*2 University of Southern Queensland, Australia*

*3 McMaster University, Canada*

*4 HE Consultant, UK*

Publishing in SoTL presents challenges for many scholars, including the unfamiliar methodologies sometimes distant from disciplinary practices and the isolation experienced by many academics as lone SoTL practitioners in their disciplines (Hutchings et al., 2011). In 2012, an International Collaborative Writing Group (ICWG) initiative aspired to build participants writing capacity whilst contributing new insight into scholarly teaching. Nine writing groups comprising 7-8 members worked at a distance over a year-long period with a key part of the process being a two-day residential event prior to the commencement of the ISSOTL conference in Hamilton, Canada, in October 2012. The initiative resulted in eight published articles (Healey & Marquis, 2013). The sense of belonging, capacity building in writing about SoTL, and shared learning that were highlighted in participants feedback on the 2012 ICWG pointed toward the process of co-authoring being a positive experience that nurtured collaboration (Marquis, Healey, & Vine, in press). The ICWG model resonated with communities of practice (CoP) as 'groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Wenger, McDermott, & Snyder, 2002, p 4-5). The 'nurtured higher education CoP' model emphasises facilitated leadership distributed across members (McDonald et al, 2012) and is being applied to the second ICWG initiative in 2015 to foster explicitly the dynamics of the shared learning and the importance of the leadership facilitation process within the writing groups. This symposium will invite audience members into an informal, yet informative discussion on the process of shared learning and leading as it unfolds in real-time in the 2015 ICWGs from four different perspectives: student writing group member, academic writing group member, writing group facilitator, and coordinator for all writing groups.

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## **FROM STUDENT TO COLLABORATOR: THE PROGRESSION FROM LEARNING TO LEARNING TO CONTRIBUTE THROUGH THE ICWG EXPERIENCE**

**Lucy Mapstone-Mercer<sup>1</sup>**

*1 The University of Queensland, Australia*

This presentation will explore the student perspective on the learning experiences offered by participating in an international collaborative writing group (ICWG). I am a PhD student with a diverse history in science, communication, and education. My motivation to participate in this ICWG was to develop my ability to collaborate across discipline-specific and international borders, to broaden and strengthen my network of academic peers, and to be exposed to new ways of conducting research. Moving from undergraduate studies, where the focus is on process and content learning, to postgraduate studies, where the focus is on original research development, is a challenge that every academic has faced. Participating in an ICWG offers the opportunity for students to continue this developmental journey by learning not only to carry out original research, but to do so in a collaborative environment guided by an experienced facilitator. This notion resonates with the 'nurtured higher education community of practice (CoP)' model which emphasises facilitated leadership distributed across members (McDonald et al, 2012). This CoP model is different from any previous student experience. Up until this point, the majority of a student's collaborative experiences will have been with student peers (our equals), or with academic supervisors (our seniors). Learning to collaborate with academics through an ICWG requires students to walk the line between these two relationships by contributing alongside your academic peers while also learning from those with more experience. This provides an excellent opportunity to develop collaborative skills early on, and in an accepting environment, allowing students to function within a CoP whereby members share a passion for higher education and collaborate to extend knowledge and expertise in an ongoing group process (Wenger, McDermott, & Snyder, 2002, p 4-5). This is a truly enriching experience. However, students must also overcome certain challenges in. I will reflect on and discuss the range of exciting opportunities and challenges I have faced as part of my ICWG journey, and offer some insight into what I have learned and the skills I have developed as a result.

McDonald, J., Star, C. Burch, T., Cox, M., Nagy, J. and Margetts, F. (2012). Final report: Identifying, building and sustaining leadership capacity for communities of practice in higher education, Office of Learning and Teaching: Canberra.

Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business Press

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## **LEADING AND LEARNING IN A WRITING GROUP COMMUNITY: THE VIEW OF AN ACADEMIC MEMBER**

**Jacquie McDonald<sup>1</sup>**

*1 University of Southern Queensland, Australia*

The opportunity to collaborate with international educators to research then publish about scholarly learning and teaching, rather than research focused in a discipline area, is rare. I will share my insights, from an academic perspective, of this unfolding process with reflections on social learning opportunities supported by the structured activities and share lessons learned from participation in an international collaborative writing group (ICWG) (Marquis et al 2014; Healey & Marquis, 2013).

Since 2006 I have been involved in implementing Communities of Practice (Wenger 1998, Wenger et al, 2015) in Higher Education, and the 'nurtured higher education CoP model' (McDonald et al, 2012; McDonald & Cater-Steel (2016) is being applied in the 2015 ICWG initiative to foster explicitly the dynamics of the shared learning within the writing groups. While the model encourages distributed leadership and an organising structure, ensuring member engagement is a perennial problem. Application process was competitive and over-subscribed, with clear timelines and expectations of commitment and delivery of a jointly authored publication as the identified outcome. However the nature of academic work means participants are 'time jealous' (ALTF, informal professional learning conversations), and so they choose where to commit their time. This means there is a danger that the online group participation is minimal, thereby lacking the sustained interactions required to establish a sense of community and positive social learning outcomes. How members engage in the collaborative, social learning process (Hart, 2015) will be articulated from the perspective of an academic writing group member. The audience will be invited into discussion on the process of social learning from the online, and, the pre-conference two and half day workshops.

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## **FOSTERING COMMUNITY, COLLABORATION, AND SHARED LEARNING IN AN ICWG: A FACILITATOR'S PERSPECTIVE**

**Beth Marquis<sup>1</sup>**

*1 McMaster University*

The ICWG model has significant potential for developing participants' SoTL capacity and fostering meaningful international collaborations (Marquis, Healey, & Vine, 2014; Marquis, Healey, & Vine, in press). Previous research examining participants' experiences of the 2012 ISSOTL ICWG suggested that the process serves to support scholars' development by

providing opportunities for mentorship and community building, bringing together a range of people and perspectives, and creating a context for valuable experiential learning (Marquis, Healey, & Vine, 2014). Nevertheless, some compelling challenges attach to the process, including the difficulty of collaborating at a distance, and the complexity of developing a shared vision and voice within a diverse group particularly when most participants don't know one another at the initiative's outset (Marquis, Healey, & Vine, in press). Effective group leadership has been positioned as a central means of successfully navigating these challenges and maximizing the positive outcomes of the ICWG process (Marquis, Healey, & Martensson, 2014).

This portion of the symposium will reflect on my experiences attempting to apply the findings of this previous research to the process of facilitating one of the 2015 ISSOTL ICWGs. The 'Scholarship of Inclusive Teaching and Learning' ICWG is a team of eight members based in seven different countries, working together to develop an article about equitable and inclusive teaching and learning practices. I will share the choices made in collaborating with the group to date, consider the strengths and weaknesses of those choices, and discuss the benefits and challenges of this process for me as facilitator. Particular consideration will be given to my experiences of participating in a facilitators' community of practice (Matthews, Marquis, & Healey, 2016) new to the ICWG initiative in 2015 and its impact on my own learning, development, and approach to facilitation and collaboration.

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## **INITIATING, CREATING, AND SUSTAINING THE ICWG INITIATIVE: THE ROLE OF THE COORDINATOR**

**Mick Healey<sup>1</sup>**

*1 Healey HE Consultants*

The previous contributions in this symposium have reflected on the experiences of engaging in the ISSoTL ICWGs in 2012 and 2015. In this presentation I shall reflect on the origins of the initiative over fifteen years ago with the founding of the International Network for Learning and Teaching Geography in Higher Education (INLT) (Hay, Foote and Healey, 2000). The INLT has held five ICWGs in Hawaii (1999), Glasgow (2004), Brisbane (2008), Washington (2010) and London (2014). The presenter co-organised the first two events and was a contributor to the following two, as well as being one of the coordinators for the two ISSoTL ICWGs (Healey, 2006; Healey and Marquis, 2013; Healey, Marquis and Vajoczki, 2013;

Healey, Pawson and Solem (2010); Marquis, Matthews, Healey, and Martensson, 2014; Marquis, Healey and Vine, 2014; 2015; Mathews, Marquis and Healey 2016).

This presentation will examine how the idea has developed over the last 15+ years, the nature of the impact it has had, and the challenges faced by the coordinators. The symposium participants will be invited to discuss how the concept may be sustained over the next 15 years.

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## **Session H3**

Paper

### **PAIRED-PLACEMENT AS AN ALTERNATIVE MODEL TO PROMOTE TEACHER LEARNING IN PROFESSIONAL PRACTICE**

**Kim Anh Dang<sup>1</sup>**

*1 Office of the Vice-Provost (Teaching and Learning), Monash University*

Professional practice is a crucial component in many disciplines in higher education. It can take the form of clinical practice for students in nursing and healthcare, or teacher placements in teacher education programs. Within teacher education, teacher candidates commonly teach individually, under a supervising teacher. They are usually expected to assume responsibilities similar to those of experienced teachers despite

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limited experience and preparation. Extant research shows that within this single placement model, many teacher candidates experience isolation and lack of support, and having to focus on survival rather than learning.

The paired-placement model is one response to the many challenges associated with the traditional model of single teacher placements. Paired-placement is a model in which teacher candidates are placed in subject pairs rather than individually. Emergent research highlighted the multiple benefits of paired-placements for teacher learning during practicum, and invited further investigation into this mode of professional practice. The question is still left open as HOW teacher candidates learn to teach in the paired-placement.

This paper explores whether and how the paired-placement facilitates teacher professional learning in a second language teacher education context at a Vietnamese university. Methodologically, the study draws upon case-study research of four pairs of English language teacher candidates over their 15-week paired-placement in Vietnam. Data include individual interviews with the teacher candidates; observations of the pairs co-taught lessons; video-recordings of planning meetings and lessons; and relevant artefacts such as instructional materials. Theoretically, the study is grounded in Vygotsky's (1978, 1981) sociocultural theory of learning and third generation activity theory (Engestrom, 1987, 2008).

The findings across the four pairs reveal that learning opportunities were initially manifested in conflicts within the teacher pairs. These conflicts may be caused by their differing or conflicting conceptions of student teaching or unequal power relationship. Beyond confirming that learning occurs in the paired-placement, the study uncovers the intricate process of learning mediated by the paired-placement. Driven by their conceptions of student teaching, the teachers exercised their agency by drawing on peer observation and/or professional dialogue as resources for reflection-in-action, reflection-on-action, and reflection-for-action, to achieve enhanced understanding, which then informed their subsequent response to contradictions and conflicts. Contradictions when resolved led to teacher candidates powerful learning and transformation.

The study highlights the paired-placement as a promising model for teacher education. It also offers pedagogical implications for effectively adopting this model within teacher education and also other disciplines to promote learning in professional practice.

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## Session H3

Paper

### **DEVELOPING LINKS ACROSS FIGURED WORLDS: INTEGRATING PHYSICAL AND VISUAL LITERACIES IN THE EXPLORATION OF ARTIFACTS AND CULTURAL SPACES**

**Melanie Nash<sup>1</sup>**, Helen Kent<sup>1</sup>, Catherine Reid<sup>1</sup>

*1 Melbourne Graduate School of Education*

Drawing upon the theories underpinning figured worlds (Holland et al. 1998) and multiliteracies (Cope and Kalantzis, 2000), this paper demonstrates how teacher educators designed and implemented an interdisciplinary approach to enact literacy pedagogies in a variety of cultural institutions. This collaboration between teacher educators in Physical Education (PE) and English, allowed for the development of a partnership between faculty and the cultural institutions, in order to develop strategies to use the spaces and artefacts in creative ways. The modelling conducted by the teacher educators provided pre-service PE teachers with a 'set of tools'

that enabled them to inturn design a learning experience for local secondary school students, that were enacted beyond the classroom setting and used multimodal texts.

This approach and activities, that the pre-service teachers participated in and designed, was underpinned by literacy theory, including Luke and Freebody's Four Resources Model (1998). Aspects of multiliteracies theory (New London Group, 1996) were also drawn on, particularly in relation to visual, gestural and intertextual elements.

In this paper we report on the success of this initiative and use feedback from the participants to critique the processes used and discuss future directions for our collaborations to develop authentic learning beyond the classroom setting and which crosses discipline boundaries and incorporates digital technologies.

In addition, we will demonstrate through audience interaction and engagement how activities conducted in cultural spaces can provide participants with models allowing for the development of purposeful, interdisciplinary and integrated approaches to education in cultural sites.

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## Session H4

Paper

### **ENGAGING AND LEADING TEACHING TEAMS IN THE DEVELOPMENT OF QUALITY CURRICULA: A COLLABORATIVE APPROACH**

**Andrea Carr<sup>1</sup>**, Kathleen Burke<sup>1</sup>, Helen Ceperkovic<sup>1</sup>, Robert Ceperkovic<sup>1</sup>, Lynette Goldberg<sup>1</sup>, Abbie Grace<sup>1</sup>, Amanda Harper<sup>1</sup>, Andrea Price<sup>1</sup>

*1 University of Tasmania*

The Bachelor of Dementia Care (BDemCare) is a new fully online course that has been developed and delivered within a very short time-frame with minimal staffing including, in some instances, discipline experts inexperienced in curriculum development, especially for teaching large numbers online. In the initial semesters of delivery, curriculum development occurred in a 'just in time' space. A collegial system of team-based peer review was established to ensure constructively aligned curricula both within and across units. It proved to be an efficient, inclusive and opportunistic approach to integrate processes for quality assurance and improvement with ongoing curricula development.

A Peer Assisted Teaching Scheme (PATS) (Carbone, 2014) framework was adapted to guide this activity. The original mentor-mentee approach, that aims to reinvigorate and remediate underperforming courses and units, was reframed as a whole-of-team, collaborative mentoring initiative that is a proactive method for quality assurance and in the development and improvement of curricula.

All academics employed in the BDemCare team, including casual, fixed-term contract and ongoing staff members engaged in the process. Crucially, professional staff also participated as equal review members, contributing from an academic administration perspective. Team members provided peer review and input into unit outline documents for clarity, accuracy and compliance with institutional requirements. In particular, assessment task design and associated rubrics for grading, and the wording of learning outcomes were examined to ensure a student-centred focus on communicating expectations and constructive alignment of curricula (Biggs & Tang, 2011). An experienced course coordinator took on the role of initial mentor, guiding the process and ensuring that workload was fairly distributed. All team members had the opportunity to contribute and take a lead in a range of activities. This example of transformational

leadership (Pearce, 2004) resulted in the BDemCare team creating and fostering a shared vision and goal of developing and delivering quality curricula that supports a positive student learning experience.

This approach to course and unit development has resulted in the continuing growth of quality curricula in this new fully-online course. The unintended, but nonetheless positive, outcome was the establishment of a collegial, supportive team committed to the delivery of a quality course. Just two years into delivery, the BDemCare has grown to be the third largest course offered by the University of Tasmania and won a number of educational program awards. In 2014, due to a strong focus on alignment of unit learning outcomes with course learning outcomes, it was able to demonstrate compliance with the Australian Qualifications Standards (AQF) framework, with evidence at the level of what was taught and assessed. The team continues to engage in formal and informal peer review practices and the collegial culture where peer review is valued contributes to the ongoing quality assurance of the course.

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#### Session H4

Paper

### **CURRICULUM LEADERSHIP PRACTICES OF ADMINISTRATORS IN ATENEO DE MANILA UNIVERSITY**

Dary Dacanay<sup>1</sup>

*1 Ateneo De Manila University, Philippines*

The purpose of this research was to understand the curriculum leadership practices of administrators in Ateneo De Manila University by which their actual leadership practices are observed, collect curriculum leadership related data, and to understand the ways they make decisions based on the interview and pertinent data gathered. In order to achieve this overall objective, the following research questions framed this study:

- 1) What significant thoughts or practices that contributed to the curriculum leadership experiences of Administrators in Ateneo De Manila University?
- 2) What framework on Curriculum Leadership Practices of Administrators of Ateneo De Manila University might emerge base on the experiences of the participants?

A qualitative case study was used in this study. Three administrators were interviewed to provide insight into the research questions. Participants in the study were self-selected on pseudonyms to preserve anonymity. Interviews were conducted face to face, and then transcribed. The themes that emerged from the interviews include: (1) Curriculum Profile; (2) Curriculum; (3) Leadership; (4) Leadership Styles; (5) Curriculum Leadership Practices; (6) Vision; (7) Guiding Principles; (8) Systems, Structures, Resources and Processes; (9) Research, Teaching and Community Service; (10) Changes

The findings from this study describe practices used for actual administration of a university in its curriculum related developments. Administrators recognize that their curriculum leadership practices would help them establish patterns curriculum related endeavors of the university especially in the review of the university core-curriculum.

The aim for school administrators should be to use research-based strategies, practices, and programs that have proven successful when they plan interventions and programmatic curriculum changes for the university.

The emergent conceptual framework of the study presents an inner core circle in the center symbolizes the Curriculum

Leadership Practices of Administrators in the university as influenced by the outer core circles containing the emerging themes of Curriculum including curricular profile, concepts and approaches, Leadership including Leadership styles, Teaching, Research and Community Service and Systems, Structures, Resources and Processes. The outer boxes contain the over all curriculum direction of the university as to its distinct Jesuit Character as an Educational Institution, Vision, Guiding Principles and Changes. The framework encompasses the curriculum leadership practices of administrators in Ateneo De Manila University as it relates to a more diverse roles and responsibilities influenced by the internal and external factors transforming the curriculum leader into a diverse person that can result in acquisition of life-long habits of learning that foster attention to curriculum related experience, reflective understanding beyond self, and criteria for effective action.

Based on its findings, this study recommends that further investigation into data collection processes that lead to improved curriculum leadership practices of administrators being conducted. Administrators continue to face challenges associated with providing adequate curriculum leadership practices for future curriculum leaders, building capacity with teaching and administrative curriculum leaders is recommended, so that a continuum of curriculum leadership supports could be provided to meet the diverse curricular needs of the university.

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#### Session H4

Paper

### **LEADERSHIP IN ASSESSMENT PRACTICE: AN INVESTIGATION OF INTER-INSTITUTIONAL SIMILARITY AND DIVERGENCE OF ASSESSMENT PRACTICE IN THE CONTEXT OF EXTERNALLY BENCHMARKED CURRICULUM IN THE HEALTH SCIENCES**

Kade Davison<sup>1</sup>, Rosanne Coutts<sup>2</sup>, Esther Jones<sup>2</sup>

*1 University of South Australia*

*2 Southern Cross University*

Background: Many higher education qualifications require accreditation by external bodies to allow graduates to work in defined professions. How such accreditations interact with individual degree program level assessment approaches has been of interest to scholars of teaching and learning for a number of years (1, 2). Indeed it is of interest to discuss the potential role of the accreditation process in constraining or supporting innovation and progression in individual and institutional approaches to assessment. This paper aims to explore the macro level diversity or otherwise of assessment practice in an applied science bachelor degree program subject to national curriculum standards as a vehicle for discussion of the potential leadership role of accrediting bodies in scholarly practice.

Methodology: The exercise and sports science profession in Australia has arguably the most rigorous national benchmarking system, by way of industry accreditation, of anywhere in the world. Degree wide comparisons of assessment types, volume and percentage weightings per item were made across the programs. A geographically diverse sample of universities representing each cluster (Group of Eight, Australian Technology Network, Regional Universities Network and Innovative Research Universities) of institutions within the Australian context were selected. Assessment items appearing in all compulsory course/units of study in each institutions nationally accredited degree program were reviewed for type and percentage weighting from publically



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available online information.

**Results:** The number of different types of assessments used across any single degree program ranged from 17 - 26, with written examinations being the predominant type across all making up between 38.5 and 48% of the total assessment load. The second most frequent type of assessment varied between programs and included participation (n=1), practical exam (n=2) and group presentation (n=2). Across the five degree programs the average number of assessments per unit/course of study ranged from 3.2 - 4.3. The highest number of assessment in any one unit/course was 7 and the lowest across all units/courses was 2. The mean weighting of assessment items ranged from 25% to 33% and the maximum and minimum ranged from 60 to 85% and 2 to 30% respectively.

**Discussion:** This comparison provides an interesting insight into the range of assessment approaches used across a diverse sample of Australian universities to achieve a common set of predetermined student outcomes. The diversity in types of assessment used and the relative prevalence of these shows that institutional and/or individual academic discretion appears to be preserved in the accreditation context. The heavy reliance on written examination may be due to accreditation requirements or a legacy of discipline approaches anyway. These data provide some base to begin a dialogue about shared leadership and collaboration in driving a scholarly approach between academic, institution, and accrediting bodies. Hutchings et al (1) suggest it is time to link the top down approach of accreditation with the bottom up approach of educators and faculty to meaningfully improve the learning outcomes of students. This session will provide an opportunity for open discussion on the barriers and possible facilitators to shared leadership.

Lubinescu et al. 2001. *New Directions for Higher Education*.

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## Session H5

Paper

### UNIVERSITY-COMMUNITY-SCHOOL ENGAGEMENT: AWAKENING ASPIRATIONS

Ruth Greenaway<sup>1</sup>, Uwe Terton<sup>1</sup>

<sup>1</sup> University of the Sunshine Coast

It is more important than ever for universities to engage in local and global communities to encourage young people, from an early age, to consider higher education (HE). The Commonwealth government and the university sector have acknowledged the low participation rate of students from low socio-economic status (SES) backgrounds in HE. Contributing factors to this complex societal issue include availability, accessibility of HE, academic achievement and the aspirations of students. Various strategies have been developed to increase the number of students from this group participating in HE, with varied success. The post-secondary aspirations of young people strongly reflect the influence of family (cultural capital) and the local environment (social capital), particularly in the later years of primary school.

The aspirations of young people are said to be guided by their interactions with family and the wider community. Engaging the community is an important strategy in exposing students from low SES areas to HE and to encourage them to acquire a tertiary qualification. To increase low SES students capacity to aspire, engagement of HE institutions with their community, including school students and their parents would be mutually beneficial. Such engagement can awaken the aspirations of

young people and provide knowledge that may assist families to overcome barriers and highlight enablers to HE, which in turn may lead to a change in cultural or social capital.

Awakening aspirations by introducing the notion and purpose of HE enables primary aged students to build insight into their future. These aspirations may not be a specific profession but the development of skills in a certain area. To support this argument we discuss a program conducted in 2013 and 2014 involving primary school students attending schools identified as having low SES. The program, My Tertiary Education Day (MyTED): Encouraging primary aged students to consider higher education, includes the following strategies: a series of four in-class lessons delivered by university staff, an eBook with a story about the aspirations of Edwina (Ted), an Eastern Grey Kangaroo, video narratives by university graduates describing their career pathways, and a university campus visit. The strategies used are designed to encourage and foster imagination and dreaming, to explore possibilities for the future.

MyTED fosters imagination, builds the capacity to aspire and ability to believe that the 'future is as limitless as the stars' (Crew, 1997). Ted herself is the product of daydreams and imagination and is used to excite children into discovering their aspirations. Students aspirations were captured and discussed by using the research method Photovoice. Further, MyTED discusses complex ideas that students may prefer to explore through visual means rather than by taking photographs and writing about them (Knight, 2010). For this reason students are given the option of taking photographs that represent their aspirations or drawing pictures. Students enthusiasm for drawing created a new research method that we have called MyVoice.

This paper invites critical dialogue and appraisal from conference participants in the area of engagement when dealing with complex societal needs and issues..

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## Session H5

Paper

### DEVELOPING A SENSE OF PLACE: ENGAGEMENT THROUGH SCHOOL AND COMMUNITY PARTNERSHIPS

Kevin O'Connor<sup>1</sup>, Gladys Sterenberg<sup>1</sup>

<sup>1</sup> Mount Royal University, Calgary, Alberta, Canada

The purpose of this SOTL research is to investigate how school and community partnerships can be enacted within a realistic and place-based approach to teacher education that starts not with theory, but rather with practical problems faced by teacher candidates (Korthagen, 2001). In most professional programs, tensions exist between theory taught in academic courses and practical knowledge gained in practicum settings. Teacher education programs are no different (Segall, 2002) as teacher candidates struggle to use the research-based guidelines offered to them in their courses when they subsequently engage in their practicum placements (Clift & Brady, 2005). The only exceptions to this general trend appear to be programs that can provide a high degree of congruence between the content of course work and the models provided by mentor teachers in their practice (Darling-Hammond, 2006). Drawing on research on participatory classrooms (Bacharach & Hasslen, 2001) and reflective collaborations (Loughran, 2002), we are interested in bridging the theory-practice divide through school-community partnerships. We implemented a pilot of an extended integrated practicum for 24 teacher candidates in their final year of a 4-year education degree program. The 16-week school-based semester within four

partnership schools consisted of a capstone research project, weekly seminars, and two curriculum and pedagogy courses. Our research question was: What unique features of an extended and integrated practicum based on school-community partnerships contribute or dissuade an integrated theory-and-practice experience for teacher candidates? Qualitative research methodologies were used to address the research question. Participants were 16 teacher candidates and 32 mentor teachers and school administrators. Data consisted of transcripts of participant interviews and school focus groups; assignments by teacher candidates (e.g., reflective journal entries, portfolio, discussion board responses); field notes by faculty supervisors; and course artefacts (e.g., course lesson plans, student evaluations). Data was analyzed using qualitative methods to identify common themes on the impact of an extended integrated practicum on theory-and-practice integration. Our findings indicate that the engagement of mentor teachers in weekly seminars significantly impacted teacher candidates ability to apply theoretical knowledge to their classroom contexts. Robust teacher professional identities emerged in the latter part of the practicum. All participants acknowledged that practical feedback informed the theoretical stance in a reciprocal cycle of professional learning. One unanticipated outcome was that mentor teachers became very interested in opportunities to engage in professional learning with the course instructors and faculty supervisors. Unfortunately, we were not able to facilitate such professional development during the study but will be incorporating opportunities in the next iteration of the practicum. One of the most significant impacts of our study was on our own pedagogy. We found many instances where our theoretical understandings were deepened and changed because of our participation in classrooms with children and our teacher candidates. Rich conversations with mentor teachers helped us reframe our instruction of on-campus courses. We will provide opportunities for the audience to actively consider and discuss how teaching and learning can be enhanced through robust school and community partnerships by attending to theory-and-practice connections within site-based contexts.

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### Session H5

Paper

#### **THE ENGAGEMENT OF LEGAL STUDIES STUDENTS AND THEIR TRANSITION TO STUDYING LAW AT UNIVERSITY**

**Noeleen McNamara**<sup>1</sup>, Kerrie Anglin<sup>2</sup>

*1 University of Southern Queensland*

*2 St Peter's Lutheran College, Springfield*

Law students bring a range of backgrounds into their first year of University study of law. For mature aged students, this might be professional or personal experience with the legal system or working in a related field for many years. For school leavers (and indeed older students), this might be one to three years studying legal studies at high school. This study might be the very reason why they choose to undertake a law degree and will be the focus of this paper.

The transition through the first year of university is well recognised as challenging for all students. Kift (2014) reports that the attrition rate for first year students is high (as many as one third) and almost double that for second year students. Applying this to the teaching of first year law, the author's experience is that there is limited understanding or consideration of knowledge that might have been obtained from high school legal studies. It is acknowledged that the curriculum must cater for those students who have no background in law, but an understanding of what students

have studied at school can inform teaching and assessment. Likewise, a more detailed knowledge of what students will undertake in first year university could assist legal studies teachers, who often are called upon to advise students about future legal studies. In the context of law students, this could specifically impact on their engagement levels at university (for example if they have experience in mooting at school) or even retention issues (if they have an unrealistic expectation of studying law).

Collaborative research has been undertaken between a law lecturer who teaches first year courses and a legally qualified legal studies teacher in order to address such issues. This paper will review relevant literature and the curriculums (including assessment items) of legal studies and first year law. An exploratory study of both legal studies and first year students has been conducted with a view to understanding the motivations for studying law, the role that legal studies has played in this decision and the perceived benefits that such studies have played in the first year at university. Whilst not the principal focus, data has been obtained on the motivations of mature aged students in undertaking law and this will also be considered.

The paper will also report on the community engagement activities which have been undertaken in the author's law school over a number of years. This has included holding legal studies conferences for years 11 and 12 students. Feedback has been sought from students (and their teachers) about the role that these activities have played in informing career aspirations.

Conclusions will be drawn as to strategies that could be employed at both school and university to facilitate a more seamless transition between school and university, and contribute to first year retention. Such conclusions have wider implications for other areas of study -inter alia accounting, economics and the

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### Session H6

Paper

#### **THE IMPACT OF AN INTERNATIONAL SERVICE LEARNING PROJECT ON PRE SERVICE TEACHERS LEVELS OF AGENCY AND CULTURAL COMPETENCE**

**Julie Maakrun**<sup>1</sup>, Timothy Perkins<sup>1</sup>

*1 University of Notre Dame Sydney*

Initial teacher education programs are continuously looking for ways to grow and evolve to meet the changing needs of pre-service teachers who will face a diverse student population when they begin their careers. As a response to this need, educators are now more than ever required to learn and teach through the lens of global mindedness, requiring the capacity to teach students how their actions and the actions of others affect people in all parts of the world; encouraging them to be change agents driven through their own critical thinking and actions (Chareka, Leyte & Mills, 2010).

Literature suggests that courses that incorporate service-learning generally provide greater learning benefits, including a deeper understanding of course material, a better understanding of the complex problems people face and an ability to apply course material to new situations and real world problems (Hurd 2008). Service-learning programs in education have also been found to increase participants sense of personal efficacy, awareness of the world, awareness of personal value and increased levels of engagement (Astin, Vogelgesang, Ikeda & Lee, 2000). Further, international service-learning has been shown to "...enhance intellectual growth, personal development and global mindedness" (Walters, Garii

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& Walters 2009, p.4).

Academic staff from the University of Notre Dame, Sydney run an initiative which, immerses students in a 3 week international cross-cultural service-learning project in Nakuru, Kenya. Students from the schools of Education and Medicine work in a primary school and children's home to improve education and health outcomes. The project endeavours to challenge preconceptions and presumptions about the professional world students will soon enter and, through authentic lived experience, aims to challenge the students personally and to build their capacity as agents of change.

A significant aspect of this project is that unlike many service-learning programs it is external to the students course of study, and thus by not being directly linked to specific learning objectives as part of a specific course or unit has allowed students and accompanying teacher educators the freedom to let the experience dictate the learning, rather than the other way around.

As teacher educators, we have capitalised on service-learning as the means to foster ownership of, sensitivity to, and participation in community-building activities. These have been transformational to students understanding of and response to global issues. It became evident that this project, as a high-quality, short-term immersion project has had a significant impact on pre-service teachers personal growth and also their professional competencies.

Our research indicates that service-learning as a pedagogical tool, when combined with learning in a cross-cultural community context can help students develop knowledge, skills and cognitive capacities that will allow them to deal effectively with the complex social issues and problems.

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## Session H6

Paper

### THE GLOBAL CANOPY: ENSURING TODAY AND TOMORROW'S STUDENTS HAVE COMPETENCY NAVIGATING IN A GLOBALISED WORLD

Patricia McLaughlin<sup>1</sup>, James Baglin<sup>1</sup>, Andrea Chester<sup>1</sup>, Anthony Bedford<sup>1</sup>

<sup>1</sup> RMIT University, Melbourne

Never before have universities been presented with such exciting and compelling global opportunities. The richness of the student body on our campuses provides a cohort that is global, connected and outward-looking. Within Australia, this cohort consists of overseas students representing 193 countries, and domestic students looking to global mobility as part of their learning experience. The outbound mobility of Australian students is rapidly growing as governments, universities and students themselves see the opportunities afforded by an international global experience.

However whilst all Australian universities welcome significant numbers of inbound international students and also conduct and increasingly encourage outbound student mobility programmes, the two 'strands' of students rarely engage in deliberately organised learning and teaching activities that promote global competence. Existing literature indicates that the two groups, inbound international students and outbound domestic students, are passing *à cœces* ships in the night, with opportunities for long term relationships, improved global connectedness, cross-cultural understandings and fertile learning interactions unrealised or operating coincidentally at the margins of the organised curriculum. Yet the potential for improved learning, cross-cultural understandings, lasting inter-country relationships and personal and educational scaffolding has never been greater. The continued growth of each cohort

in isolation of the other is educationally restrictive and wasteful of potential cross-cultural, global learning connections.

This paper reports upon an investigation of coherent approaches of integrated teaching and learning between these two cohorts at Australian universities. The research formed part of a Global Canopy project of diverse disciplinary case studies. These case studies illustrated how separate cohorts of inbound and outbound students can inter-relate to build discipline-based competencies for navigating tomorrow's world. Using a student survey and individual interviews of discipline-based case studies, the data revealed enhanced student learning, cross-fertilisation of concepts, and new global learning and teaching approaches for these cohorts. Students showed new understandings of their own global competencies and presented coherent discipline-based global perspectives. A key conclusion identified the value of specific, organised discipline-based learning interactions between the two cohorts of inbound and outbound students across the curriculum.

As higher education enters a new phase of globalisation, there are significant benefits for all stakeholders in this cross-fertilisation and global competence. The learning and teaching approaches identified in this paper have implications for all students and staff in tertiary institutions both within Australia and across the developed world.

Keywords: global learning; lifelong learning; student mobility

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## Session H6

Paper

### THE WORLD IS A BOOK AND THOSE WHO DO NOT TRAVEL READ ONLY A PAGE

Paul Cerotti<sup>1</sup>, Claire Davison<sup>1</sup>, Konrad Peszynski<sup>1</sup>, Vince Bruno<sup>1</sup>, Huan Vo Tran<sup>1</sup>, **Joan Richardson<sup>1</sup>**

<sup>1</sup> RMIT University

The above quote is still relevant from Saint Augustine, especially in the global business world that we currently live and work in. The global markets are demanding graduates who have global competence and who have read more than one page.

The purpose of this study is to ascertain if and how Global Intensives with the College of Business at RMIT relate to Master students global competence according to the knowledge, dispositions and skills described in the 'Global Competence Model'. This research will address two research questions: (1) is there a relationship between participation in short term 'Global Intensive' and changes in students Global Competence? And (2) What are the students perceptions about the 'Global Intensives' that relate to global competence?

Forty Master students from across the College of Business who participated on one of the four 'Global Intensives' to Canada, USA, China and Vietnam will complete a post tour 'Global Competence Aptitude Assessment'. Six months after completing one of the 'Global Intensives'. Postgraduate students will be interviewed about their experiences abroad and analyse their pre departure reflections on the intensive.

Once completed will formulate recommendations to enhance the design of 'Global Intensives within the College of Business at RMIT in the future.

## Session H7

Paper

### **LEADERSHIP IN CHALLENGING THE PROCESS: CREATING A DISCOURSE ON CURRICULA PRACTICE IN REGARD TO CLINICAL SKILLS CURRICULUM**

**Maria Mackay<sup>1</sup>**, Patrick Crookes<sup>1</sup>

*1 University of Wollongong*

This presentation will outline the findings of a project that aimed to demonstrate leadership in challenging existing clinical skills curricula practice in universities across Australia. This project took a risk in creating a conversation on the clinical skills that exist within curriculum and the perceived inability of the education sector to adequately prepare graduates for the workforce.

The project was one component of a wider research project that has developed the Nursing Competency Schedule (NCAS) which provided significant leadership in the area of competency assessment with approximately 20 universities now using the same assessment tool (Crookes & Brown 2010). It utilised curriculum mapping and descriptive data analysis to compare and contrast the data collected in the mapping process. Qualitative thematic analysis was undertaken cumulative information that was gathered in conversation,

This presentation will report the results of the curricula mapping project highlighting the commonalities and differences in the inclusion of clinical skills in current pre-registration nursing curricula in Australia. Findings of this research have highlighted how by providing leadership for universities in developing nursing curriculum, they were able to clearly identify and articulate how clinical skills are taught and assessed in the context of the overall program. Universities were able to achieve a significant increase in their awareness in regard to their strengths and weaknesses regarding clinical skills curricula and demonstrate a change in curricula to strengthen their applications for re-accreditation.

Nursing is a practice based profession where students are required to gain a level of clinical competence to be eligible to register as a nurse on the completion of their degree. There is a lack of agreement at both a National and International level in regard to the clinical skills that are required in pre-registration curricula. There was a perceived need for a university to lead a provocative dialogue with education providers and health care services in regard to the clinical skills required to be included in pre-registration nursing curricula. This conversation required the facilitators to have a strong rapport with industry and have the courage to raise issues that are controversial.

There was a need to identify for universities who offer nursing degrees to consider the clinical skills they were teaching and how this prepared their graduates for the reality of practice. Leadership is required the need to challenge the process and create conversations that explored new and innovative practice in regard to student clinical skills development (Brooks Moriarty & Welyczko 2010, Johnson, Chang & O'Brien 2009 and Boxer & Kluge 2000).

We would expect nursing students to be exposed to an environment that enables them to challenge the process in a safe and efficient way. Overall students tend to be site focussed on their area of practice with little appreciation given to the overall breath of nursing practice.

This study will provide a significant body of information for universities and the health care sector on how to implement curricula change that is responsive to industry and the students needs.

## Session H7

Paper

### **CURRICULUM TRANSFORMATION: LEADING CHANGE THROUGH A RESEARCH DRIVEN CONSULTATIVE MODEL**

**Marcus O'Donnell<sup>1</sup>**, Anne Melano<sup>1</sup>, Margaret Wallace<sup>1</sup>, Romy Lawson<sup>1</sup>, Eeva Leinonen<sup>2</sup>

*1 Learning Teaching & Curriculum, University of Wollongong*

*2 Deputy Vice Chancellor Academic, University of Wollongong*

Leading change and educational transformation in higher education institutions has been the subject of significant research and scholars have articulated a number of unique factors that can mitigate or enhance change processes within the sector (McRoy et al 2009; Scott et al 2008; Pennington 2003). Any successful curriculum renewal program must overcome these typical points of resistance and address a specific set of characteristics which influence the process of change in the higher education environment (Blackmore & Kandiko 2012). This article outlines the process that The University of Wollongong, a medium-sized research-intensive, regional university in Australia adopted to develop an institution wide curriculum model. The UOW Curriculum Transformation Project (CTP) adopted an action research process (McNiff 2013) developed through a series of stakeholder consultations and a process of grounded theory development in which the educational experience of key academic staff was explored in relationship to broader pedagogical and educational theory. This process was designed to maximize the possibility of successful supported change through carefully addressing known impediments to and pre-conditions of change within the higher education sector (Pennington 2003). The paper sets out the theoretical background to the Curriculum Transformation Project, the consultative action research method developed and the curriculum model adopted by the University. The project adopted a process that was informed by four key factors

\*The institutional history of curriculum change and previous good practice

\*The sector demands for greater quality assurance and accountability

\*The research on curriculum best practice

\*The practice wisdom of UOW academics

These four factors were conceived as a continuous feedback loop in which, for instance, research was fed into the consultations which both helped develop a model which was then further refined with reference to sector demands and previous institutional efforts. In reporting this overview the authors seek to make a contribution to both the developing literature on institutional curriculum transformation and to the understanding of leading change processes within the higher education sector.

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## Session H8

Panel Session

### EXPLORING PEER-TO-PEER LEADERSHIP INITIATIVES TO DEVELOP SOTL CAPACITY AMONGST FACULTY

**Caroline Cottman<sup>1</sup>, Carol Rolheiser<sup>2</sup>, Angela Carbone<sup>3</sup>, Jo-Anne Kelder<sup>4</sup>, Justine Walls<sup>5</sup>, Liam Phelan<sup>6</sup>**

*1 Acting Director and Senior Academic Developer, Centre For The Support and Advancement of Learning and Teaching (C~SALT), University of The Sunshine Coast*

*2 Professor, Curriculum, Teaching and Learning and Director of The Centre For Teaching Support & Innovation (CTS), University of Toronto*

*3 Director Education Excellence, Monash University*

*4 Lecturer, Learning and Teaching Quality, University of Tasmania*

*5 Associate Dean Learning and Teaching, Faculty of Health, University of Tasmania,*

*6 Senior Lecturer and Teaching & Learning Coordinator GradSchool, The University of Newcastle*

Scholarship of Teaching and Learning (SoTL) is a critically-reflective activity in which teachers of any discipline interrogate their educational practices and identify opportunities for improvement in curriculum, teaching and student learning. This panel will explore initiatives that aim to develop academics' capacities for leadership in SoTL in their disciplinary and institutional contexts by way of peer mentoring and peer-assisted strategies. Both Australian and international perspectives on developing SoTL will be provided from teaching academics, Directors of academic development units, Associate Deans of Education, and from any university staff members involved in quality assurance of programs.

Different initiatives used in departments and across institutions will be explored, in particular those that draw on peer-mentors as leaders in interrogating educational practices and developing SoTL expertise in colleagues. The panel will give attention to small-scale initiatives through to programs designed for large scale implementation, and will focus on professional development initiatives with sufficient flexibility to respond to changes in specific institutional needs. This adaptive capacity, evident in some peer-to-peer models of academic development, allows for targeted attention to opportunities for improving education practices, and for fostering inquiry and then disseminating findings of those changes in practices. The conceptual frameworks that underpin initiatives, the methods and tools employed by initiatives, and the evidence used to demonstrate achievements will be debated and discussed.

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## Session H9

Symposium

### THE TEACHING AND LEARNING OF HISTORY IN THE AGE OF EDUCATIONAL OUTCOMES AND STANDARDS

**Adrian Jones<sup>1</sup>, Jennifer Clark<sup>2</sup>, Adele Nye<sup>2</sup>, Sean Brawley<sup>3</sup>**

*1 La Trobe University*

*2 University of New England, NSW*

*3 Macquarie University*

The presenters are all history academics who practice SoTL, and who are ISSoTL stalwarts. Largely from the perspective of the teaching and learning of History in particular and of the Humanities in general, we each confront the issue of how best to enable creativity and agency in History classrooms in an edu-policy environment characterised by a concern for outcomes and standards. More than most disciplines, so we

suspect, History has many time-honoured teaching and learning traditions. The presenters combine the historian's arch scepticism with a readiness, nonetheless, to innovate. Three provocative papers follow.

Symposium Chair

Ellen Warne (Australian Catholic University, Melbourne)

1. Surprise Me!': The (im)possibilities of agency and creativity within a standards framework of History education.

Jennifer Clark and Adele Nye (The University of New England, Armidale NSW)

Contrary to popular belief, and although indisputably evidence-based, History is far from the mere recovery and ordering of facts. Rather it is the imaginative and original interpretation of the past. The difference stems from the exercise of individual creativity to shape the historical narrative. In teaching History at the tertiary level in an era that privileges regulation and compliance and where the discipline of History has agreed to the application of discipline standards, what space remains to encourage, and ultimately reward, students who demonstrate genuine creative practice. We are reminded of the famous Australian historian who, when asked by a student, 'What must I do to achieve a high distinction in my essay' replied 'Surprise me!'. In this paper we explore the increasing drive towards accountability and conformity and ask whether it is indeed possible to enable student creativity within such an environment.

2. Is flipping worth it? Applying a value matrix to blended learning

Sean Brawley and Matthew Bailey (Macquarie University, Sydney, NSW)

At ISSoTL '14 I introduced colleagues to a project being undertaken by the Department of Modern History, Politics and International Relations at Macquarie University. In Sean Brawley's role as a Department Head, with the support of teaching and learning developers, and informed by the scholarly literature (see for example Keengwe, Onchwari and Oigara, 2014; Nordmeyer and Stelzer, 2014), I asked: "How do you flip a department?" I proceeded to share my Department's initial efforts in this space. In the 2014 presentation I shared the interim results of our efforts which included insights into how I had set out to lead such a transformation; how colleagues engaged with the process and the initial efforts in curriculum design and content creation. I also asked many questions of the SOTL literature that informed our design. For example, would our design realise the "promise" of collaborative online learning advocated by the likes of Roberts (2004). This presentation will answer the range of pedagogical, logistical and administrative questions I posed in 2014 and conclude by offering a "value matrix" that colleagues might wish to deploy when considering engagement with flipped approaches across the blended learning paradigm.

3. A (Theory and Practice) Essay of the (History) Essay

Adrian Jones (La Trobe University, Melbourne)

Everyone who writes anything knows you discover things as you go along. Writing is a heuristic. This essay considers the theory and practice of writing history essays. Some of the ways in which writing enables discoveries and some of the ways in which it deepens interpretations are explored. Conclusions are drawn about a better (and more empowering) agenda, other than offering more content, for an advanced-level history education.

## Session H10

Paper

### INTEGRATING TECHNOLOGY FOR LEARNING: A CASE STUDY OF ECHO360

Kulari Lokuge Dona<sup>1</sup>, Janet Gregory<sup>1</sup>, Ekaterina Pechenkina<sup>1</sup>

*1 Learning Transformations Unit/Swinburne University of Technology*

The use of educational technology is changing traditional methods of learning and teaching (Kirkwood & Price, 2013; Van Dusen, 2014). Our study demonstrates the importance of developing and implementing streamlined approaches for the integration of educational technologies, and reflecting on practice to understand how these developments affect the learning environment. This paper presents a case study of the organisational experience of implementing the Echo360 lecture recording system as a teaching and learning tool at Swinburne University of Technology, Melbourne, Australia.

In 2014, Swinburne introduced the Echo360 lecture recording system as an opt-out model, that is, a formal request was required from the academic to prevent their lecture from being recorded. This approach differed significantly from the previous opt-in model where academics specifically requested recording services using Lectopia. The opt-out Echo360 model required a streamlined system which used time-tabling data to generate fully automated lecture recordings. Recordings were then made immediately available to students through the Learning Management System without any need for intervention by academic staff.

It is imperative that universities implement technological change in the most effective way to support the intended users of technology 'academics and students' to help them achieve their teaching and learning goals. Technological advances change how education is delivered and received. While research into lecture-recording models and their role in enhancing educational experiences and student outcomes is growing (McNaught, Lam, Chan, Yuen, & Ho, 2012; Secker, Bond, & Grussendorf, 2010; Toppin, 2011; Woo et al., 2008), there appears to be no case studies about the seamless integration of Echo360 or similar opt-out systems. Our case study is addressing this knowledge gap.

The case study methodology adopted in our research enables a holistic perspective of the organisational experience as a complex system (Patton, 2002), and allows the presentation of evidence from which others can understand the experience and develop their own conclusions (Stake, 2000). Interviews conducted with Swinburne technical support staff and surveys with academics generated rich data on the process of full institutional integration of the Echo360 lecture-recording system. Key learnings that emerged included the importance of institutional communication during all stages of the implementation process; technical challenges encountered during the integration phase; the importance of adequate training resources for academic staff; and the need to manage the growing demand for Echo360 recordings when the system is not available in all teaching spaces. The evidence from this Case Study informs the ongoing implementation of Echo360, and provides a base from which to consider the implementation of future technologies to enhance learning and teaching.

Note on audience engagement: We intend to use a number of interactive tools during our presentation, including audience polling, Echo360 demonstration and a live Twitter feed.

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[https://www.dropbox.com/s/5jbe7aigujihez/References\\_LokugeDona\\_Gregory\\_Pechenkina2015SSOTL.pdf?dl=0](https://www.dropbox.com/s/5jbe7aigujihez/References_LokugeDona_Gregory_Pechenkina2015SSOTL.pdf?dl=0)

## Session H10

Paper

### E-TEXTS IN HIGHER EDUCATION: DISRUPTIVE OR MERELY DISQUIETING?

Gerry Rayner<sup>1</sup>, Rowan Brookes<sup>1</sup>

*1 Monash University*

Rationale: The scale and speed of technological advancement is rapidly changing the way undergraduates use and interact with information. Students own or have access to a range of devices that enable their learning to be more mobile, flexible and interactive. As part of this suite of technologies, discipline-related e-texts have become considerably more sophisticated and as a consequence, more prevalent across the education sector. While the transformative potential of these technologies is almost universally acknowledged, there is a dearth of evidence regarding their pedagogical value and a lack of the undergraduate student voice about their experiences with and perspectives of e-texts. This is surprising, as students' attitudes of e-texts and their willingness to engage with these technologies are vital to informing appropriate strategies for the implementation and success of digital learning innovations.

Framework: The primary aim of this study was to investigate foundation biology students' perspectives of discipline-related e-texts. Pre-survey and post-surveys ascertained students' ownership of mobile and other digital devices, their previous experience in using e-texts and confidence in using a prescribed subject e-text for their studies. The post-survey explored students' experiences of using the prescribed e-text, including its ease of use, annotation, sustainability, and portability compared to a hard copy equivalent, and its value in enhancing their understanding of scientific content and concepts.

Outcomes: Approximately one third of students had prior experience in using a curricula e-text. More than 50% of students were confident about using the prescribed e-text for their studies, and those with prior experience with an e-text were significantly more confident about using it than students without such experience. On completion of their studies, more than 60% of students preferred a hard copy text to the e-text. This preference was despite students' strong endorsement of the e-text's sustainability and portability, and its greater usefulness for locating relevant information. Common negative student comments about the e-text included the difficulty and impacts of reading on screen text, particularly for sustained periods of reading, the potential for distraction, and limitations around annotation and highlighting of e-text content.

Reflective evaluation: These results show that while many educators have enthusiastically embraced e-texts over their hard copy equivalents (Weinstock, 2010), careful consideration should be made of many variables before any decision is taken. Additional to student perspectives, an important issue confronting the use of curricular e-texts relates to how students process, learn and apply understanding to text read from a screen (Woody et al., 2010; Daniel & Woody, 2013), as the format of textual information has been shown to impact their comprehension and depth of learning (Mizrachi, 2014). Students' reluctance to engage with e-texts, together with early indications of the impact of e-texts on their learning, call for carefully planned strategies that encourage, scaffold and support both students and staff in transitioning from hardcopy texts to e-texts. Given that students themselves are expressing strong reservations about using an e-text for reading scientific content, further research is required into their pedagogical value and into the effectiveness of innovations aimed at addressing current deficiencies.

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## Session H10

Paper

### **WIKIS FOR GROUP WORK: ENCOURAGING TRANSPARENCY, BENCHMARKING AND FEEDBACK**

Amir Abdekhodaee<sup>1</sup>, Kourosh Dini<sup>1</sup>, Farnaz Modarresi<sup>1</sup>, Anne-Marie Chase<sup>1</sup>, **Bella Ross<sup>1</sup>**

*1 Swinburne University of Technology*

Education delivery models and approaches are undergoing radical change. The traditional knowledge exchange model whereby an educator imparts knowledge to students may not be best placed to develop essential skills for the 21st century (Griffin, McGaw, & Care, 2012) and is being challenged by models that encourage knowledge creation by students. Using a wiki to facilitate group work may provide students opportunities for collaborative learning (Blumenfeld, Marx, Soloway, & Krajcik, 1996), knowledge sharing and construction (Elgort, Smith, & Toland, 2008), and skill development. Wikis allow individual contributions to be traceable thereby increasing individual accountability in group work situations. Wikis can furthermore be monitored continually by a teacher and peers to monitor progress by both groups and individuals. This can benefit feedback practices throughout the course of a project.

In this study, we report on our initial findings from a group wiki project in an Engineering Management unit at an Australian university. A wiki was introduced to the existing group report assessment to add transparency to group project management activities and report writing. There were 84 groups with approximately 3-4 students in each. Each group had their own wiki which could be viewed by the entire cohort. Students were required to provide three separate sets of feedback to another group's wiki during the semester. We report on the findings from student surveys and focus groups.

Almost three quarters of students found the wikis helpful for benchmarking their activity against their peers. The wiki-enabled transparency provided an opportunity for students to benchmark their performance in various ways, offering a comparison for quality of work and the rate of progress. This comparison also offered students a standard against which they could attempt to improve their performance. Over half of the students stated that peer feedback had improved their work; however, a lot of the feedback given by peers was too brief to be constructive, and provided too late to be useful in guiding their work. Many students described the wiki project as a delegation of tasks and overall did not think that the wiki had impacted on group collaboration. These findings are consistent with earlier literature (Cole, 2009; Elgort et al., 2008; Witney & Smallbone, 2011).

This project is in its second iteration and the project leader plans to continue refining the use of wikis in future units. In particular, future iterations aim to improve the quality and timing of feedback as well as increase student collaboration. Audience contributions to how this can be achieved are welcomed.

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## Session H11

Paper

### **SUSTAINABLE PARTNERSHIPS FOR FUTURE PEDAGOGIES: MASTERING ACADEMIC AND RESEARCH SKILLS (MARS)**

Josephine Hook<sup>1</sup>, **Leanne McCann<sup>1</sup>**, Nell Kimberley<sup>1</sup>

*1 Monash University*

With over 19000 students from diverse cultural backgrounds and modes of enrolment entering via various educational

pathways, the Monash Business School faces several educational challenges, including issues of scale, transition and graduate employability. This paper examines the connection between the Business School response to these challenges and the emerging pedagogy. Educators are harnessing technical innovation to disrupt traditional pedagogies, enabling flexibility around the pace, place and mode of teaching and learning. The student experience of this flexible delivery is enhanced by innovations to ensure the provision of quality education, founded on sustainable educational outcomes (Ryan and Tilbury, 2013).

This paper reports on the outcomes of a Monash Business School-funded partnership between academic staff, Learning Skills Advisers and Librarians in the design, implementation and review of MARS (Mastering Academic and Research Skills). MARS is a four-tiered blended learning program encompassing a day-long orientation workshop program, a modular online course, in-curricular collaborations between academics and library staff, and a series of face-to-face writing workshops. Students have multiple entry points to resources to develop critical and reflective skills for problem-solving, synthesis and analysis, preparing them for the global workplace. Student-focused teaching aims to facilitate future-facing conceptual change (Brew, 2012). The design of this multi-faceted program engages flexible pedagogies for graduates to build strategies to navigate their 'uncertain global future' (Ramsden, 2008). The MARS program provides a platform where research and teaching converge to create a community of practice. Students have regular opportunities to engage in face-to-face and online interaction where they learn, practice and share research and academic skills collectively (Wenger, 1998).

Adopting the Online Evaluation Toolkit (McCann & Sato, 2014) in the design and post-implementation stages of MARS provides a comprehensive and systematic approach to the creation and evaluation of the program. Currently 4000 Monash Business School postgraduate students each semester directly benefit from the four-tiered MARS program. Drawing on various university-wide and faculty-specific analytical data, the design team is able to obtain metrics of success. In partnership with the faculty we monitor performance in order to locate opportunities for further in-curriculum collaboration between library and academic staff. This timely and ongoing feedback strategy between faculty staff, library staff, and students enables reflection in- and on-action (Schon, 1983, 1987) whereby enhancements to coursework are reflected in skills development resources.

Underpinning the development of the MARS program was a team engagement with Senge's 'five disciplines' (Senge, 1990). Curriculum alignment practices shared by academic staff, Learning Skills Advisers and Librarians established a coordinated, integrated, scaffolded and intentional approach to skill development. The MARS program aligns course outcomes and unit curriculum with Monash Graduate Attributes, the Australian Qualifications Framework, the Research Skills Development Framework, employability skills and relevant professional threshold standards. This mapping process enables a long term view for the development, evaluation and review of the MARS program.

Expert discipline academics and library staff have created a sustainable partnership to produce a multi-dimensional and inclusive learning platform that successfully addresses the learning needs of the large and diverse learning contexts of the Monash Business School. Aligning discipline content with professional standards and skills development, and providing a flexible teaching and learning environment for students and educators, creates a community of practice dedicated to positive student outcomes.

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## Session H11

Paper

### **CHALLENGING A EUROCENTRIC NOTION OF GLOBAL CITIZENSHIP: PERSPECTIVES OF INFORMANTS FROM CULTURALLY DIVERSE BACKGROUNDS**

**Kathleen Lilley<sup>1</sup>**, Michelle Barker<sup>1</sup>

*1 Griffith University*

University campuses are characterised by diversity. Yet, according to Held (2010, p. 76), living with diversity is underpinned by the assumption that norms or ground rules exist for communication, dialogue and dispute settlement, as individuals view wide-ranging moral-political questions differently. No such ground rules exist to guide academics and students ability to engage in effective intercultural communication for the co-construction of knowledge. As such, future pedagogies and learning paradigms need to adapt in ways that will foster intellectual mindsets and metacognitive capacities that are responsive to the realities of rapid social, cultural, environmental and political change. However, there is limited evidence that showcases best practice approaches to intercultural learning that engages with moral reasoning and cultural sensitivity.

A liberal framework for learning is strongly underpinned by moral and critical thinking and dialogic learning and employer groups have recommended that liberal principles be synthesised into professional learning (Georgetown University, 2013, Maguire and associates, 2012). Despite increased emphasis on internationalisation of the curriculum, limited research has explored how a cosmopolitan ethic linked to global citizenship and a liberal framework for learning relates to culturally diverse academics and students. Moreover, there is scant evidence explaining how diverse cultural values influence academics attitudes to teaching, the student experience and their preparation for the dynamics of contemporary workplaces.

Universities commonly espouse aims of educating global citizens, yet there has been little evidence to explain what the term means. Lilley, Barker and Harris (2015, 2014a, 2014b) reported on the moral and transformative cosmopolitan underpinning of the global citizen in higher education; the organisational implications for educating global citizens; the

transformative process of learning involved with developing a global citizen mindset, and the metacognitive capacities that fuel a global citizen mindset. However, this research was explored through a Eurocentric lens.

This paper reports on a pilot study expanding on the authors previous research and reports how a Eurocentric notion of global citizenship relates to informants from diverse Asia-Pacific cultures. An analysis of semi-structured interviews will explain how intercultural perspectives converge and diverge from Eurocentric conceptions of global citizenship, and how diverse individuals engage in intercultural communication and the co-construction of learning.

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## Session H12

Symposium

### **FROM LOCAL ASSESSMENT TO CHANGING CLASSROOM PRACTICES NATIONALLY AND INTERNATIONALLY: IMPROVING STUDENTS' CRITICAL THINKING USING THE CAT (CRITICAL THINKING ASSESSMENT TEST)**

**Ada Haynes<sup>1</sup>**, Denise Drane<sup>2</sup>, Elizabeth Lisic<sup>1</sup>, Sami Basha<sup>3</sup>

*1 Tennessee Technological University*

*2 Northwestern University*

*3 Ahliya University*

How can educational initiatives be scaled across different disciplinary, institutional and cultural contexts? This symposium will describe how one critical thinking initiative has been scaled across disciplines and universities in the United States, and how it is being introduced in a new cultural context in Palestine.

Many argue that an education should prepare students to think critically. Critical-thinking skills are regarded by many faculty as the most important outcome of an undergraduate education (Bok, 2006). Yet, tests of factual information are the primary type of assessment used in higher education (Kvale, 2007). This is problematic as assessments determine how students invest their efforts to learn (Gibbs & Simpson, 2004-5). Boud and Falchikov (2007) argue that how faculty assess student learning has a greater impact on learning than the teaching pedagogy that is used.

The Critical thinking Assessment Test (CAT) began fifteen years ago at Tennessee Technological University (TTU) as a grassroots



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initiative to assess and improve students' critical thinking. This faculty-driven tool has spread to over 235 institutions in the United States. The CAT engages faculty in meaningful assessment, helps them understand student weaknesses, and encourages discussion of methods to improve learning.

This symposium features an overview of the CAT and associated faculty development initiative. Northwestern University will present data from two faculty development initiatives based on the CAT that illustrate how the initiative has been scaled across disciplines with community college, university and high school faculty. Quantitative and qualitative data on the impact of the initiatives on faculty will be presented.

Data from six diverse higher education institutions that have administered and scored the CAT instrument will be presented as an example of how the initiative has been scaled across institutions. The relationship between experience scoring the CAT instrument and subsequent changes made in faculty teaching and assessment practices will be explored.

The CAT is beginning to be used outside the US. But does it translate across cultures? How might an initiative on critical thinking be introduced into a new culture? To address these issues, data from a study on Palestinian student and faculty perceptions of the CAT will be presented.

Attendees will participate in an activity related to CAT skills and will engage in a discussion of the relevance of the critical thinking skills foundational to the CAT across cultures (individualistic and collectivist) and across learning philosophies.

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## SCALING A CRITICAL THINKING INITIATIVE ACROSS DISCIPLINES

**Denise Drane<sup>1</sup>**

*1 Northwestern University*

Northwestern University will present data from two faculty development critical thinking initiatives based on the Critical Thinking Assessment Test (Test) that illustrate how the initiative has been scaled across disciplines from welding to electrical engineering to linguistics with community college, university and high school faculty. Quantitative and qualitative data on the impact of the initiatives on faculty will be presented.

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## DRIVING FACULTY CHANGE ACROSS INSTITUTIONS

**Elizabeth Lisic<sup>1</sup>**

*1 Tennessee Technological University*

Faculty and administration recognize the importance of critical thinking skills, however there still appears to be a disconnect between this awareness and the implementation of change in teaching and assessment practices. Research focusing on high-impact instructional practices indicate that these strategies, when correctly implemented, can lead to gains in critical thinking. Institutions are seeking ways to train and equip their faculty to effectively utilize these strategies. This drive for instructional improvement has led to an increased focus on faculty development in higher education. The Critical thinking Assessment Test (CAT) is an instrument used in higher education institutions across the country to assess students' critical thinking ability. This tool engages faculty members at the testing institution as they score student responses from their own institution allowing faculty to gain insight into strengths and weaknesses in their own students' critical thinking ability.

Results will be presented from a study seeking to understand the relationship between experience scoring the CAT

instrument and subsequent changes made in faculty instructional practices. Participants included faculty at six post-secondary institutions across the United States that have experience scoring the CAT instrument. Survey data from multiple institutions across the United States will be presented in order to better understand the relationship between experience scoring the CAT instrument and subsequent changes made in faculty teaching and assessment practices.

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## Session H13

Paper

### INFUSING SOTL COMPONENTS IN STAFF TRAINING - A FACULTY DEVELOPMENT CONTINUUM AT THE UNIVERSITY OF LIEGE

**Dominique Verpoorten<sup>1</sup>**, Franscoise Jorme<sup>1</sup>, Catherine Delfosse<sup>1</sup>, Pascal Detroz<sup>1</sup>

*1 IFRES, University of Liege, Belgium*

This paper documents the attempt of the University of Liege (Belgium) to establish a 'pedagogical development continuum' by offering three nested programs, each likely to be credited in the next one, thanks to a single overarching competency framework (the CREER model). At a proper level of intensity, each program builds upon SoTL components, as defined for instance by McKinney (2007): 'The systematic reflection/study of teaching and learning made public'.

Level 1: FORMASTART (10 ECTS; attendance attestation) is compulsory for all newly hired teaching fellows. They have to choose and attend ten short training sessions dealing with major topics of higher education pedagogy (syllabus, pedagogical alignment, eLearning, etc.). Each training path has to be concluded with a reflective report in which participants describe the resulting benefits. For most of them, this program is a discovery of pedagogy fundamentals. A reflection on own practice is initiated, without developing a systematic turn. Along the continuum, the overwhelming majority of trainees (1260 involved since 2007) will not move beyond this slight formal engagement with pedagogy.

Level 2: FORMAPLUS (10 ECTS; certificate) mainly targets new tenure-track faculty facing the pressure to develop relevant teaching practice within a short time. The program is tailored to these immediate needs. Through a combination of additional training sessions, coverage of relevant literature, continuous reflection recorded in a SoTL diary, participants bring significant but limited improvement to their daily teaching practice. The program (4 participants since 2014) supports a reasoned approach of these changes and fosters internalization of different tenets of instructional quality. However, these evolutions are kept private.

Level 3: FORMASUP (60 ECTS; master's degree; <http://www.formasup.ulg.ac.be>) is addressed to teachers in higher education (in Belgium and abroad). This program (100 faculty since 2001) commits to all SoTL components. Participants engage in a methodical and many-sided scrutiny of one of their course and in a theoretically/empirically-founded regulation thereof. These outputs get a public dimension via a blog, a portfolio, a formal communication to colleagues, and the writing of 'regulation articles' that, for some, will result in a conference paper.

At all levels of the continuum, teaching practice is made an object of a) attention, b) conversation, c) transformation and d) study (ACTS model, adapted from Watkins, 2012), through a variety of instructional methods.

Besides the presentation of the continuum and its underlying models, the paper will document major issues encountered by the trainers: individual coaching, participants workload, pros

and cons of a research-based teaching approach (Healey, 2005), and fluctuating borders between SoTL and scientific writings.

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### Session H13

Paper

#### MAXIMISING POTENTIAL FROM TEACHING FOCUSED ACADEMIC POSITIONS - THE INAUGURAL CURTIN TF RETREAT

Georgina Fyfe<sup>1</sup>, Helen Flavell<sup>1</sup>, Kerry Pedigo<sup>1</sup>

*1 Curtin University*

In the current Enterprise Bargaining agreement (2012-2016), Curtin University in Western Australia introduced Teaching Focused (TF) positions to improve the student experience and teaching quality. The shift of teaching workload allocations also aimed to strengthen our research outputs. The TF role recognises clinical or professional experience for some academic staff, so TF (Clinical Professional) roles, not requiring a PhD at levels B and C, were a welcome addition in the Faculties of Health and Humanities.

There have been Teaching focused positions in the US and UK for some time (Probert 2013), and many Australian universities have similar positions described in their current EBA documents. Some consider these positions a deficit academic role (Probert 2013) without a career structure equitable with a research role (Chalmers 2011). Indeed, many Curtin staff were reluctant to be transferred from T&R positions to TF positions, fearing loss of status and increase in teaching hours.

Building academic leadership capacity in TF positions in the Faculty of Health Sciences at Curtin is supported by the Dean T&L and her team. Professional development of academic staff has evolved in the last decade, and must now refocus on developing teaching teams and building communities of practice (Gibbs 2013). With this in mind, and from feedback gathered from informal meetings with TF staff, a Faculty plan was developed which included a funded capacity-building Retreat for TF staff. The Faculty of Humanities became involved, and together we ran the inaugural two-day residential TF Retreat in November 2014.

Learning Outcomes for the Retreat included understanding the drivers for change in Higher Education, sharing best practice, building evidence for SoTL, and planning for career progression. Our aim was to build on the strengths of Curtin's most able and effective teachers to identify key issues and plan for a future where TF staff lead the university in T&L effectiveness and Scholarship of T&L. Twenty two Health Sciences staff in TF (Academic and Clinical Professional) roles joined 40 staff from the Faculty of Humanities at the two-day residential Retreat. The Retreat program drew on Curtin staff to facilitate sessions on academic identity, career progression, faulty thinking, leadership in T&L and the definitions and importance of SoTL. The Vice Chancellor contributed a session on Curtin's vision and expectations of TF roles, and took

questions and comments from the participants.

Ethics approval was sought to allow evaluation of the impact of the Retreat. Feedback showed that staff were still confused by definitions of SoTL, but they valued the session on career progression. Sessions that challenged participant thinking, such as managing change, were less well received (Fyfe, Flavell et al. 2014). Staff identified the participation of the VC very positively. One point came out strongly in relation to professional development: TF Staff wanted to identify their own PD needs, rather than have us tell them what they needed. Further findings and recommendations for improving the impact of our subsequent TF Retreats will be presented, and participants will be encouraged to contribute their experience and reflections to the discussion.

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### Session H13

Paper

#### SOTL VISION AND THE NEED FOR A USEFUL WORKING DEFINITION OF EFFECTIVE TEACHING

Cathryn McCormack<sup>1</sup>, Angela Carbone<sup>2</sup>

*1 Southern Cross University*

*2 Monash University*

The incessant pressure for innovation in teaching and learning has resulted in ideas being recycled, and hype about the 'next big thing'. While a number of factors interplay to create this phenomenon, it is in part because we do not have a concise, clear and compelling working definition of effective teaching, meaningful to both academics who teach and managers who assess their performance. A useful working definition would help us frame a vision for SoTL by encouraging evidence-based, scholarly practice. Hattie (2009), after a career of meta-analyses of teaching and learning across all levels of education, points us in a scholarly direction with the factor identified as having the singled largest impact: 'teachers, working together, as evaluators of their impact.'

The tyranny of accuracy holds us back from shaping an effective working definition. Our very expertise and critical thinking skills work against us as we reject useful definitions because of minor inaccuracies. We have literature defining excellent, expert and scholarly teaching (Kreber, 2002), and in Australia a framework for teaching quality (Chalmers, Cummings, Stoney, Herrington, & Elliott, 2015), yet despite efforts by outstanding scholars (Devlin & Samarawickrema, 2010) proposed working definitions of effective teaching lack 'saleability'. From my experience working with teaching awards and teaching and learning grants, I see some applications fail, not because of the quality of work presented, but for lack of a clear and compelling message. Similarly, to provide vision, our working definition must encapsulate

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'saleability' of effective teaching through a clear and compelling message.

In this presentation I put forward a model for discussion adapted from Trigwell (2001). Although not using the term 'effective teaching', Trigwell introduced a two-dimensional model of teaching competence: one dimension labelled quantitative (teaching skills), and one qualitative (conceptions of teaching). The adaptations suggested include relabelling the quantitative dimension to 'teaching skills', and the qualitative dimension to 'teacherly thinking'. Teacherly thinking would encompass conceptions of teaching but also extends to professional identity, pedagogical content knowledge, reflective practice, and other as yet unidentified aspects. In addition, I propose a new third dimension, 'community of practice'.

In the presentation I pose the following questions for discussion:

- \* How does effective teaching compare with good, excellent, expert, or quality teaching?
- \* leadership in SoTL?
- \* Is the Trigwell model or adapted Trigwell model a useful way to describe effective teaching?
- \* Are the adaptations appropriately named and described?

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## Session H14

Paper

### **AUTHENTIC EMPATHY: A LESSON IN UNDERSTANDING SELF AND OTHERS, CANADIAN INDIGENOUS CHILDREN'S PERSPECTIVE THROUGH DRAWINGS**

Michelle Eady<sup>1</sup>, Eva Alerby<sup>2</sup>, Corinne Green<sup>3</sup>

<sup>1</sup> University of Wollongong

<sup>2</sup> Luleå University of Technology

<sup>3</sup> University of Wollongong

There are 300 million Indigenous people globally, more than 21 million refugees and approximately 190 million migrants (Alerby & Brown, in press). The situation of these peoples differs depending on location although, in many ways, their perspectives can be similar. Diversity is critical for students, teachers in classrooms, and schools as they move through their journey as lifelong learners. All children have equal rights to education and schooling, moreover, the United Nations Convention on the Rights of the Child stresses the obligation to take a child's perspective (United Nations, 1989).

The Indigenous communities of the Northwest Territories of Canada represent a distinct group of Indigenous peoples, including the Dene peoples. Cultural identity is found here through a diverse and unique array of perspectives, values, beliefs and traditions. Indigenous perspectives are held with

great esteem, seen in its purpose for living with integrity, guiding choices, understanding value, and empowerment (Western Canadian Protocol for Collaboration in Basic Education, 2000). In particular, there is a distinct sense of existence within the 'Laws of relationships', with natural world, with one another, and with self (Western Canadian Protocol for Collaboration in Basic Education, 2000, p. 5). Comprised of nine fundamental laws which define the way that they should live and relate to one another, the Dene laws are fundamentally based on relationship; relationship with the world, relationship with others, and relationship with self (Blondin, 2000). These aspects of Indigenous culture were the foundation on which we built our interest in these children's perspective of themselves through drawing in an effort to promote understanding of one another.

The use of empirical data collection that consists of drawings on different topics has been adopted by several researchers (see, for example, Alerby, 2000, 2003; Aronsson & Andersson, 1996; Palmberg & Kuru, 1998; Wenestam & Wass, 1987). The data gathered by drawing represents responses which authentically articulate the experience of the individual through visual portrayal of their own realities, which may then be interpreted in a holistic way (Alerby & Bergmark, 2012). Students were asked to draw their perceptions of how they view their Aboriginality followed by verbal reflections in the form of facilitated short discussions completed directly after the students' drawings. The discussions used questions focussed on the internal thought processes of the participant to accompany their visual portrayal (Alerby & Bergmark, 2012; Shaban & Al-Awidi, 2013).

The sequence emerging across the data gathered in this study demonstrated a link between students' understanding of self on a deep level, and a genuine understanding of others both in local and global contexts. These understandings led students to speak with real empathy for others as they demonstrated genuine perceptions and understandings of the diverse contexts and cultures in their world. It is their understanding of self, what we can learn from them, and how we can transfer this knowledge to teachers and students in mainstream school systems that is the primary focus of our work.

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## Session H14

Paper

### **EDUCATING FUTURE LEADERS IN COMBATING THE ENDURING PROBLEM OF POVERTY: INCORPORATING POVERTY ALLEVIATION IN BUSINESS CURRICULUM**

Helen Dalton<sup>1</sup>, Ranjit Voola<sup>1</sup>

<sup>1</sup> The University of Sydney Business School, Sydney, Australia

Overcoming poverty is not a task of charity, it is an act of justice. Like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by actions of human beings' Nelson Mandela

Of 7 billion people in the world around 4 billion at the 'base of the pyramid' live on less than 5USD a day (Pralhad & Hammond, 2002). As the poor integrate more into the marketplace, there is a moral and economic imperative to include them as consumers and producers. Poverty alleviation has been the domain of not-for-profits, governments and the UN, but there is a shift to calling on businesses to be part of the solution. The achievement of this counter-intuitive approach is contingent on a new generation of business leaders as they identify market opportunities that embrace social purpose. These new corporate leaders will come through the education of our business school students. Universities

have a key role in engaging business students in understanding poverty and its alleviation, and profitability in new and uncertain contexts such as the poor. It requires that business education includes poverty alleviation and rethinking of the curriculum. To this end, a pioneering offering of an interdisciplinary unit encourages students to radically rethink the traditional business focus on middle-class markets and use social justice principles to engage with the world's poor, profitably.

This paper reports on how an interdisciplinary intensive course within a Masters program intended to shape future corporate leaders, aimed to develop business graduates that see beyond hard-held assumptions. Through a framework of transformational learning (Mezirow, 1991; Slavick & Zimbardo, 2012) students were cognitively and emotionally challenged as they developed strategies for profit businesses to profit and concurrently alleviate poverty. It required students to develop skills that were ambidextrous in nature, in other words, that two seemingly contradictory outcomes are possible. Students considered new perspectives and critically questioned their entrenched assumptions and beliefs about business and its role in society - assumptions and beliefs built-up throughout their business education, experiences and cultural norms. At the core of the challenge was how students wrestled with ideology couched in social justice and widening of the purpose of business, and popular conception of capitalism and shareholder value.

Through action research the paper will share findings on challenges, student outcomes, and developing a business curriculum that allows exploration of the counter-intuitive and ambidextrous notion of making profit whilst alleviating poverty, and what this may mean for the call for interdisciplinary university learning experience.

Audience engagement will be through two dialogues. One around whether business curricula supports the competencies and actions needed to alleviate poverty and the second around participants re-imagining their discipline-specific curriculum to include content from disciplines/areas that are counter-intuitive, and then discussion on what this may mean for implementation, including why faculty and students may resist this re-imagining.

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### Session H14

Paper

#### **DO STUDENTS NEED HELP UNSCRAMBLING OUR EPISTEMOLOGICAL DIFFERENCES IN TEACHING ETHICS OR DO WE NEED TO ACCEPT WE HAVE A PROBLEM FIRST?**

**Claudine Moutou<sup>1</sup>**

*1 The University of Sydney*

Interdisciplinary education is challenging but ultimately a powerful way of helping students prepare for the complexity of real-world issues. Real-world issues do not come in neat disciplinary packages, but often require our students to reflectively integrate and synthesize information from different disciplinary perspectives (Golding 2009). One might expect the teaching of ethics as a generic graduate attributes should

demand sensitivity to dilemmas that may arise in interdisciplinary and multidisciplinary settings. But with busy academic lives who has time to find out who is teaching what, how?

The move to integrate ethics through the curriculum does not guarantee quality teaching, with many Faculties finding that the ways in which students are exposed to ethics is haphazardly coordinated if at all (Solberg et al 1995, Beauvais et al 2007). Whilst various approaches have been found to be effective in developing academic confidence in teaching ethics (Beauvais et al 2007, Towell et al 2012) and working on a coherent approach across the Faculty (Walleretal et al 2014) the evaluation of these efforts in relation to how alumni are better enabled by the ethics curriculum is unknown.

This paper reports on research conducted with alumni, academic staff and students to gauge how the epistemological basis of our ethics teaching is able to be integrated in the real world. Results of surveys of alumni, university staff, and students are used in conjunction with curriculum mapping of ethics and assessments across a multidisciplinary Masters program as part of a Teaching Innovations Fellowship. The paper reports how the authentic feedback from alumni and students helped to generate new interest amongst faculty in considering how epistemological differences could be acknowledged and bridged for the benefit of students.

Key words: ethics education, interdisciplinary challenges, faculty engagement, alumni engagement, ethical frameworks, innovation

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### Session H15

Paper

#### **TRANSFORMING THE FACULTY CULTURE ACROSS THE STEM DISCIPLINES**

**Howard Jason<sup>1</sup>, Kathy Koenig<sup>1</sup>, Jill Beyette<sup>2</sup>, Anne Vonderheide<sup>3</sup>**

*1 Department of Physics, University of Cincinnati*

*2 Department of Biology, University of Cincinnati*

*3 Department of Chemistry, University of Cincinnati*

Change is ubiquitous within colleges and universities but sustained and directed change notoriously challenging to implement. An expansive scholarly literature on organizational change theory in corporate settings has documented what is needed to encourage and sustain change, but much less effort has been directed to higher education settings. Recent work has reviewed change strategies in the STEM disciplines suggesting some effective directions as well as identifying substantial missing scholarly evidence [1,2]. Here we present a model that reflects recent literature and report initial results of implementing several change strategies. The central elements of our approach involve identified departmental Teaching and Learning Liaisons, a unique faculty development component by the our teaching center, a vertical integration of leadership across department heads, the Dean, and the Provost, and the explicit acknowledgement that change happens locally.

More specifically, we present preliminary results of an NSF-ISLE-supported effort entitled "Enhancing Student Success in Biology, Chemistry, and Physics by Transforming the Faculty Culture." We explore a 4-step model that reflects recent literature and report initial results by each of the Departments of Biology, Chemistry, and Physics of implementing several change strategies.

As part of the session presentation, the model of change we are using will be described and examples of changes in each of the Departments of Biology, Chemistry, and Physics will be described. Time permitting, participants will then be formed



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into teams of three or four and asked "How could you accomplish a change in the teaching culture at your institution?" Each will be asked to make a list several actions, appropriate to their local circumstances, which could affect a change in the teaching culture. The teams will then: 1) identify a common or pressing challenge; 2) generate ideas of how to address the challenge; 3) select the first idea to be implemented, recognizing the local circumstances; 4) be prepared to present their conclusions. We will then facilitate a discussion among the participants on the process and illustrate how the model can be applied in a variety of departmental settings.

At the conclusion of the session participants will be familiar with a model of change that has 4 steps and which is responsive to identified local (departmental) circumstances, understand the unique and important role that the departmental Teaching and Learning Liaisons play, understand the roles of department Head, Dean and Provost in sustaining the change process and be able to imagine implementing such a change process responsive to the participant's local circumstances.

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## Session H15

Paper

### EMBEDDING PROFESSIONAL SKILLS DEVELOPMENT IN ENGINEERING: A CASE STUDY OF A GRASS-ROOTS INITIATIVE

Kanchana Jayasuriya<sup>1</sup>

<sup>1</sup> Victoria University, Melbourne

Engineering practice requires the interaction between many professionals with different sets of knowledge, skills and expertise, an environment described as 'distributed expertise' (Trevelyan 2010, p. 190), where the disciplinary discourse and effective interpersonal skills are vital. Professional skills, such as, effective communication and team membership are part of a core set of competencies that engineering graduates need to demonstrate at the point of entry to practice. The University Curriculum and T&L Quality Frameworks articulate a series of principles and standards to inform future work in developing disciplinary knowledge and capabilities of students. This paper describes a grass-roots initiative within an engineering unit where a Learning & Language (L&L) and discipline academic collaborated to improve the learning and professional skills development of students as part of the curriculum. While there have been many initiatives to develop communication-focussed models across curricula (example, Craig, Lerner & Poe 2008), this localised initiative aimed to change practice by creating conditions where both the learning of engineering content and skills can prosper.

The initiative was linked to a 2nd year unit. Learning Outcomes included effective communication, teamwork, and interpersonal skills and assessment through team-based projects. With the discipline expert, the L&L academic was involved in the design/development of learning material and assessment tasks and teaching in class. The L&L academic (also an engineer by training) acted as a mentor to students to guide their learning through weekly reports on key elements of

the projects (namely, objectives; tasks completed; what has been learnt; and, tasks to be completed). This was implemented to encourage students to review, reflect, learn and build on their efforts each week. The L&L academic met with student teams providing guidance on a range of topics, including, unpacking the assignment task; working as a team; developing project plans; developing innovative solutions (thinking outside the box) and writing. These meetings were essential for addressing gaps in understanding or other project-related concerns and providing feedback on time.

Students' feedback on completion of the unit indicated that in-class L&L guidance was valuable for their learning and skills development and most were appreciative of the learning conditions and support provided. Examples of comments were, "Goes in-depth. Fluent. Great advice. Encourages students to open their minds" and "Very helpful. Got more insight into report writing than having to read about it". The conclusion was that the changed practices at the local level (embedding "L&L" in "disciplinary content", aligned to institutional standards) formed an effective pedagogical strategy to develop students' overall learning. Furthermore, there was endorsement by academics for the initiative to be repeated next year. However, several areas were identified for improvement or for consideration before possible implementation more widely.

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## Session H15

Paper

### LEARNING THROUGH INQUIRY LEADS TO CHANGE IN PRACTICE

Heather Scott<sup>1</sup>, Missy Bennett<sup>1</sup>, Yasar Bodur<sup>1</sup>

<sup>1</sup> Georgia Southern University

Encouraging teachers to experience science through an inquiry-based approach builds their self-confidence to teach in future classrooms utilizing these practices. Sanger (2006) found that when teachers were taught chemistry content utilizing an inquiry approach, they learned chemistry at least as well as a traditional approach and in some situations they could actually explain it better. Likewise, Smith (2007) found that teachers must be educated in environments which support and encourage the dispositions they wish to mirror in their classrooms. Research by the Millken Family Foundation (2000) suggests that science teachers benefit most from professional development that encourages higher order thinking skills and laboratory practice rather than broader, more general content information. In its declarations for scientific inquiry, the National Science Teachers Association (NSTA) (2004), supports and encourages the use of inquiry as a teaching approach in the classroom. Recommendations include administrative support for professional development on how to teach scientific inquiry as well as for the curricular time needed to do scientific inquiry effectively. NSTA also recommends that professional development engage science educators in opportunities to examine their beliefs, knowledge, and habits. NSTA (2006) principles of professional development encourage examination of specific science content and pedagogy connected to issues of instruction and student learning in the context of classrooms (Loucks-Horsley, Love, Stiles, Mundry,

and Hewson 2003; Elmore 2002; Darling-Hammond and Sykes 1999).

Using a field-based professional development course, 45 teacher participants over three years were introduced to the concept of guided-inquiry as they became participants in an inquiry project to pose questions and investigate the interdependence of the Atlantic Horseshoe Crab and the Red Knot Shorebird. The experience of teachers-as-students from this course honed science teachers skills for using inquiry in their own classrooms. This investigation used a mixed-method design, including both qualitative and quantitative evaluation strategies. Qualitative methods included classroom observation, individual and focus group interviews, and document analysis. Qualitative content analysis was used to analyze documents, and constant comparative analysis was used to analyze participant observation and interview/focus group data. Quantitative methods included survey measures of: participant attitudes, interest, use of inquiry activities, beliefs about inquiry, and perceived obstacles to implementation of inquiry in the classroom. In addition, school-aged student science attitudinal surveys and work samples were collected.

To date, cumulative data has indicated positive outcomes for all participants. Teacher surveys, supported by observational data, showed that 100% of the participants credited the professional development with enhanced understanding of inquiry, and with greater interest in implementation. Teacher-prepared inquiry lesson plans indicated a firm understanding of inquiry and implementation. Student work samples and classroom observations indicated high levels of engagement and enjoyment of inquiry activities. Overall, the professional development activity enhanced attitudes, interest, use of inquiry activities, and beliefs about inquiry among teacher participants. As teacher participants assumed the role of students, they gained insight into the pedagogy of inquiry which translated into enhanced classroom practice.

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## Session H16

Symposium

### AUSTRALIA, NEW ZEALAND, SOUTH AFRICA AND CANADA - CONVERGENCES AND DIVERGENCES IN THE EXPERIENCES OF FIRST-GENERATION UNIVERSITY STUDENTS

**Amani Bell<sup>1</sup>, Airini<sup>2</sup>, Matt Benton<sup>1</sup>,** Roisin Laubscher-Kelly<sup>3</sup>, Moragh Paxton<sup>3</sup>, Tepora Pukepuke<sup>4</sup>, Lorri Santamaria<sup>4</sup>, **Ema Wolfgramm-Foliaki<sup>4</sup>**

*1 University of Sydney*

*2 Thompson Rivers University*

*3 University of Cape Town*

*4 University of Auckland*

The changing demographic in first world nations has been described as the largest challenge for higher education. As Middleton (2008) indicates, the net effect is that those population groups that have traditionally provided successful students are being 'replaced by increasing numbers of students from groups that are traditionally underserved by higher education' (2008: 4). Universities have for some time been reaching out to new generations of students, many of whom are the first in their family to attend university (FIFU). While some progress has been made, many challenges remain. Diversity in the academy is critical for students, teachers and institutions if they are to learn and flourish. Some might call it the economics of higher education; some the sociology. Fundamentally it is the ethics of higher education: doing what is right to ensure all students, together with their families and

communities, have the opportunity to access the benefits of a university education.

This symposium is about the possibilities of potential within universities expanding to better serve students who are the first in their family to participate in university (FIFU students). With reference to research in Australia, Canada, New Zealand and South Africa, this symposium will critically examine university practices that influence FIFU student success. Elements that are both unique to context and unified across the global higher education milieu will be explored. Evidence-informed teaching and learning practices and implications for future research will also be discussed. Fundamentally though, this symposium and the research within it are about who belongs in universities and the idea of the purpose of the university. We are reaching a critical point in how we think about and teach within universities. Will we welcome all to our classrooms and lecture halls, genuinely?

The common methodology of the four studies is qualitative, and is centred on valuing student voices and experiences, with a strong emphasis on Indigenous / decolonised methodologies. Through these methodologies, which include critical incident technique (Flanagan, 1954; Airini et al 2011) and Participatory Learning Activity (Bozalek & Biersteker 2010), we explore rich data on FIFU student experiences at four institutions in four countries.

The discussant will draw together and reflect on the common and unique themes in the four presentations, providing both practical recommendations and questions for further exploration. Throughout the symposium, participants will be invited to reflect on and share their experiences of FIFU students in their institutions.

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### POTENTIAL PLUS: UNIVERSITY PRACTICES THAT HELP/HINDER CANADIAN FIRST GENERATION STUDENT SUCCESS

**Airini<sup>1</sup>**

*1 Thompson Rivers University*

Canadian universities have for some time been reaching out to new generations of students, many of who are the first in their family to attend university (FIFU). Four themes will be described from Canadian-based research about university practices that can better serve FIFU students:

- an outcome focus: Universities will be most effective when using outcomes measurement tools that are meaningful to the FIFU students, and that are collaboratively developed with these students and their communities;
- longer time spans: Increasing FIFU student participation and success is not undertaken on the basis of short-term goals. Rather this is about helping in mapping the future of societies, environments, economies, and cultures.
- the importance of being Indigenous: Indigenous aspirations,

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values and affiliations in the contemporary world (see Durie, 2005) are recognized when universities better serve FIFU students. This is a strengths-based approach that focuses on Indigenous potential.

-interdisciplinary and 'unusual' relationships: University practices that effectively support FIFU success draw on extended relationships that connect across disciplines, communities and enterprises. The mix of expertise and information brings new insights and proposed solutions are wide-ranging and interrogated deeply and practically. Institutional and intellectual flexibility through novel relationships enables universities to support FIFU success in exceptional ways.

This research is drawn from interviews with FIFU students at a modern, comprehensive Canadian university with open entry policies. The Critical Incident Technique (Flanagan 1954, Airini et al 2011, 2010) was used to capture unique incidents of times when university practices have helped/hindered FIFU student success, as reported by the students themselves. The data shows that we are reaching a critical point in how we think about and teach within universities. Will we welcome all to our classrooms and lecture halls, genuinely? How will universities enable success for all?

This research highlights success-ful practices and first principles to widen participation. In effect this is about the intentional effort to combine the strengths of FIFU students (such as motivation, life experience, ambition, knowledge and skills) with the strengths of the university (such as research and teaching, strategic and academic planning). Some might call it the economics of Canadian higher education; some the sociology. Fundamentally this research highlights the ethics of university practices in Canada: doing what is right to ensure all students, together with their families and communities, have the opportunity to access the benefits of a university education. The potential has never been greater for universities to expand to better serve students who are the first in their family to participate in university.

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## INTERPRETATION OF STUDENT DRAWINGS AS A METHOD OF EXPOSING THE FIFU STUDENT EXPERIENCE

**Roisin Kelly-Laubsche<sup>1</sup>, Moragh Paxton<sup>1</sup>, Ziyanda Majombozi<sup>1</sup>**

*1 University of Cape Town*

The massification of education has led to an increase in the number of non-traditional students at universities worldwide. Many of these students come from disadvantaged backgrounds and are the first in their family to attend university(FIFU). In South Africa, despite increased entry into tertiary education for students from these groups, many of them fail to complete their degrees. Although much research has focused on the broader population of disadvantaged students at South African universities, very little has focused on factors affecting the success of FIFU.

As part of a multi country project focused on the success of FIFU the research team felt that we needed to bring more indigenous research methodologies into the research arena as a means of addressing the goals of social justice. We wanted to sensitize researchers to new methodologies and diverse epistemologies. Focus group methodologies appealed to the whole FIFU research team because we liked the idea of students from diverse groups sharing their experiences in group discussions. However, the South African (SA) team were aware that English is not the home language of the majority of our students and EAL speakers might be silenced in a diverse focus group. Therefore we decided to use participatory

learning activities (PLA) as a research methodology and ask students to draw their experiences of the journey to, into and through the university. We felt that PLA could be a means to facilitate students who struggled to express their ideas in an additional language like English. If students could get their ideas down in the form of a drawing this would enable them to refer to their drawings when they joined the focus groups. Language barriers would be removed and they would be free to express themselves through another medium. The SA FIFU team had agreed that one cohort would be FIFU and another non FIFU and this would mean both cohorts would be able to communicate on equal terms.

As well as being a stimulus for conversation in the focus groups, we felt that the drawings themselves may serve as a window into the experiences of these students. Therefore, this study was carried out in two phases; The first focused on interpretation of the student drawings using social semiotic analysis (the theory of social semiotics sees the ways in which signs convey meaning as a social process) and compared these interpretations using video recordings of the students describing their drawings. The second phase concentrated on the focus group data. In the ISSOTL presentation, the SA team will present the results of phase one of this study. The data presented will include the major themes that emerged from a broader analysis of the student drawings as well as a more in depth analysis of a sample of these drawings using social semiotics, an illustration of our findings using snapshots from a sample of these drawings and a discussion of the relationship between our findings and the student descriptions of their drawings.

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## EXCAVATING STORIES OF FIFU STUDENTS IN AOTEAROA NEW ZEALAND

**Emma Wolfgramm-Foliaki<sup>1</sup>**

*1 The University Of Auckland*

A university qualification is known to bring long term benefits especially for those who are 'First in their families' (FIFU) to study in higher education. Given what we know there is a strong argument to be made for greater and equitable access to higher education, especially for FIFU students who are usually from under-served communities. In Aotearoa New Zealand, a high number of students who are at university are first in their families to do so. Yet we know very little about this group and the factors that contribute to their success. What we do know however is focused more on what they (FIFU students) lack rather than what they bring to university. FIFU students have been labelled as under-prepared, at risk, from disadvantaged backgrounds and are generally known as non-traditional students. By applying a deficit perspective to examine this group we fail to recognise that FIFU students are leaders in their own families and communities with aspirations for educational attainment. The existing scholarship on FIFU also does not identify the positive contribution that family members make to their university journey. For example, a high number of FIFU students are from families with much cultural capital who may lack a traditional university education yet they are still capable of supporting their FIFU students to succeed in their studies (Orbe 2003). This research project shifts the focus onto the strengths of FIFU students so that we ask and consider what they bring and how the university can use this knowledge to help meet their needs and thereby better serve their communities.

This presentation draws from narratives and visual representations gathered from focus group interviews of a group of FIFU students (Maori, Pasifika & a third cohort of all other students) in Aotearoa New Zealand. We used a culturally

appropriate methodology in our focus group interviews to bring to the fore authentic multiple narratives of the FIFU journey and their experiences. From our collaboration with our South African partners we also decided to use participatory learning activities (PLA) as a research methodology where we ask students to draw their journey into and through the university. However, students were informed that this was optional. Our preliminary analysis reveals a number of themes that will be covered in this presentation; the importance of being first, perspectives on benefits of a university education, FIFU students' transition into university, the contribution of family and role models to FIFU journey, institutional structure and practices that help/hinder FIFU progress, complexities of FIFU students' multiple identities, and strategies for engaging with FIFU students who are from indigenous backgrounds. Our findings will be a basis for discussion on how we can bridge the gap between the aspirations of FIFU students for educational achievement and current university teaching and learning practices.

#### References

Orbe, M. (2003). African American first generation college student communicative experiences. *Electronic Journal of Communication/ La Revue Electronique de Communication*, 13, (2/3).

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### **IF YOU WANT TO MAKE A DIFFERENCE YOU GO TO WHERE THE BIG DECISIONS ARE MADE: EXPERIENCES OF INDIGENOUS AND NON-INDIGENOUS FIRST GENERATION STUDENTS**

**Amani Bell<sup>1</sup>**, Matthew Benton<sup>1</sup>

*1 University of Sydney*

Under-representation of Indigenous students and students from low SES backgrounds is the result of several complex and interrelated factors (Universities Australia 2008; Hall 2011). Similarly there are a range of factors that influence retention and achievement once students are enrolled at university, including socio-cultural capabilities, student motivation, teacher approachability, student time management, family attitude, institutional support, and connections with other students (Devlin & O'Shea 2012; 2011). While a suite of policy and funding initiatives exists, a range of approaches is needed to increase participation of Indigenous people and people from low SES backgrounds in higher education (Universities Australia 2008).

Within the larger WUN project team, we are a research partnership of an Indigenous researcher and a non-Indigenous researcher. Matt is Indigenous, and is a first generation student, currently doing a Master's degree. Amani is an experienced higher education researcher, with Egyptian and Australian heritage.

Our research is drawn from four focus groups, two with non-Indigenous first generation and non-first generation students, and two with Indigenous students, most of whom were first generation. We selected a decolonised approach in conducting focus groups, ensured respect and created a feeling of welcome and openness. We asked the 22 students about their journeys to and through the university, and have since conducted a thematic analysis of the transcripts (Braun and Clarke 2006), with a critical overlay of a postcolonial Indigenous lens (Chilisa 2012).

Our analysis revealed themes around when and why first generation students decide to go to university, and why they decided to go to the University of Sydney in particular. The importance of support programs for first generation students was highlighted, especially in the creation of long-term social support. Cultural dissonances were jarring for some students, who mentioned the lack of common experiences with other students, finding some lecturers 'aloof' and alluding to the 'delegitimation' of Indigenous knowledge (Akena, 2012). All students found balancing university, expenses, and a social life difficult, but there were particular difficulties for some Indigenous students in being away from family and community, finding some of the content difficult emotionally (e.g. colonisation), and feeling quite isolated from the rest of the campus (Indigenous block mode students). Another theme that emerged with many of the Indigenous students was one of empowerment against the status-quo of the established power structures exemplified by the University. In some cases, students resisted Western dominance of historical knowledge presented by academics in favour of their own cultural experience (Dei, 2008).

Overall, our research illustrates some provocative ideas regarding the scholarship of first generation students that points to an experience of both complex adversity and crucial ambition.



# Program Friday 30 October 2015

0900-0930		Invited Speaker (Storey Hall) - <b>Professor Gregor Kennedy</b>		
Room Number	16.01.001	16.07.008	16.07.007	16.07.001
0930-1100	<p><b>Session J1</b> <b>Theme 2</b> 0930-1000 <b>Silvia McCormack</b> Internationalizing the Curriculum in Practice</p> <p>1000-1030 <b>Judith Smith</b> Curriculum Design Reimagined: Applying design thinking to curriculum change</p>	<p><b>Session J2</b> <b>Theme 5</b> <i>Panel Session</i> 0930-1100 <b>Romy Lawson, Sally Kift, Keithia Wilson, David Boud, Nicolette Lee, Rosemary Deem</b> Whole of Degree Curriculum Design: Transitioning students in, through and out of higher education</p>	<p><b>Session J3</b> <b>Theme 1</b> <i>Symposium</i> 0930-1100 <b>Marcus Collins</b> Passing it on: how postgraduates can help undergraduates to develop research projects</p>	<p><b>Session J4</b> <b>Theme 5</b> 0930-1000 <b>Carol Van Zile-Tamsen</b> Using psychometric analysis to inform change to university course evaluations</p> <p>1000-1030 <b>Guopeng Fu</b> Evaluating flexible learning strategies in undergraduate courses: Technology and Community-Based Experiential Learning</p> <p>1030-1100 <b>Elaine Huber</b> Learning through evaluation: Leading change one project at a time</p>
Room Number	80.02.017	80.02.003	80.04.021	80.07.009
0930-1100	<p><b>Session J8</b> <b>Theme 1</b> 0930-1000 <b>Susan Conkling</b> Scholarship, Leadership, and the Relevancy of Our Questions</p> <p>1000-1030 <b>Alisa Percy</b> Leading change: a scholarly framework for policy enactment in the academy</p> <p>1030-1100 <b>Paul Taylor</b> Organisational Leadership to achieve Student Leadership in the Leeds Curriculum</p>	<p><b>Session J9</b> <b>Theme 2</b> <i>Symposium</i> 0930-1100 <b>Greg Higgins</b> The Future is here: Adaptive tutorials and virtual laboratories emphasizing teacher-controlled real time feedback on student interaction and personalised learning with rich learning-by-doing simulations</p>	<p><b>Session J10</b> <b>Theme 4</b> 0930-1000 <b>Michelle Fox</b> Enabling Sessionals to Shine: STARS as an exemplar of practice</p> <p>1000-1030 <b>Claire Hamshire</b> Step-in: An exploration of students' initial induction experiences</p>	<p><b>Session J11</b> <b>Theme 4</b> 0930-1000 <b>Rachel Spronken-Smith</b> Sign of engaged PhD candidates? Average completion rates of 77-88% in about 4 years</p> <p>1000-1030 <b>Peter Reaburn</b> Engaging Academy: Lessons Learnt Taking Theory to Practice in Communities of Practice at Two Australian Regional Universities</p> <p>1030-1100 <b>Michael Grimley</b> Autism massive open online course (MOOC)</p>
1100-1130		MORNING TEA		
1130-1230		Closing Keynote (Storey Hall) - <b>Professor Rosemary Deem</b>		
1230-1300		Closing		

Invited Speaker (Storey Hall) - **Professor Gregor Kennedy**

16.07.002	16.07.003	16.07.004	
<p><b>Session J5</b> <b>Theme 4</b> <i>Symposium</i> 0930-1100 <b>Marina Harvey, Jillian Hamilton, Anne Hewitt, Mark Israel, Gail Crimmins</b> Leading quality learning and teaching with sessional, casual or adjunct teachers</p>	<p><b>Session J6</b></p>	<p><b>Session J7</b> <b>Theme 2</b> 0930-1000 <b>Leanne Ngo</b> ePortfolios: A 21st century pedagogy and learning paradigm 1000-1030 <b>Suzanne Owen</b> Creating virtual scenarios for a virtual world: using an immersive learning environment (ILE) to provide a simulated clinical learning experience</p>	

80.04.025	80.07.006	80.07.08	80.09.07
<p><b>Session J12</b> <b>Theme 5</b> 0930-1000 <b>Christine Brown</b> Professional development for promotion a UOW case inspired by the Transforming Practice Programme 1000-1030 <b>Arshad Ahmad</b> Mobilizing Translational Research to Foster the Scholarship of Change</p>	<p><b>Session J13</b> <b>Theme 6</b> 0930-1000 <b>Sara O'Sullivan</b> A systematic review mapping twenty five years of Irish SoTL research (1990-2015) 1000-1030 <b>Caroline Bennett</b> Creating Sustained Institutional Change: Transforming a Traditional R1 Engineering Program to an Active-Learning, Evidence-Based Teaching Model</p>	<p><b>Session J14</b> <b>Theme 2</b> 0930-1000 <b>Anne-Marie Murray</b> Are current students coping with current pedagogies and current learning paradigms? A case study of second year medical students in a problem-based learning medical degree 1000-1030 <b>Karen Scott</b> Investigating the sea change in learning habits of contemporary university students</p>	<p><b>Session J15</b> <b>Theme 1</b> 0930-1000 <b>Qi Gao</b> From instructor tutoring to peer tutoring: a de-centered instruction model on undergraduate student's project-based learning 1000-1030 <b>Tai Peseta</b> Students as researchers of assessment renewal: learning about academic life as a precursor to leading SoTL change 1030-1100 <b>Heather Smith</b> Reflections on Principles and Practices of Students-As-Partners in Teaching and Learning in Higher Education</p>

**MORNING TEA**

Closing Keynote (Storey Hall) - **Professor Rosemary Deem**

**Closing**

# Abstracts Friday 30 October 2015

## Invited Speaker

### MOVING THE WHOLE CURVE: STRATEGIES FOR EFFECTING CHANGE IN EDUCATIONAL TECHNOLOGY PRACTICE

Gregor Kennedy<sup>1</sup>

*1 The University of Melbourne, Melbourne*

In 2011 the University of Melbourne embarked on an ambitious program that aimed to revitalise how technology was developed and used to support teaching, learning and assessment. Historically, the University had capably negotiated the complexity of the educational technology landscape with clear periods of innovation, balanced by periods of careful consolidation. Successful whole-of-institution curriculum reform prior to 2011 provided an appropriate context for tackling how a strongly campus-based institution could embrace existing and emerging technologies to improve and enhance teaching and learning practice.

In this presentation I will provide an overview of the strategic and operational strategies that were instrumental in bringing about widespread change in the use of educational technology at the University of Melbourne. I will reflect on areas of both strategy and operation that were critical to the success of the initiative, and I will provide examples of how both the institution as a whole and individual staff members were supported in changing their teaching and learning practices. While some of these elements are somewhat obvious and well documented by others - clear articulation of strategy, widespread consultation, provision of incentives - others are less so. I will conclude with a discussion of some of these more esoteric approaches adopted to leading strategic change. An explicit focus of these strategies was to "move the whole curve". That is, have an institutional approach that not only provided innovation opportunities for the digital evangelists and early adopters, but also supported those who were more reticent or had more modest ambitions in their use of educational technology at the institution.

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## Session J1

Paper

### INTERNATIONALIZING THE CURRICULUM IN PRACTICE

Gerry Urwin<sup>1</sup>, Silvia McCormack<sup>2</sup>

*1 Coventry University*

*2 La Trobe University*

This is an exposition of a UK/ Australian project to encourage the development of practical business skills for Business undergraduates, particularly focusing on international team working and communication. This fits well with the Australian National Strategy on Work Integrated Learning in University Education initiative. It also addresses the UNESCO (2013) Intercultural competences: conceptual and operational framework which argues that one of the key characteristics of contemporary societies is the high levels of cultural diversity and the proliferation of opportunities for intercultural interactions, meaning that 'Increasingly different groups co-exist in close proximity and need to understand and negotiate concepts, perceptions, opportunities, and actions'.

The objectives of the project are ambitious and include the development of, in UK terminology 'employability skills' and what Deardorff refers to as 'intercultural competence' stemming from the belief that in order to prepare '21st century graduates to live in and contribute responsibly to a globally interconnected society,' it is essential to help them develop a number of attributes and qualities that will enable them to

successfully engage in intercultural encounters and to facilitate intercultural interactions that unfold as intercultural dialogues where mutual understanding takes place.

The project aims to link Coventry University final year undergraduate business students with counterparts in La Trobe University, Melbourne. It involves a 3 week exercise where students are given the task of assessing the suitability of a proposal to internationalize a small to medium size enterprise (SME). Melbourne students consider the case for operating in the UK, Coventry students consider operating in Australia. Groups consist of 2/3 students from each institution. Students are given a short case study describing the firm and the sector, and asked to prepare a short presentation with supporting evidence of the feasibility of their firm operating in the new location. Students present results using 'Pecha Kucha' style and this is recorded and posted online for assessment by their international counterparts. Students are allocated to groups with contact details and are required to use Skype instant messaging, teleconferencing and videoconferencing facilities (including file and screen sharing) to work together and help each other achieve their task.

This paper will examine the process of this type of curriculum development, identifying issues and difficulties in creating an effective teaching and learning environment for our students, that also encompasses the other key stakeholder group, employers. It suggests possible solutions to these issues, based on the experience of this project.

<https://www.universitiesaustralia.edu.au/news/media-releases/Landmark-strategy-to-make-graduates-more-job-ready-#.VU3GGfViko>

<http://unesdoc.unesco.org/images/0021/002197/219768e.pdf>

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Higher Education Academy, 2014. *Internationalising Higher Education Framework*.

<https://www.heacademy.ac.uk/workstreams-research/themes/internationalisation/internationalisation-framework>

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## Session J1

Paper

### CURRICULUM DESIGN REIMAGINED: APPLYING DESIGN THINKING TO CURRICULUM CHANGE

Judith Smith<sup>1</sup>, Verity Morgan<sup>1</sup>

*1 Queensland University of Technology*

Universities need to fundamentally transform their approaches to learning and teaching to be able to respond to the rapid pace of change in the external environment, technological disruptions and the expectations of students and employers. More than ever graduates will need to be able to thrive in volatile environments, work productively in teams and combine depth in professional knowledge with broad perspectives and new ideas. Fundamental shifts in academic practice are required to imagine and realise change to curriculum that will best prepare graduates for today and more importantly tomorrow.

Curriculum teams deploying new ways of working such as design thinking is one way the Queensland University of Technology is aiming to strengthen their curriculum transformation processes to enhance learner experiences and improve graduate outcomes and employability. This work involves a strong commitment to a culture of creative and collaborative curriculum design, which involves close engagement between staff in Faculties and Divisions, and with

students, alumni, industry and community as key partners in the curriculum design process.

This paper articulates preliminary findings of participatory action research (Bradbury and Reason 2008; Kemmis and McTaggart 2005) that is exploring how design thinking approaches (Brown and Wyatt, 2010) are informing the practices of curriculum transformation. The participatory action research methodology is supporting a collaborative systematic approach to this inquiry, which aims to simultaneously develop understandings about curriculum design practice and implement improvements to practice.

Through the research, design thinking strategies (Kimbell, 2011; Design Thinking Toolkit 2nd ed, 2012) have been adapted to assist curriculum teams: to reframe curriculum challenges informed by building empathy and understanding of stakeholder needs; to take risks in reimagining curriculum possibilities; to open up thinking to potential curriculum innovation; and, to use prototyping and testing of curriculum solutions to inform choices in the curriculum design. The ambiguity and complexity of the changes facing higher education are requiring curriculum team members to apply different mindsets and ways of thinking to their curriculum practices and requiring participants with different skills to contribute to the curriculum design process. Findings from research to date on the application of design thinking strategies shows a change in focus from problems to the exploration and prototyping of constructive, creative and hopeful solutions (Brown and Wyatt, 2010). It also shows academics willingness to build deeper engagement with stakeholders (students, industry and consumers partners) in the design process, which is leading to greater empathy and understanding for stakeholder needs in design solutions.

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## Session J2

Panel Session

### WHOLE OF DEGREE CURRICULUM DESIGN: TRANSITIONING STUDENTS IN, THROUGH AND OUT OF HIGHER EDUCATION

Sally Kift<sup>1</sup>, Keithia Wilson<sup>2</sup>, Romy Lawson<sup>3</sup>, David Boud<sup>4</sup>,  
Nicolette Lee<sup>5</sup>, Rosemary Deem<sup>6</sup>

*1 National Senior Teaching Fellow Deputy Vice Chancellor  
Academic, James Cook University*

*2 National Senior Teaching Fellow & Australian University  
Teacher of The Year Portfolio Leader Student Success and  
Retention, Griffith University*

*3 National Teaching Fellow Director of Learning, Teaching &  
Curriculum, University of Wollongong*

*4 National Senior Teaching Fellow Foundation Director Centre  
For Research Assessment and Digital Learning, Deakin  
University/University of Technology Sydney*

*5 National Senior Teaching Fellow Executive Director Learning  
and Teaching Centre For Collaborative Learning and Teaching,  
Victoria University*

*6 Vice Principal Education, Royal Holloway & Bedford New  
College*

Curriculum design is multifaceted, trying to meet a range of expectations for the students, universities, industries, professions and regulatory bodies. In order for it to be truly effective the curriculum has to be designed in a holistic manner that provides scaffolding throughout the degree to engage students with learning using integration and sequencing (Kift, 2009). This whole of degree approach removes the silo effect of developing units of study in isolation, requiring collaboration between academics from across the whole degree (Lawson, 2014). This practice is seen to be beneficial for curriculum design in the majority of contexts

globally. However, this is a change of mindset for many academics who have engaged in curriculum design in the past, where common practice has been to individually develop and teach units and so a change management processes has to be implemented to provide support during the curriculum design approach. Taking Kotter's (2002) change management model, participative leadership is key to the success of these cultural changes.

Whole of degree curriculum design has many benefits for the different stages of transitioning into, through and out of university. Good practice for transition pedagogy is to provide students with explicit and consistent assistance to move from their earlier context to their new context (Kift, 2009). During the first year it is crucial that this holistic approach is adopted to ensure shared ownership and contribution. Convening the relevant stakeholders who, in partnership, design and implement a first year orientation and engagement program ensures conscious attention is given to designing "transition facilitative" learning environments (Wilson, 2009).

Whole of degree design creates a curriculum map to show students how they will progress throughout their degree. This facilitates making degree level learning outcomes and the standards for each stage of the degree explicit, showing students where and how they will be introduced to knowledge and skills that will then support them to further develop towards their degree level learning outcomes. This overview of expectations allows students to make judgements about their ability as they progress, "a necessary skill for lifelong learning" (Boud, 1995, p.11), as well as allowing for scaffolded feedback so that students can foster optimum success.

Capstone experiences can be used to assist in the transition of students from their university studies to the workplace; a transition "out" that can be as demanding as the transition "in" to university in the first year. They are also being increasingly used as a device to put whole of degree learning together to assess whether graduates are work ready in their chosen disciplines (Lee, 2014). Therefore designing effective capstone experiences requires an understanding of transition pedagogies and a commitment to a holistic curriculum framework that carefully positions skill acquisition and experiences from the first to the final year of study, and beyond (McNamara et al., 2011; Van Aker and Bailey, 2011).

This panel is compiled of a range of experienced scholars from Australian Universities, each who have developed practices at the grass roots, and then gone on to work at national and international levels to influence practice in the higher education sector. They will explore curriculum design for transition from an authentic perspective providing examples of theory in practice that they have unpacked through scholarship of teaching and learning. Participants will be provided opportunities to share good practice as well as discuss their contexts as well as new ideas for curriculum design.

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## Session J3

Symposium

### PASSING IT ON: HOW POSTGRADUATES CAN HELP UNDERGRADUATES TO DEVELOP RESEARCH PROJECTS

Marcus Collins<sup>1</sup>, Alan Booth<sup>2</sup>, Deena Ingham<sup>1</sup>, Katie Carpenter<sup>3</sup>, Jenna Townend<sup>1</sup>, Sofia Mali<sup>1</sup>, Sean Jinks<sup>2</sup>

*1 Loughborough University*

*2 University of Nottingham*

*3 Royal Holloway, University of London*

This symposium will assess the rationale, methods and initial outcomes of 'dual mentorship' in the setting of a history dissertation workshop staged at Loughborough University in spring 2015. Second-year undergraduates about to embark on writing their final-year dissertations (aka Honors theses) were provided with guidance from postgraduates trained in peer-assisted learning techniques by educationalists and historians. Dual mentorship therefore involves an inclusive form of leadership, in which academics cede control of the classroom to postgraduates, who in turn share their research experiences with undergraduates in a collaborative manner.

Feedback from undergraduates demonstrated that the workshop fulfilled its objectives of providing them with intensive small-group teaching, honing their dissertation proposals and increasing their confidence. By the end of the workshop, they felt better prepared to undertake the hardest intellectual challenge most of them will encounter in their educational career.

Moreover, the postgraduates recruited from seven institutions learnt as least as much from the workshop as the undergraduates. They received the relatively rare opportunity to share their expertise in research skills and to reflect on the fundamentals of research design while immersed in writing their own dissertations. The workshop asked them to devise sessions collectively while deciding individually how to deliver these, leading to instructive comparisons of teaching methods. The mentorship of postgraduate students by academics within their own discipline is comparatively infrequent, since most pedagogical training takes place in cross-disciplinary settings and postgraduates are seldom observed for several hours of teaching. Recruiting postgraduates from different universities and a range of related fields also fostered new networks in the often solitary work of dissertation research. The Loughborough scheme developed new communities of history practice (Lave and Wenger, 1991) involving PhD, undergraduate and academics.

The mutual benefits gained by undergraduates and

postgraduates suggest that workshops of this kind should be considered within curriculum design alongside other methods of dissertation preparation (Lavender, 2010) and that in the face of calls to diversify final-year projects (Healey et al., 2013) 'the standard 8000 to 12000-word dissertation remains a valuable and viable exercise for all history students.

Following correspondence with Joanne Rae, the symposium will be transmitted from Britain using WebEx video conferencing. It will present different perspectives on 'dual mentorship' from four participants in the workshop: a history lecturer (Collins), an educationalist (Ingham), a history postgraduate (Carpenter) and an English postgraduate (Townend). These four views on the same workshop will allow us to consider its efficacy from those inside and outside the discipline of history, from a practicing teacher and a trainer of teaching, and from that of established academics and those beginning their academic careers.

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## Session J4

Paper

### USING PSYCHOMETRIC ANALYSIS TO INFORM CHANGE TO UNIVERSITY COURSE EVALUATIONS

Carol Van Zile-Tamsen<sup>1</sup>, Xiufeng Liu<sup>1</sup>

*1 Center for Educational Innovation, University at Buffalo*

The number of response options on a Likert scale and their labels can influence ratings (Harter, 1997; Marsh, 2013; Nowlis, Khan, & Dhar, 2002; Sedlmeir, 2006; Wakita, Ueshima, & Noguchi, 2012). Specifically, including a neutral point allows respondents to 'stay on the fence' (Nowlis, Khan, & Dhar, 2002). However, when respondents are truly ambivalent, forcing them to respond, either in agreement or disagreement, will bias results (Marsh, 2013; Nowlis, et al., 2002). An opt-out option, such as don't know or not applicable, allows people to avoid rating the item at all (Marsh, 2013), but is appropriate when respondents cannot form an opinion.

The present study was designed to examine the effect of scale format on student ratings of course and instructional effectiveness. The Faculty Senate of a large research university adopted a university-wide online course evaluation instrument, consisting of six items addressing overall course effectiveness, and 5 items addressing instructional effectiveness. The rating scale for these items was designed to maximize the amount of usable data by requiring students to respond to every item and excluding a neutral midpoint. The 4-point scale included the following options: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree.

During the summer pilot of the instrument, students expressed concerns that the rating scale forced them to respond, even when they could not form an opinion, and many expressed feeling pressured to complete their evaluations. From a measurement perspective, the extent of bias in responses was unknown. During the fall administration, an experimental design was used to compare four versions of the scale, the existing 4-point scale, a 5-point version with the neutral midpoint added, the 4-point scale with an opt-out option, and the 5-point scale with an opt-out option.

Rasch analysis was used to calculate indices to determine measurement precision and reliability for each version of the scale (Bond & Fox, 2012) for the two sets of items. Winsteps (Linacre, 2014a) was used to estimate the Andrich Rating Scale Model (Embretson & Reise, 2000) for each set of items across the four conditions (eight total analyses). Based on these analyses, the best format for the course items appears to be a 5-point scale containing a neutral midpoint, and the best scale for the instructor items appears to be the 5-point scale with an

opt-out option. The Partial Credit Model was used to estimate latent scores for course and instructional effectiveness across all scale conditions, and scores were compared across conditions using ANOVA. Results indicate that the overall measures of course and instructional effectiveness are consistent across all variations of the scale when controlling for variation in course section.

In this session, the authors will describe the institutional context that led to the study, the design and results of the study, and how these results were used to inform the decision to revise the scales for the spring 2015 administration. This session corresponds to Theme 5: From local scholarship to changing practice.

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## Session J4

Paper

### EVALUATING FLEXIBLE LEARNING STRATEGIES IN UNDERGRADUATE COURSES: TECHNOLOGY AND COMMUNITY-BASED EXPERIENTIAL LEARNING

Will Valley<sup>1</sup>, Cyprien Lomas<sup>1</sup>, Guopeng Fu<sup>1</sup>

<sup>1</sup> University of British Columbia

This study reports an evaluation of Flexible Learning strategies in the undergraduate core series courses in the Faculty of Land and Food Systems at the University of British Columbia. The core series courses consist of five compulsory courses from first year to fourth year. The courses aim to integrate research and education to address sustainability issues around food, health, and the environment. Undergraduate students in the faculty are expected to gain expert knowledge as well as practical skills in inter/trans-disciplinary and community-based, experiential learning settings (Valley, 2014). FL, an instructional approach allowing flexibility of time, place, and audience through the use of technologies (Khan, 2007), is the major pedagogy employed in the core series courses.

The core series courses has been implemented for more than a decade and has accomplished a significant extent of the expected learning outcomes (Rojas, 2009). However, an assessment is still in need to evaluate the effectiveness of Flexible Learning. Community-Based Experiential Learning (CBEL), referring to community-based pedagogies that connect university students with community partners for mutual benefit of learning and discovery (Fryer, 2010; Bringle, Clayton, and Price, 2009), and learning technologies are the two major components of Flexible Learning in the core series courses. The courses integrated e-lectures, wikis, Connect content management platform, and Wordpress webpages as the major technologies for facilitating teaching and learning.

The evaluation focused on how and why Flexible Learning affected student learning and employed qualitative approaches which explore in-depth reasons of human behaviors (Palys & Atchison, 2007). Denzin (1978) suggests to use more than one method to gather data in order to create methodological triangulation (Mathison, 1988). The data collection approaches include focus group interviews, student reflections and classroom observations in order to increase the credibility and validity of the results.

In general, Flexible Learning in the courses resulted in students reporting positive learning experiences. The structures and technology interfaces used in the course created a noticeably different learning experience from the traditional plenary lecture experience. Most students reported enjoying and appreciating the differences because these strategies stimulated students' engagement with the course content in, out, and beyond the classroom. Students reported valuing the experience working in, for, and with the local communities.

Working with people from various disciplines and backgrounds helped students understand course content in real-world situations, fostered group work skills, and solidified students' career perspectives. Further, students reported that the multiple technological approaches helped maintain engagement at a high level and broaden their horizons. However, some students found the multiple online interfaces to be confusing and overwhelming and learning the functions and formats to be overly time-consuming.

The evaluation results encourage the faculty to continue implementing Flexible Learning strategies in the core series courses with modifications of the various technologies. The findings from this study may inform the practices of other instructors attempting similar flexible and active learning strategies and promote discussions and reflection among ISSOTL conference delegates.

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## Session J4

Paper

### LEARNING THROUGH EVALUATION: LEADING CHANGE ONE PROJECT AT A TIME

Elaine Huber<sup>1</sup>

<sup>1</sup> University of Technology, Sydney

In the higher education sector, various forms of funding exist for supporting the development of new innovations in learning and teaching. These can range from small internal grants starting at a few thousand dollars, to larger multi-institution, external funding from agencies such as the Australian Government Office for Learning & Teaching. The findings from these learning and teaching projects are usually well documented and often disseminated through conference proceedings and journal articles. Such projects have the ability to instigate the start of a change process that brings ideas, concepts and implementation to a wider audience. However

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dissemination of project findings can be limited in their ability to impact on the project or initiative under investigation.

In contrast, formative evaluation processes can yield findings that can impact immediately on the project design and lead to improved outcomes. However, scholarly evaluation practices in learning and teaching projects are under-reported in the literature (Alexander, 1999). The reasons for this are unclear however there is some emerging research to suggest that evaluation is influenced by the project leaders conception of evaluation as well as the lack of resources (both time and budget) to implement evaluative measures (Huber & Harvey, 2013).

For robust evaluative measures to be implemented, a well designed evaluation plan is required. Large projects often have compulsory evaluation requirements alongside budget allocation and there are a range of good quality resources to support project teams with the implementation of various evaluative approaches (see for example Chesterton & Cummings, 2011). But what of smaller projects with limited budget both in time and money? The available resources can be overwhelming and too complex for such projects. However the importance of evaluation for improvement of the project outcomes leading to innovation and change, cannot be underestimated.

This paper describes the development of an evaluation planning instrument designed for small internally funded learning and teaching projects through an action research approach (McNiff, 2001). The aim of the instrument is to assist project teams to develop an evaluation plan that is relevant and flexible to their contextual needs. The evaluation planning instrument is informed by leading evaluative scholars including Lois-Ellin Datta, Michael Owen, Michael Patton and Daniel Stufflebeam. This planning instrument was piloted with a group of academics from one Australian Metropolitan University all of whom were recipients of learning and teaching project funding. The instrument was interrogated through a hands-on workshop and focus group. This feedback was triangulated with the literature and reflective observations of the researcher, and was then applied to the design of the instrument and a second cycle of development, implementation and evaluation was carried out. Preliminary findings show that a simple 5 step approach to evaluation is needed for small internally funded learning and teaching projects and if designed to be responsive to various contextual requirements, can act as a powerful instigator for leading innovative change in the learning and teaching arena.

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## Session J5

Symposium

### LEADING QUALITY LEARNING AND TEACHING WITH SESSIONAL, CASUAL OR ADJUNCT TEACHERS

**Marina Harvey<sup>1</sup>, Jillian Hamilton<sup>2</sup>, Anne Hewitt<sup>3</sup>, Mark Israel<sup>4</sup>, Gail Crimmins<sup>5</sup>, Peter Looker<sup>6</sup>**

*1 Macquarie University*

*2 Queensland University of Technology*

*3 University of Adelaide*

*4 University of Western Australia*

*5 University of the Sunshine Coast*

*6 Nanyang Technological University, Singapore*

Questions and Rationale: Many countries rely on sessional teachers to teach in their universities. These teachers are also known as casuals, adjuncts, part-time, contingent, non-tenure track, teaching or graduate assistants, and visiting scholars. In Australia, the majority of teaching is undertaken by sessional

teachers. This reliance on sessional teachers has become institutionalised and is therefore predicted to be a constant feature of the tertiary education workforce. While we know that sessional teachers are a diverse cohort, our data on sessional teachers are limited which makes a systematic approach to engaging and supporting these staff challenging. A quality student learning experience is dependent upon these teachers, yet we need to consider how quality can be both assured and enhanced if resourcing, organisational engagement and management and professional learning opportunities for sessional teachers are not systematised. This complex issue aligns with the conference sub-theme of Engagement: leading inside and outside the academy.

Research Outcomes: Australia is leading good practice in the scholarship of teaching and learning with sessional teachers. The speakers on this symposium are leaders in the academy. Each is leading and presenting on scholarly research and practice with sessional staff, at multiple levels of the higher education sector, and thereby multiple perspectives are offered. The role of leading quality learning and teaching with sessional teachers nationally is presented through the example of the BLASST (Benchmarking Leadership and Advancement of Standards for Sessional Teaching) national standards. Holistic institutional approaches and programs, which have been nationally recognised as award winning, are then introduced. A disciplinary perspective for Law is provided through the national 'Smart Casual2' project. The individual sessional staff perspective is offered through the voice of female casual teachers explored through verbatim drama. Throughout the symposium, a global perspective is provided by an international discussant.

Methods & Models for Reflective Critique and Audience Engagement: The audience is invited to engage with this symposium through reflective discussion and critique of the symposium presentations. Specifically, this symposium will engage the audience with an invitation to consult and challenge the symposia panel with questions about the issues they are encountering with quality learning and teaching with sessional teachers in their own international context. The activities will be modelled on an adaptation of the Finnish tradition of 'brief solution therapy' where the audience hear from a panel (in this case higher education researchers and educators) before presenting the issues they are facing. Each person seated round a circle then offers how they see the issue and what, on the basis of their own experience, they would think of doing. The aim is for the audience to evaluate what strategies offer the best fit for their own international institutions.

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## Session J7

Paper

### **EPORTFOLIOS: A 21ST CENTURY PEDAGOGY AND LEARNING PARADIGM**

Kim Watty<sup>1</sup>, Leanne Ngo<sup>1</sup>

*1 Deakin University*

In the last two decades, teaching and learning in higher education has undergone transformative change as a result of disruptive technologies and new learning paradigms. The extant literature and recent reports suggest this change and its impact on teaching and learning looks set to continue. This begs the question: What will be the role of technology in the innovation of higher education over the coming years? How can academic teaching staff adapt to and embrace learning paradigms involving digital technologies?

We argue that a key consideration for teaching and learning practitioners in 21st century higher education must be ePortfolios, which we view as a powerful learning approach and paradigm. An ePortfolio ultimately provides students with the opportunity to demonstrate their learning, as well as a set of desired professional capabilities, to enhance their employability and professional development. In addition, ePortfolios provide a record of student achievements and feedback on those achievements. ePortfolios have the potential to extend the learning beyond the classroom, and engage learners in student-centred, active learning that encourages them to self-reflect, take ownership, and fosters their development as lifelong learners. For students to derive these learning benefits, however, teaching staff need to be aware of the value of ePortfolios and be committed to its implementation. The “e” component of ePortfolios arguably enhances the power of Portfolio pedagogy and ultimately augments teaching and learning potential. According to Batson (2015), ‘in such a digitized ecology of learning, in which the classroom is no longer “the center,” where is the center? For learners, the new center is their ePortfolio.’

This paper details the findings of a landmark OLT-funded Australian study on the use of ePortfolios in Business Education. Drawing on a constructivist framework, and utilising a mixed methods data collection approach, it explored the current uptake of ePortfolios and its potential as a future learning paradigm and pedagogy to meet the challenges that higher education is currently facing in its need to constantly innovate and cater to a generation of future students who are tech savvy, connected and who expect technology in their learning and teaching. Carried out across three institutions, the study explored academic, student and employer perspectives to garner insight into the three key stakeholders who can benefit from ePortfolio use in higher education. It also undertook case studies in these three institutions where ePortfolios were introduced across a range of business units. The paper details the quantitative and qualitative findings of the challenges and benefits of ePortfolio identified by these stakeholders and within the case studies. It also proposes for consideration a practical assessment framework to assist academics considering using ePortfolios in their teaching. It also speaks to the reasons for lack of uptake of the ePortfolio approach and provides recommendations for encouraging academics to adopt ePortfolios in their practice. With a focus on practical outcomes, the study has produced a range of resources and publications that will be of use to those considering ePortfolios in their teaching and learning.

Reporting on this study, this paper explores the implications for ePortfolio pedagogy moving forward, and the potential of ePortfolios to enhance teaching and learning in the 21st century higher education context.

## Session J7

Paper

### **CREATING VIRTUAL SCENARIOS FOR A VIRTUAL WORLD: USING AN IMMERSIVE LEARNING ENVIRONMENT (ILE) TO PROVIDE A SIMULATED CLINICAL LEARNING EXPERIENCE**

Suzanne Owen<sup>1</sup>, Gary Grant<sup>2</sup>, Lyndsee Baumann-Birkbeck<sup>2</sup>, Denise Hope<sup>2</sup>, Sohil Khan<sup>2</sup>

*1 Griffith University Health*

*2 Griffith University Pharmacy*

Question: Can we use virtual environments to complement traditional clinical placements for health students' learning?

Theory/Methods/Framework/Models: This project was underpinned by the use of design based theory using principles such as constructivism, interactivity, cognitive load and learner-centred design that are central considerations when constructing and structuring this resource. It aimed to create a high-fidelity immersive learning environment (ILE), to provide a realistic simulation practice experience for health students. The ILE is a customisable, panoramic interactive e-Learning experience with intrinsic, skills-based, clinical simulation activities, specifically designed to complement learning outcomes. The ILE allows students to walk through the pharmacy environment, and provides a prelude or complementary experience to practical or work-integrated learning. It allows self-paced learning with inbuilt formative assessment that provides immediate feedback to the learner. Students could take on the role of the patient at the pharmacy or of the pharmacist.

Method: The pilot study was conducted using a mixed-methods approach in an undergraduate healthcare curriculum. Outcome measures included a semi-structured questionnaire delivered pre- and post-activity and assessments of physical engagement within the environment to gauge learning outcomes and participant perspectives.

Outcomes: The ILE provided a realistic practical learning experience (over 80% of students agreed or strongly agreed with this sentiment). Student engagement was amplified by the ILE and the simulation activities. In addition, the program has proven to be an effective approach to enhance student knowledge specific to learning outcomes. Students felt safe knowing they could not cause harm while undertaking simulations within the ILE (98%), and demonstrated limited anxiety in their performance (18% reported feeling anxious in the activity).

Reflective Critique: The ILE provides an innovative and distinctive learning experience for students. The environment is customisable and specifically designed to complement learning outcomes, while allowing self-paced learning and the provision of immediate feedback. The methodology utilised to build clinical scenarios inside the panoramic virtual environment is adaptable and allows for modification and evolution for future innovation. The ability to use the program in clinical ward scenarios, exercise science scenarios and pathology and medical scenarios makes it a very adaptable and multidisciplinary educational tool. This is strength of the technology as it can utilise a strong foundational clinical scenario that can increase in complexity as students develop critical thinking skills and progress through their health degree.



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## Session J8

Paper

### SCHOLARSHIP, LEADERSHIP, AND THE RELEVANCY OF OUR QUESTIONS

Susan Conkling<sup>1</sup>

<sup>1</sup> Boston University

Whether on an institutional level or in our disciplines, leadership through changing times depends upon scholars' capacity to construct and address relevant questions. If we expect SoTL to be recognized equitably with other forms of scholarship, then the relevance of our questions matters. Some have contended that, if SoTL is to be recognized, it must be comparable to scholarship in the field of education. I argue in this presentation that examining debates within the field of education can help SoTL expand the relevance of our questions. Examples of debate include Elliot Eisner's 1983 response to Dennis Phillips in which Eisner claimed that education research had been "defined largely as a species of educational psychology." One implication of this statement was that education research privileged questions such as What teaching methods have the greatest effect on student learning? Much of published SoTL poses questions about whether this method or that one better correlates with students' test scores, final projects, or attitudes. Eisner's debate with Phillips helps by confirming that questions arise from theory, and we need not limit scholarship to psychological theory. SoTL might, for example, draw from sociology, particularly from symbolic interaction, to ask: How do students' social interactions construct their meanings of teaching (or learning or the course material)? SoTL might draw from linguistics ask: How do students come to participate in a Discourse community? Another example of education debate occurred in 2002 when the U.S. Congress, through the National Research Council (NRC), declared that education research was broken, and restoration required emphasis on empirical evidence, and generalizability across studies.

Patti Lather responded, advising that replicability was "no satisfactory answer" given the complexity of schooling and the importance of teachers' "contextual judgments." Lather helps us understand that we cannot accept uncritically the claim that SoTL must take place for improvement of students' learning. How does SoTL favor particular forms of cultural and linguistic capital? Who is silenced? SoTL has capacity for critique. and it is essential to leadership in the academy that we examine the social and political contexts of learning and the ends toward which learning takes place.

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## Session J8

Paper

### LEADING CHANGE: A SCHOLARLY FRAMEWORK FOR POLICY ENACTMENT IN THE ACADEMY

Alisa Percy<sup>1</sup>, Catriona Taylor<sup>1</sup>

<sup>1</sup> University of Wollongong

This paper critically engages with the concepts of leadership and change through a discussion of the scholarship informing the planned implementation of an English language policy at one Australian university. The paper will explain how the theoretical concepts provided by critical policy scholarship (eg. Ball, 1994; Braun, Ball, Maguire, & Hoskins, 2011) and practice theory (Fenwick, Nerland, & Jensen, 2012; Kemmis et al., 2014) will be used to inform the proposed implementation framework. Specifically, it will demonstrate how the distinction provided by critical policy scholarship between policy interpretation and policy translation, and the concept of policy enactment (Braun et al., 2011) will be used to develop a framework that foregrounds the situated, professional, material and external dimensions of the contexts in which the policy is to be enacted, and recognises the creative application of policy in localised sites. It will also demonstrate how practice theory offers a way forward in operationalising the policy in such a complex environment. Through a practice lens, changing practice means attending to the practice-architectures - the cultural-discursive, socio-political and material-economic conditions in which practice is enacted "and direct engagement with the ecologies of practice that hold practices in place (Kemmis et al., 2014). It also involves redressing the notion of leadership through a practice framework (Wilkinson & Kemmis, 2015). It is hoped that sharing this approach will inform future discussions and scholarship about policy implementation across the sector.

## Session J8

Paper

### ORGANISATIONAL LEADERSHIP TO ACHIEVE STUDENT LEADERSHIP IN THE LEEDS CURRICULUM

Paul Taylor<sup>1</sup>

<sup>1</sup> University of Leeds

In recent years in the UK 'the research-led environment [has been] presented as the optimum learning experience' (Mockridge et al, 2009, p 66), drawing on influential suggestions of more 'research-based study' (Ramsden, 2008), 'research experience' (Thrift, 2008) and, in the USA, 'research opportunities for undergraduates' (Obama, 2009). Yet, the aspiration for undergraduates to have the opportunity to be fully engaged with the research culture of their university is troublesome in the prevailing model of HE in the UK that sees the 'student as consumer' (McCulloch, 2009, p 171).

We have noted that positioning student researchers as producers of original knowledge and designers of curriculum raise important questions about the status of participants in HE and the resources allocated to their interests' (Taylor, 2009). The University of Leeds is addressing these concerns as it introduces a 'Final Year Project' component for all students as part of the Leeds Curriculum. As well as providing academic guidance to undergraduate researchers, our research shows that provision of leadership skills and of logistical and financial support to our students allows them to realise their research potential and emerge as future research leaders themselves. This in turn requires leadership from influential individuals within the organisation.

Our conclusions are drawn from a case study surrounding the

attendance of 16 students from the University of Leeds at the British Conference of Undergraduate Research in Winchester, England in April 2015. Our data will be presented in part through a short film summarising the experiences of our undergraduate researchers.

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## Session J9

Symposium

### **THE FUTURE IS HERE: ADAPTIVE TUTORIALS AND VIRTUAL LABORATORIES EMPHASIZING TEACHER-CONTROLLED REAL TIME FEEDBACK ON STUDENT INTERACTION AND PERSONALISED LEARNING WITH RICH LEARNING-BY-DOING SIMULATIONS**

**Greg Higgins<sup>1</sup>, Patsie Polly<sup>2</sup>, Louise Lutze-Mann<sup>3</sup>, Mike Keppell<sup>4</sup>**

*1 Smart Sparrow, Sydney, Australia*

*2 School of Medical Sciences, UNSW Medicine, Australia*

*3 School of Biotechnology and Biomolecular Sciences, UNSW Science, Australia*

*4 Learning Transformations, Swinburne University of Technology, Australia*

Background: Providing large numbers of undergraduate students in STEM disciplines with engaging, personalised, authentic learning-by-doing experiences is important, but challenging, especially due to pressures on cost and time. This paper seeks to define the role technology can play in the evolution of learning environments, and provide practical examples of how teachers and students can leverage technology (at scale) to enhance and redefine the learning process.

Adaptive Tutorials – defined: Adaptive Tutorials (ATs) are e-Learning modules where an Intelligent Tutoring System adapts the instruction level (difficulty, feedback, and activity-sequence) to learners, based on their level of knowledge, their learning style and their interaction with the content. The system enables educators to give their students a personalised learning experience, motivating those students who are struggling and challenging those who excel at each crucial step of their learning.

From a pedagogical point of view, ATs are analogous to physical teaching environments and are similar to the concept of Tutorial Simulations as described by Laurillard (2002). They are a pragmatic hybrid between instructivist and constructivist educational theories, striking a balance between guided and discovery learning. ATs are typically guided, featuring a detailed explanation that leads students through the interaction, whilst offering adaptive, remedial feedback in response to learners' misconceptions. Adaptive Tutorials are also interactive, often featuring a simulation, enabling students to investigate a phenomenon, or a relationship between parameters of a problem in a hands-on manner, thereby encouraging discovery learning.

Virtual Labs (vLabs) - a case study in Sciences: The Gene Suite and other vLabs have been successfully implemented in 1st - 3rd year Molecular Biology and 3rd year Pathology courses at UNSW Australia. vLabs, built to operate in Smart Sparrow's Adaptive eLearning Platform, have facilitated learning of technical molecular laboratory skills that are linked to development of experimental skills for undergraduate science students. Such skills are essential for undergraduates in building a conceptual understanding of scientific methodology and experimental design. They also facilitate the translation of laboratory techniques to changes in human biology due to disease. In a recent survey about the Western Blotting vLAB students indicated that the experience was at least equivalent to the real lab in their perceived development of concepts, laboratory skills and diagnosis of disease.

Adaptive Mechanics - a longitudinal case study in efficacy: Funded by the ALTC in 2011, the 'Adaptive Mechanics' project, lead by Professor Ganga Prusty from UNSW, saw a collaboration of 7 leading Australian universities in the development of a series of adaptive tutorials, featuring rich simulations, targeting 12 threshold concepts in 1st and 2nd year Engineering Mechanics. A longitudinal case study (6 years) has demonstrated a reduction in failure rate by 24%, and a significant increase in students being awarded Distinction and High Distinction.

Conclusion: ATs and vLABs have great potential for improving students' development of diagnostic skills. Both ATs and vLabs continue to deliver a personalised, self-paced and enhanced learning experience, and are able to be shared and adapted by teachers across disciplines and faculties promoting peer-to-peer learning and collaborative teaching across programs.

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## **WESTERN BLOTTING VIRTUAL LABORATORY**

**Patsie Polly<sup>1</sup>**

*1 School of Medical Sciences, UNSW Medicine, Australia*

Background: Providing large numbers of undergraduate students in scientific and medical disciplines with engaging, authentic wet-laboratory experiences is important, but challenging, especially with increasing student enrolment and the developments in modern molecular genetics equipment/techniques. Virtual laboratories (vLabs) are a potential means to enable interactive learning experiences and will enhance the undergraduate student experience by being hands-on, build analytical skills, and can promote higher order thinking. We have developed six vLabs, the Gene Suite, which are integrated and link to one another to teach technical and theoretical concepts that underlie gene and protein expression, including RT-PCR, qPCR, Western blotting, EMSA, cell culture and siRNA. The vLab Gene Suite will expose students to these experimental techniques, associated analytical skills and the opportunity to learn difficult concepts. Indeed, implementation of the Western blotting vLab in a third year Pathology course for science undergraduates has demonstrated its effectiveness

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in engaging learners. As vLabs are produced on the Adaptive eLearning Platform (AeLP) developed by Smart Sparrow, (<https://www.smartsparrow.com/>), students receive immediate formative feedback and staff can track students progress and provide remedial action as required. The design and delivery of the vLab Gene Suite addresses the issue of evolving learning and teaching paradigms using virtual spaces and also addresses three priority areas for UNSW Australia: enhancing large-scale courses, provision of personalised assessment and the use of educational technology.

**Methods:** The vLab Gene Suite was developed and deployed using the AeLP. The Western blotting vLab was evaluated to assess students' perceptions of their laboratory skills, relevant to the diagnosis of Muscular Dystrophy. A blended learning rotation model was applied in which wet laboratory and vLab environments for Western blotting were both delivered to three consecutive cohorts of 3rd year science undergraduates undertaking a Muscle Diseases practical class. Evaluation questionnaires were administered at the completion of the practical classes.

**Results:** The Gene Suite vLabs have been successfully implemented in 3rd year Pathology courses at UNSW Australia. Virtual laboratories have been successfully used to facilitate learning of technical molecular laboratory skills that are linked to development of diagnostic skills for undergraduate science students. Such skills are important for undergraduates in building a conceptual understanding of translation of laboratory techniques to changes in human biology due to disease. Students indicated in online questionnaires that the Western blotting vLab was at least equivalent to the real lab in their perceived development of concepts, laboratory skills and diagnosis of disease.

**Conclusions:** Virtual laboratories have great potential for improving students development of diagnostic skills. Further studies are required to determine the impact of vLabs on student learning. The Gene Suite will have future impact in implementation across Science and Medicine programs at UNSW Australia. Furthermore, key outcomes from our approach will help deliver a personalised, self-paced and enhanced learning experience. Virtual laboratories can also be shared, adapted and customised by different teachers across biomedical disciplines and faculties, promoting peer-to-peer and collaborative teaching across different programs.

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## **VIRTUAL LABORATORIES (VLABS): A GREAT WAY TO ENCOURAGE "ACTIVE LEARNING"**

**Louise Lutze-Mann<sup>1</sup>**

*1 School of Biotechnology and Biomolecular Sciences, UNSW Science, Australia*

**Background:** Science is an experiment-focused discipline where it is essential to gain technical skills, enhance student understanding through individual experimentation and reinforce material presented in lectures. While an authentic experience is preferable, it can be challenging to provide this in the university setting, especially for large classes. A solution is to provide students with an alternative that allows them to follow the step-by-step process that occurs in a laboratory but in an on-line setting that could parallel the authentic experience.

In order to provide students with a more satisfactory and engaging laboratory experience, we have developed two virtual laboratories (vLabs) to demonstrate conceptually challenging topics with a focus on a variety of experimental approaches. The first vLab explores the use of an oxygen electrode to measure oxygen consumption by mitochondria with various carbon sources that teaches students concepts

about the electron transport chain. The second vLab explores the use of molecular techniques to analyse genetic changes that lead to disease using PCR, gel electrophoresis and the mapping of family pedigrees. The vLabs were designed using the Smart Sparrow Adaptive eLearning Platform which has the potential to monitor the student's interaction in real time, offer students remediation based on their specific individual interaction; provide the instructor with information about individual student's progress; and identify areas of common misconception.

**Methods:** The vLabs were deployed to University of New South Wales (UNSW) science students at stages one and two using the AeLP through Moodle. The PCR vLab complemented an authentic PCR laboratory while the oxygen electrode was only attempted in the virtual environment. The vLabs were later adapted for use by UNSW medicine students. The effectiveness of the lesson was measured using directed surveys with a Likert scale and examination of data provided by the analytics tool of the AeLP.

**Results:** The vLabs were successfully implemented with positive feedback from the students. They readily engaged with the task, found the adaptive feedback very helpful and felt that their learning was enhanced as they were able to carry out the experiments at their own pace without the fear of failure. Furthermore, the Virtual Apparatus that was developed - a robust simulation of an oxygen electrode and the PCR simulations - can also be used to simulate the function of the equipment in student-designed experiments that investigate respiration or photosynthesis and qPCR. This has applications in a wide variety of courses at all levels of undergraduate teaching in both science and medicine.

**Conclusions:** Current data indicates that student learning and satisfaction can be greatly improved by having a blended approach for laboratory experiments. As the classic Chinese proverb states: "Tell me and I'll forget; show me and I may remember; involve me and I'll understand". The introduction of vLabs in science is a great way to encourage "active learning" where interactions in the virtual environment maintain student interest as they receive immediate feedback on their performance.

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## **Session J10**

Paper

### **ENABLING SESSIONALS TO SHINE: STARS AS AN EXEMPLAR OF PRACTICE**

**Michelle Fox<sup>1</sup>**

*1 Queensland University of Technology*

As a substantial proportion of Australian University teaching is conducted by Sessional Academics (May, 2013), there is growing recognition across the Higher Education sector that we must support and foster the development of Sessionals if we are to ensure positive learning outcomes for our students. As Hamilton et al., (2013) argue [There is a need for] ongoing teaching-development opportunities; local and contextual holistic support; and increased recognition of excellent sessional academics and their practices. However, while Sessional Academics at many institutions are offered some form of academic development, they are typically afforded limited opportunity to build their confidence and capacity, to receive reward and recognition, or to share their teaching experience and insights with others (Hamilton, 2008).

Employing a multimodal approach to reflective practice, this presentation will focus on an initiative called STARS (Sessional Teaching and Reflection Showcase), which I developed as a Sessional Academic Success (SAS) Advisor in

QUT's SAS program - a distributed leadership program (in line with principles espoused by Jones et al, 2013), which enables experienced Sessionals to provide local and focal support, academic development, and community building to our peers (as detailed by Hamilton et al., 2013).

Within this framework, the STã...RS program was designed and implemented to build the capacity of Sessional Academics through supporting them to reflect on and showcase innovative practices within the context of Sessional teaching. STã...RS promotes the scholarship of learning and teaching through a blended and scaffolded approach of semi-structured workshops, individual consultations, communities of practice and distributed mentoring. Besides fostering a sense of belonging through peer engagement in collaborative learning and iterative feedback, STã...RS encourages Sessionals to engage in reflective practice, plan and evidence impact on student learning and build abstract writing, communication and presentation skills. Moreover, by affording Sessionals the opportunity to present their teaching achievements at showcase events that are well-attended by peers (Academics, Professional staff and University Senior staff), STã...RS enables Sessional teachers to see and be seen sharing teaching innovations, and influencing learning and teaching culture.

This presentation will explain how Sessionals are supported to shine through the STã...RS program and to achieve outcomes that have been recognised as unique in the sector. It will illuminate the potential benefits of STã...RS as a model for building supportive academic communities, fostering innovative teaching approaches that strengthen engagement with learning and teaching, and facilitating opportunities for personal development, recognition and reward.

It will also report on the STã...RS programs impact, through reference to feedback gathered from participant interviews; feedback from audience surveys, which affirm STã...RS as an effective mechanism for rewarding and recognising Sessional Academics, which has long been an elusive goal for QUT (and the sector) and recognition (BLASST Institutional Award, 2015) and uptake of the model by universities across the sector.

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## Session J10

Paper

### STEP-IN: AN EXPLORATION OF STUDENTS' INITIAL INDUCTION EXPERIENCES

Claire Hamshire<sup>1</sup>, Kirsten Jack<sup>1</sup>

*1 Manchester Metropolitan University*

The student experience aspect of the Manchester Metropolitan University (MMU) Mission states that we will create an excellent learning environment that places students and their success at the heart of our work; creating an outstanding, inspiring and sustainable environment for learning. Central to this goal is student engagement and as stated by Foster et al. (2012) retention can be considered to be the baseline from which all other engagement begins. Thus the concept of engagement underpins student learning in terms of both retention and persistence (Nelson et al., 2012) and student success and attrition are perceived as a worldwide concern with an average 10% of students in the UK leaving higher education in their first year.

Student attrition from Higher Education is therefore an increasingly important focus for institutions, funding bodies and students as the cost of post-compulsory education continues to increase. Following an internal evaluation study this project team were awarded an institutional SOTL research grant to work in partnership with students to gain an in-depth understanding of the different dimensions of our students

induction experiences and further develop resources to support them in an approach that promotes social and personal as well as academic development during this time.

The purpose of this proposed study was to explore students' induction experiences across MMU, with a focus on their perceptions of induction; using data collection methods that focus on individual experiences. The main aim was to identify best practice by exploring students' opinions and beliefs, described in their own words; to identify and explore the factors that influence their transitions to higher education

Evaluation of students' perceptions and experiences was integral to the project and the students own expressions of their learning experiences were central as only they can articulate their learner experience (JISC 2007). To achieve this the evaluation utilised a mixed methods design, combining quantitative and qualitative data for a comprehensive analysis of the problem. This pluralistic approach considered multiple viewpoints and perspectives and allowed a more complete picture of the students' experiences to be assembled and meet the aims of the study.

There is no simple formula to increase retention across a diverse student population where attrition is a multi-causal problem that requires a combination of solutions. However, by listening to our students to identifying barriers to student success and best institutional practice, this project developed realistic steps that can be taken to enhance students' transition into the institution and ultimately retention. Outcomes included targeted events and activities, social media campaigns and films produced in partnership with students. To engage the audience this session will present a summary of the findings and showcase some of the resources developed; consider implications of the project for the student engagement agenda; and make recommendations for curriculum design and delivery to meet students' needs.

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## Session J11

Paper

### SIGN OF ENGAGED PHD CANDIDATES? AVERAGE COMPLETION RATES OF 77-88% IN ABOUT 4 YEARS

Rachel Spronken-Smith<sup>1</sup>, Robin Quigg<sup>1</sup>, Claire Gallop<sup>1</sup>, Claire Cameron<sup>1</sup>

*1 University of Otago, Dunedin, New Zealand*

Studies of PhD completion rates and times have been published for many countries including the United Kingdom, Canada, the United States of America and Australia (e.g., see Bourke et al., 2004; Elgar, 2003), but to date no such data have been published for New Zealand. Consequently a quantitative study was undertaken at the University of Otago,



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a research intensive university in southern New Zealand. An analysis of PhD cohorts for the years 2000-2012 was conducted, with an emphasis on data for 2000-2008 since we would expect most of these candidates to have completed their PhDs by now. The entering cohort size increased from 158 in 2000, to 272 in 2012. For the entire dataset (i.e. the 13 cohorts), 53% were female, 47% male, 65% had New Zealand citizenship and 35% were international students. Overall, 57% were on Otago scholarships, 69% were fulltime candidates, 8% were part-time and 23% had varying status. About a third (32%) of all PhD candidates were in the age bracket 18-25 years at entry, with 27% aged 26-30 years, 15% 31-35 years, 9% 36-40, 12% 41-50, and 5% aged 51 and above.

Completion rates were defined as the percentage of the cohort that submitted their thesis for examination, while completion time was defined using candidacy time from enrolment to submission of the thesis for examination. For cohorts beginning their PhD from 2000-2008, 77-88% submitted their theses (average of 82%), with only 11-23% withdrawing. The average completion time was 4.3 years. For the cohort beginning in 2009, 69% have submitted their thesis in an average time of 3.6 years. Thus it appears that at the University of Otago we have PhD completion rates and times that rank amongst the best in the world.

In this interactive session we will explore variation in completion rates and times according to gender, citizenship, age, enrolment status, and funding. Moreover, we will consider the possible factors that contribute to these very high completion rates and relatively fast completion times. Such factors include overall high quality supervision, scholarship funding (including a stipend and tuition fee waiver) for a maximum of three years, tuition fees (candidates both domestic and international pay \$7-\$10,000 a year depending on the discipline area), allowing for deferrals during candidature, access to a publishing bursary if the candidate completes in under 4 years, institutional support for the development of research skills, and coaching support for candidates. The audience will be asked to contribute data for their institutions as well as their perceptions of factors affecting PhD completion rates and times.

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## Session J11

Paper

### ENGAGING ACADEMY: LESSONS LEARNT TAKING THEORY TO PRACTICE IN COMMUNITIES OF PRACTICE AT TWO AUSTRALIAN REGIONAL UNIVERSITIES

Peter Reaburn<sup>1</sup>, Jacquie McDonald<sup>2</sup>

1 Central Queensland University, Rockhampton, Queensland, Australia

2 University of Southern Queensland, Toowoomba, Queensland, Australia

Engagement in local and global communities is more important than ever for the higher education sector (HES). However, academic life can be a very individualistic activity, particularly in smaller regional universities where a critical mass of staff in each discipline is difficult to achieve. Moreover, high

workloads and constant change decrease the time available and willingness to engage in collegial and scholarly activities (Buckley and Du Toit 2010). Ironically, although there is an ideal of engagement in a community of scholars, it is a culture infamous for fragmentation, isolation, and competitive individualism' (Palmer, 2002, p. 179). The authors' experiences with Communities of Practice (CoPs) demonstrate they are effective in engaging academy in the scholarship of learning and teaching (SoTL) as articulated in The Scholarship of Engagement (Boyer, 1996).

CoPs are increasingly being used to engage individuals in the HES within both Australia (McDonald, 2012) and internationally (Tight, 2015). CoPs are groups of people who share a passion for something that they know how to do and who interact regularly to learn how to do it better (Wenger et al. 2002). CoPs have been used to improve learning and teaching (L&T) practice and innovation (Baker-Eveleth et al., 2011; Sanchez-Cardona et al., 2012); professionally develop L&T staff (Nixon & Brown, 2013), and develop SoTL (Bishop-Clarke et al., 2014). CoPs have been operating at Central Queensland University, Australia (CQU) since 2009 and the University of Southern Queensland since 2006. The presenters are the leaders of CoPs within their respective universities.

The presenters will share what they have learnt are the keys to creating and sustaining CoPs within the HES. First, they will present the outcomes of a CQU-funded study that examined the effectiveness of CoPs in enhancing both staff L&T practice and perceived student learning outcomes at CQU. Using both an online survey (n=39) adapted from Sandell, Wigley & Kovalchick (2004) and focus group (n=7) methods, the project findings showed that CoP members feel their engagement with CoPs benefits their L&T practice in a wide variety of ways including enhancing general teaching effectiveness', involvement in intellectual approaches to or discussion about teaching', and learning more about the scholarship of teaching and teaching projects and research'. Importantly, participants felt their CoP involvement increased student achievement in relation to the specific CoP focus.

Secondly, the presenters will reflect on CoP facilitation (leadership) which personifies a distributed, shared and collaborative approach which needs to be focused on meeting members' needs, keeping the focus on the domain and practice of the CoP, and engendering trust and a shared passion for the domain. Thirdly, the presenters will highlight the importance of 'managing up' and engaging the senior leadership/management to ensure the sustainability of CoPs. Finally, the presenters will share their Top 10 Tips' for creating and sustaining CoPs.

The presenters will schedule 15 minutes for question and answer time and facilitate the sharing of audience members' experiences with CoPs within their own organisations.

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## Session J11

Paper

### AUTISM MASSIVE OPEN ONLINE COURSE (MOOC)

Mick Grimley<sup>1</sup>, Emma Donaldson<sup>1</sup>, Timothy Moss<sup>1</sup>

1 Swinburne University of Technology

On April 2nd 2015 Swinburne University of Technology launched a worldwide 6 week Autism MOOC (Massive Open Online Course). The MOOC generated large amounts of interest from the Autism community and had over 10,000 registered participants. This paper reports on the initial findings of the research project which ran alongside the MOOC. The research project aimed to evaluate the success of the MOOC regarding its utility: firstly for supporting the Autism

community; and, secondly, the effectiveness of the MOOC pedagogy in supporting such communities. The Autism MOOC was designed to take a practical approach to Autism through the lens of inclusivity. One of the objectives of the Autism MOOC was to equip participants with the skills and knowledge to solve practical issues in the lives of individuals with Autism for better social, emotional and educational outcomes. The MOOC was aimed at family members and practitioners involved in the day-to-day issues involved in managing the environment surrounding an individual with Autism. By taking a scenario based learning approach, the MOOC emphasized that there was not one correct way to approach different situations. Participants worked collaboratively and critically to assess the information provided.

In designing the MOOC we recognised that engagement with the Autism community (carers, parents and support workers) must go beyond the theoretical aspects of Autism and that the Autism community is already familiar with this literature, given their vested interest in the topic. The MOOC leveraged the knowledge base of the Autism community by creating a community of practice that is highly supportive and experienced to support participants with a range of experiences. In addition, the MOOC draws out and documents processes and experiences from a highly complex range of issues that serves to provide an understanding of the complexities of Autism and the needs of individuals with autism and their carers beyond the theoretical.

The research project aimed to utilise a simple design through an entry and exit survey and a discussion forum with a highly engaged and informed group of participants this project was able to:

- \* Capture rich, extensive and authentic qualitative data about issues of interest to the researchers through the discussion board and surveys

- \* Capture data about real and relevant issues within the Autism community

- \* Build a large international Autism community for future work

The data from our research study supports our MOOC design and the engagement anticipated. In this presentation we will present initial findings on the MOOC's relative success and/or limitations and discuss the merits of such an approach for informing the research around complex societal needs and issues. In this way we consider the wider possibilities of MOOC pedagogy to support community building, and highlight effective and efficient methods of research in massive online environments.

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## Session J12

Paper

### PROFESSIONAL DEVELOPMENT FOR PROMOTION A UOW CASE INSPIRED BY THE TRANSFORMING PRACTICE PROGRAMME

Patrick Crookes<sup>1</sup>, Christine Brown<sup>1</sup>

*1 University of Wollongong*

Late 2013, UOW accepted the invitation to be involved in the inaugural Transforming Practice Programme (TPP), facilitated in Australia by Professor Patrick Crookes. This provided the UOW TPP team, led by Associate Professor Christine Brown, with access to the expertise of a network of Universities within Australia and the UK, each targeting an institution-specific approach to Reward and Recognition of Teaching. Unique to the UOW context, and heavily influencing our TPP activity, was a new Academic Performance Framework (APF), to be implemented in 2014. The institution was also adopting a

decentralised promotion process.

UOW's strategic priority for learning and teaching (2014-2018) is curriculum transformation. To enact this in a sustainable way, certain changes are required such as: new leadership roles; increased emphasis on teamwork, particularly embracing sessional staff; greater collection and use of analytics data; and, clarity about how to articulate individual and/or team impact on student learning. The climate is right to re-conceptualise professional development that will ultimately be relevant for all staff, and begin its iterative refinement working initially with those who intend to apply for promotion.

This paper will share two perspectives on how this challenge has been approached one from the principal author of the APF, and the other from the colleague who implements a series of specific workshops to unpack the relevance of the APF; relate it more broadly to career development; and assist colleagues to adopt a more holistic approach when expressing the impact(s) of their diverse educational practices.

Fortuitously both authors were simultaneously engaged with the Australian University Teaching Criteria and Standards ([www.uniteachingcriteria.edu.au](http://www.uniteachingcriteria.edu.au)) project (AUTCAS) in 2014. This provided a national point of comparison with the APF, with regard to the scope of teaching related activity and expectations aligned to academic levels A to E (Associate Lecturer to Professor). This allowed them to consider such questions: What does it mean to 'be an Associate Professor? What evidence might one gather if one is building a case for mentoring and leadership? What will a promotion committee recognise as scholarship? And how might we extend the relevance of these questions beyond those applying for promotion?

The complex array of activity from the TPP and AUTCAS project involvement has become embedded in a new Continuing Professional Development approach for Learning and Teaching at UOW, which began in 2015. The professional development strategies highlighted in our TPP project include a staged approach to unbundling and demystifying new documents; the use of concept maps to link systems and complex processes; providing time and space for staff to engage in peer dialogue; and targeted support sessions and documents to help colleagues develop complex cases that they can present simply to a promotion committee, even if they are working in an atypical or unusual genre.

We believe that these strategies; the interplay of strategic projects and their influence on the development of a new CPD approach, will be of interest to those in Leadership roles in Learning and Teaching, and those responsible for supporting forms of recognition such as promotion.

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## Session J12

Paper

### MOBILIZING TRANSLATIONAL RESEARCH TO FOSTER THE SCHOLARSHIP OF CHANGE

Arshad Ahmad<sup>1</sup>, Michael Agnew<sup>1</sup>, Irina Ghilic<sup>1</sup>, Andrew LoGiudice<sup>1</sup>

*1 McMaster University*

What research recommends to enhance teaching and learning and what is actually practiced 'on the ground' in many classrooms and real world educational contexts can be described as a significant translation gap (Hutchings, Huber, & Ciccone, 2011; Poole & Simmons, 2013; Weimer, 2008). Our current inability to effectively translate educational theory into practice hinders both researchers and practitioners even though both wish to systematically improve education. This paper outlines a vision to develop and mobilize translational

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research, and invites readers to implant their own versions within their higher education contexts.

First, we emphasize student partnerships (Healey, 2014). Engaging students as partners is critical in developing a culture of translational research. Students consistently provide rich insights as design thinkers and as co-creators of the very processes and learning habits we aim to improve (Daniel & Poole, 2009). We integrate "Student Scholars" into all of our SoTL projects. Over sixty scholars are currently partnering in a wide range of disciplinary projects co-authoring and co-presenting at national conferences and serving as advocates to foster the scholarship of change.

Second, we enable faculty champions to push translation work within the departments and programs they inhabit. This collaboration is sought with experts within McMaster University and beyond. Within McMaster, several Fellowship programs critically examine the effectiveness of widely adopted educational practices. Fellows generate empirical evidence situated within the micro-cultures they inhabit. These include Impact Fellows from all faculties generating evidence on high impact interventions. Similarly, Research Fellows, Learning Portfolio Fellows, and Digital Learning Fellows are recognized leaders with a focus to promote both grass roots and institutional SoTL priorities. Beyond McMaster, we are collaborating with internationally recognized (SoTL) Distinguished Scholars engaged in various programs of research including critical pedagogy, cognitive science, educational leadership and indigenous learning.

Third, we are developing an online portal that provides access to translation work by connecting researchers and educators. We envision the portal as a virtual "network of practice" (Brown & Duguid, 2001) through which SoTL researchers translate findings into concrete methods for instructors to experiment with, the results of which can then be publicized for other educators and researchers to discuss, replicate, refine and generalize. The ultimate goal of the portal is to drive a "reciprocal collaboration" (Daniel & Chew, 2013) between educators and researchers, offering educators theoretically sound ideas for experimentation while simultaneously offering researchers a way to see if, or to what extent, their theories translate into practice.

McMaster's three-pronged approach incorporates the student voice, gathers a cross-section of innovative faculty members from inside and outside the university, coordinated by the McMaster Institute for Innovation and Excellence in Teaching and Learning, which serves as a hub for educators, researchers and students to find common ground. We argue that this approach to mobilizing translational research has the potential to deepen and expand SoTL's influence in higher education and foster the scholarship of change.

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## Session J13

Paper

### A SYSTEMATIC REVIEW MAPPING TWENTY FIVE YEARS OF IRISH SOTL RESEARCH (1990-2015)

Sara O'Sullivan<sup>1</sup>, Amanda Gibney<sup>2</sup>, Suzanne Guerin<sup>3</sup>, Manolis Kalaitzake<sup>1</sup>, Michael Staunton<sup>4</sup>

*1 UCD School of Sociology, University College Dublin*

*2 UCD School of Civil, Structural & Environmental Engineering*

*3 UCD School of Psychology, University College Dublin*

*4 UCD School of History, University College Dublin*

This six-month "snapshot" project, commissioned by the National Forum for the Enhancement of Teaching and Learning (<http://www.teachingandlearning.ie>), outlines the extent and characteristics of research on teaching and learning in the Irish

higher education field. The project is the first systematic study of research focused on teaching and learning at a national level and brings together a considerable corpus of Irish SoTL research. It takes a wide lens, or "big tent" approach (Huber and Hutchings 2005), including research made public via publication in peer-reviewed and other journals, working papers and presentations at conferences and other fora.

The systematic review protocol and the findings will be presented. Systematic reviews are becoming common in higher education research (Bearman et al 2012). However outside of the medical and nursing fields (e.g. Cant and Cooper 2010), to date they have not been used to map other SoTL domains. A critical assessment of using this method to map SoTL research will be presented.

A wide range of electronic academic databases, proprietary journal packages, institutional repositories and one search engine (Google Scholar) were searched. Hand searches were also used to locate studies not included in electronic databases and/or where the keywords used by the authors did not match the ones used in the search. In total 6, 851 records were screened by two of the project steering group for inclusion/exclusion.

Two additional methods were used to complement the systematic review: 1. A search of the programmes of seventy national and international educational and disciplinary conferences, meetings and symposia where Irish academics present teaching and learning research (2013-2014). 2. A search of one hundred Irish higher education teaching and learning experts' publications and presentations. All material located in these searches was also screened for inclusion/exclusion.

The analysis draws on Tight's (2012) framework for higher education research. For each study located, themes or issues, methods or methodologies, engagement with theory and level of analysis were identified. This systematic review establishes in a scholarly way the current state of research in the Irish higher education teaching and learning field, tracing aspects of its development, investigating its strengths and limitations, and offering suggestions as to future directions required.

We conclude by arguing that any vision of future pedagogies and learning paradigms in Irish higher education should be evidence based. In a time of major change in Irish higher education, the findings will provide an important resource for teachers, policy makers, the National Forum and others seeking to enhance and develop teaching and learning Irish higher education.

Bearman, M. et al 2012. "Systematic review methodology in higher education." *Higher Education Research & Development* 31, no. 5: 625-640.

Cant, R.P., and S.J. Cooper. 2010. "Simulation" based learning in nurse education: systematic review." *Journal of advanced nursing* 66, no. 1: 3-15.

Huber, M., and Hutchings, P. 2005. *The Advancement of Learning: Building the Teaching Commons*. San Francisco: Jossey-Bass.

Tight, M. 2012. *Researching higher education*. McGraw-Hill Education.

## Session J13

Paper

### **CREATING SUSTAINED INSTITUTIONAL CHANGE: TRANSFORMING A TRADITIONAL R1 ENGINEERING PROGRAM TO AN ACTIVE-LEARNING, EVIDENCE-BASED TEACHING MODEL**

**Caroline Bennett<sup>1</sup>**, Preetham Burugupally<sup>1</sup>

*1 University of Kansas, School of Engineering*

This paper will describe a major program-level initiative (Engaging Minds, Amplifying Learning) intended to transform undergraduate education across the School of Engineering at the University of Kansas towards evidence-based, active-learning strategies. The methods for encouraging broad adoption of active learning in engineering will be described, as well as how the initiative relates to and is supported by institutional shifts in education at the university-level. The paper and presentation will include discussion and analysis of the program's success to-date.

Encouraging widespread adoption of learner-centered pedagogical approaches is a challenging endeavor in engineering programs, which have been traditionally taught through a combination of lecture and teacher-led problem-solving. Challenges such as instructor skepticism, student resistance, and scarce resources have had to be addressed. The approaches taken to overcoming such challenges will be discussed.

The strategy for shifting the engineering educational model at the University of Kansas has been a combination of grass-roots support from faculty dedicated to implementing best teaching practices and top-down support from the School-level and University-level. Leadership in the School of Engineering has relied on the premise that change will be most sustainable if changes are freely adopted by faculty. Therefore, the Engaging Minds, Amplifying Learning initiative has attempted to encourage, incentivize, and support faculty-led change through introduction of targeted resources. Those resources include a full-time postdoctoral Teaching Fellow working with engineering faculty on course transformation, construction of six new active-learning classrooms, use of undergraduate teaching fellows for supporting in-class activities, and leverage of successful course transformations across campus. The role of each of these components in transforming undergraduate engineering education will be discussed, along with analysis of their relative importance in creating programmatic change.

Data indicating the performance of the program will be discussed throughout the paper and presentation; including assessment of learning outcomes in key undergraduate courses and faculty adoption of evidence-based, active-learning teaching practices.

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## Session J14

Paper

### **ARE CURRENT STUDENTS COPING WITH CURRENT PEDAGOGIES AND CURRENT LEARNING PARADIGMS? A CASE STUDY OF SECOND YEAR MEDICAL STUDENTS IN A PROBLEM-BASED LEARNING MEDICAL DEGREE**

**Anne-Marie Murray<sup>1</sup>**

*1 School of Medicine, Flinders University*

Introduction: The research is from a PhD which identified how personal epistemological beliefs were conceptualised by medical students at the end of their first two years in a PBL medical program; whether their beliefs evolved over the first two years; were related to the process of learning; and

whether they differed between students from the lowest and highest academic rankings in medical school.

This research describes the journey of how second-year medical students navigated the transition from high school to medical school where they were faced with the task of integrating basic science and multi-disciplinary topics and application of this knowledge to the clinical environment within the equally complex environment of a constructivist problem-based learning curriculum.

Literature: Personal epistemology addresses the theories and beliefs that individuals hold about knowledge and knowing. Hofer and Pintrich (1997) proposed a theoretical framework of personal epistemological theories. This theory consist of two aspects: the Nature of Knowledge and the Nature of Knowing which is further broken down into four constructs: 1. Certainty of Knowledge. 2. Simplicity of Knowledge. 3. Source of Knowledge. 4. Justification of Knowledge. These four constructs are hypothesised to exist on a continuum ranging from naive to sophisticated epistemological beliefs.

Roex and Degryse (2007) argue "although much energy has been spent on revolutionary curriculum changes in medical school...insights into students' epistemological beliefs have yet to find their way into the curriculum" (p. 616). This research contributes to the developing field of epistemological research in higher education, and in particular medical education.

Methods: A qualitative research design framed the investigation. Using the maximum variation purposive sampling technique, 12 second year students (who represented the highest and lowest academically ranked at their end of the first year medical school exams) were interviewed on two occasions. The first interview focused on how they navigated through the first two years of medical school and the second was based on how they individually worked their way through their last PBL case based on 'think out loud' protocol (Patton, 2002). The interviews were analysed thematically within a personal epistemological theory framework and presented as thematic narratives constructed on the students' retrospective experience of learning over the first two years of medical school. Narratives were well-suited to reporting these qualitative results as they link audience, text, structure, empirical inquiry and lived experience (Denzin, 1997).

Evidence: The findings revealed that students' prior learning experiences in high school had a major impact on their epistemological interpretations of the medical program. Students from the lowest ranked group misinterpreted the constructivist paradigm of the PBL curriculum and their approach to learning was disabling. Students from the highest ranked group struggled with the transition to the medical program but turned these into opportunities for epistemological development.

The research identified a pattern of epistemological beliefs between the lowest and highest ranked students. This explains why some students struggle with a constructive pedagogy based on their prevailing epistemological beliefs. Furthermore, the results showed the constructive pedagogy of PBL was a major influence on the development of some students' epistemological views, and this can accelerate students' epistemological development.

Conclusions: These results provide an epistemological explanation for why some students struggle, and will continue to struggle, based on their prevailing epistemological beliefs. The findings also suggested that the constructivist PBL approach was a major influence on the development of students' epistemological views, and that a constructivist PBL medical program can accelerate students' epistemological development.



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## Session J14

Paper

### INVESTIGATING THE SEA CHANGE IN LEARNING HABITS OF CONTEMPORARY UNIVERSITY STUDENTS

Karen M. Scott<sup>1</sup>, Anne Morris<sup>1,2</sup>, Ben J. Marais<sup>1,2</sup>

*1 Discipline of Paediatrics and Child Health, The University of Sydney, Australia*

*2 The Children's Hospital at Westmead, Sydney, Australia*

**Rationale:** University students expect to use technology as part of their studies; yet, traditional, research-intensive universities, like the University of Sydney, can struggle with the sea change in student learning habits, fueled by technology. Over recent years, teachers in the Child and Adolescent Health Specialty Block ('CAH Block') of Sydney Medical Program have noticed plummeting lecture attendance and increasing use of digital self-directed learning resources developed by us and other institutions. These can support learner autonomy and intrinsic motivation, according to self-determination theory (SDT)(Deci & Ryan); however, we have insufficient understanding of how students make choices about learning during work integrated learning placements and how traditional teaching methods need to adjust for optimal learning. Our research explored students' decisions about attending face to face teaching, using digital and print learning resources and communities, and private study during placements.

**Methods:** This study was conducted as teacher inquiry into student learning (Mor, Ferguson, & Wasson, 2015) through a mixed methods sequential explanatory design using learning analytics in the eight week May-July CAH Block and a student survey with quantitative and qualitative items in the October-November Block. Learning analytics tracked anonymous, aggregate usage statistics of locally produced elearning resources, including formative assessment and mobile case-based scenarios. The survey focused on student motivation to attend lectures and use lecture recordings, CAH digital and print learning resources and study groups, and external online medical student notes and communities.

**Outcomes:** Learning analytics identified excellent use of CAH digital resources: 69 of 76 students accessed mobile learning resources 731 times; the average duration was 29 minutes, which exceeds the 8 minute average for University elearning resources. The CAH digital resources, used by 74 students, were mostly accessed during daytime hours (08h00 - 22h00); use increased from week 6 until the week 8 exam. Of the 44 (from 61) students who completed the survey, over half (57%) replaced all lectures with recordings and all accessed CAH digital learning resources; many (31%) never read the textbook, yet most (73%) studied external online medical student notes; 32% used in-person and 11% used online study groups.

**Reflection:** Examined through SDT, students are demonstrating learner autonomy by replacing lecture attendance with recordings and taking advantage of the flexibility of digital resources during work integrated learning; few use learning communities. Extensive last-minute use of CAH resources before exams suggests students are externally, not internally, motivated and time management needs improving. Clarification of learning habits enables teachers to adapt learning design to meet students' needs and recommend effective learning strategies in demanding contexts; however, teachers need to understand the impact of contemporary learning habits on learning efficacy.

**Engagement:** In this presentation we invite comment on our next step: deeper exploration of learning patterns and

wellbeing during work integrated learning through our 'myStudyMate' app.

Deci, E., & Ryan, R. Self-Determination Theory. <http://www.selfdeterminationtheory.org/> [Accessed 12/06/2015]

Mor, Y., Ferguson, R., & Wasson, B. (2015). Editorial: Learning design, teacher inquiry into student learning and learning analytics: A call for action. *British Journal of Educational Technology*, 46(2), 221-229. doi: 10.1111/bjet.12273

## Session J15

Paper

### FROM INSTRUCTOR TUTORING TO PEER TUTORING: A DE-CENTERED INSTRUCTION MODEL ON UNDERGRADUATE STUDENT'S PROJECT-BASED LEARNING

Qi Gao<sup>1</sup>, Feng Pan<sup>1</sup>, Weixing Li<sup>1</sup>, Xiwei Peng<sup>1</sup>, Xiaozhong Liao<sup>1</sup>

*1 School of Automation, Beijing Institute of Technology*

**Introduction:** Project-based learning (PBL) is a student-centered learning pedagogy which encourages students acquiring knowledge and skills by solving real world problems. It has been widely used in higher education in the new century (Bell, 2005). Most of the existing researches about PBL focus on the effectiveness and the role of students (Thomas, 2000). As a natural authority, the role of instructor in PBL has been recognized as supervisor, resource provider, helper and process controller (Donnelly & Fitzmaurice, 2005). Hence, the instructor-student interaction has become the most important relationship in PBL. But this kind of centralized instruction model requires a lot for the instructor: to monitor the progress, answer various questions, provide valuable suggestions, etc. It also limits the scope of individual student's communication and learning.

Peer tutoring is the system of instruction in which learners help each other and learn by teaching (Goodlad et al., 1989). It had been proven effective in higher education (Topping, 1996). In peer tutoring, students express to and get feedback from other students, exchange information and resources, and are influenced by each other. The authority of professional instructor are weakened and distributed. The instructor becomes more of a planner or an organizer than a controller in learning process.

**Methods:** In order to improve the efficiency and effectiveness of instruction on undergraduate student's project-based learning, a group guidance model was proposed in this paper. According to this model, the students are organized as groups even if their project topics are different. The activity of instruction is no longer only between instructor and individual student, but is among students. Students are encouraged to report their own progress of projects to the group, ask question to other students, make suggestions peer to peer, and discuss matters with each other.

We implemented this instruction model on last year project of undergraduate students in school of automation of BIT. After projects were completed, feedback data was collected by survey. The questionnaire includes 4 aspects: 1) the student's self-assessment about project-based learning; 2) the evaluation of different contributory factors which influence the result of project; 3) what does student gain from the learning process; and 4) the activities of instruction led by instructor.

**Evidence:** In this empirical study, 6 samples with group guidance model were selected. For comparison, other 19 samples with conventional one-to-one guidance were also selected randomly. The results of statistical analysis of data

indicated that: 1) the self-assessment of students tutored by proposed instruction model were obviously higher than the control group; 2) the students tutored by proposed instruction model considered less importance of the nature of the project topic than the control group; 3) the students under group guidance model had more fun and sense of achievement during the process of PBL.

Conclusions: The results have shown that the proposed instruction model based on peer tutoring could improve the quality and efficiency of project-based learning, and enhance the self-satisfaction of students. It also provides students opportunities to practice expressing, communicating and criticizing. The de-centered instruction model weakened the leadership of instructor, but created a more active and diversified environment which made students more engaged.

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## Session J15

Paper

### STUDENTS AS RESEARCHERS OF ASSESSMENT RENEWAL: LEARNING ABOUT ACADEMIC LIFE AS A PRECURSOR TO LEADING SOTL CHANGE

Tai Peseta<sup>1</sup>, Amani Bell<sup>1</sup>, Amanda Clifford<sup>1</sup>, Annette English<sup>1</sup>, Jananie Janarthana<sup>1</sup>, Chelsea Jones<sup>1</sup>, Matthew Teal<sup>1</sup>, Jessica Zhang<sup>1</sup>

*1 Institute for Teaching and Learning, The University of Sydney*

In 2014, a new student-as-researcher scheme was developed by the Institute for Teaching and Learning at the University of Sydney to accompany its annual learning and teaching conference the Sydney Teaching Colloquium (STC). Focused on the question *Is our assessment up to standard?*, six undergraduates were selected as paid Student Ambassadors. They were engaged as researchers of the STC, adding their voices and perspectives to the event through learning about the scholarship of assessment, collecting data via short interviews with staff and students, developing digital resources via social media, participating in discussions with academics, presenting their findings, and then writing about their experiences for a peer reviewed journal publication. In short, these Ambassadors were engaged in institutional SoTL inquiry intended to provide them with an insight into the complexity of university-wide assessment renewal.

In this presentation, we not only describe the scheme in further detail, we use it as a case study to raise critical questions about the ways in which initiatives designed to empower students, attend to the contradictory positioning of the student voice and its relation to contested ideas of the university. Some time ago, Ritzer (2002) offered the idea that the university had become subject to a process of McDonaldization. In Shore's (2010) view, any coherent vision of the university has already been replaced by a troubling form of schizophrenia an existential state which induces constant anxiety. In Barcan's (2013) terms, the university can now be understood as a palimpsest, operating under the triple logics of bureaucracy, corporatism, and scholarship. While these (and other) contested narratives of the university do feature as background context within the students-as-partners literature (Bovill et al, 2011; Freeman et al, 2014), it is less clear how they appear in the design and outcomes of students-as-partners initiatives. For us, there is often a sense that the student voice has become a free-floating signifier capable of transcending the social, political and material predicaments that universities currently find themselves in across the globe. In some cases, students-as-partners initiatives are offered up as the moral response to the very ills presented by those predicaments.

The scheme reported in this presentation does not escape the analysis we offer here. We draw on data from the Student Ambassadors' reflective accounts to interrogate the desire for student-led leadership and partnership. We open up a space to query how these initiatives come to promise student agency and leadership in transforming SoTL in the academy without providing students with the conceptual and critical tools to understand the parlous conditions of contemporary higher education.

If our proposal is accepted we aim to invite at least one student to present with us at ISSoTL, funds permitting, or to include their views via video.

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## Session J15

Paper

### REFLECTIONS ON PRINCIPLES AND PRACTICES OF STUDENTS-AS-PARTNERS IN TEACHING AND LEARNING IN HIGHER EDUCATION

Heather Smith<sup>1</sup>, Roselynn Verwoord<sup>2</sup>

*1 University of Northern British Columbia*

*2 University of British Columbia*

There is increasing recognition within higher education of the importance of involving students as contributors to all aspects of teaching and learning including research and activities within the scholarship of teaching and learning (SoTL) (see Cook-Sather, Bovill, and Felten, 2014; Healey, Flint, and Harrington, 2014; Werder and Otis, 2010). This recognition is also present within ISSoTL, through the inclusion of sessions at the annual conference, the presence of two student representatives on the ISSoTL board, and the existence of two ISSoTL special interest groups (SIGs) including the Students as Co-Inquirers SIG and the Student Engagement SIG that meet to engage in discussions about various roles for students and SoTL. Membership in both of these SIGs continues to grow and at the 2014 ISSoTL conference, a joint SIG meeting identified a goal of collecting case studies from various contexts, of students-as-partners principles in action. Despite this goal, critical questions still remain about how students-as-partners principles are enacted in various contexts including how students navigate power differences in students-as-partners initiatives and what structural and institutional mechanisms exist to enable students-as-partners initiatives.

This session draws on international literature and case studies on students-as-partners (see Cook-Sather, Bovill, and Felten, 2014; Healey, Flint, and Harrington, 2014; Werder and Otis, 2010) to inform our analysis but as scholars situated within critical and feminist paradigms (see Fraser & Honneth, 2003; Freire, 2000; Giroux, 2011), we are particularly focused on unpacking assumptions about power with the intent of helping us all to become more responsive to the tensions inherent in efforts to adopt students-as-partners principles. More specifically, the authors, representing different locations in the post-secondary environment (graduate student, faculty/administrator) use Freire's (2000) writing within critical social theory, particularly his work on the teacher-student dichotomy to examine three Canadian cases which have sought incorporate the principles of students-as-partners in teaching, research and institutional practices.

With this context in mind, our paper poses the following questions: How do faculty and students meaningfully engage in partnerships to improve teaching and learning? What structural and institutional mechanisms support this kind of engagement? How do power differences between faculty and students impact engagement, particularly for students? These questions are applied to three Canadian case studies. The

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cases under examination are the creation of an undergraduate student advisory group for a Centre for Teaching, Learning and Technology, a collaborative faculty-student process of writing a research article about a classroom assignment, and a co-inquiry research project that brings together graduate students and undergraduate students.

The authors present their findings including the argument that that while the students will inevitably claim that these are positive learning experiences, that there remains a constant need to be vigilant about power differentials in these processes. This session is of interest to faculty and students who are curious about engaging in partnership activities, educational developers who may be supporting partnership activities, and educational administrators involved in institutional change efforts.

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## Closing Keynote

### **WHY AND HOW SHOULD WE VALUE TEACHING IN RESEARCH INTENSIVE UNIVERSITIES? SOME REFLECTIONS ON LEADERSHIP AND STRATEGIES SEEKING TO ALTER THE STATUS OF TEACHING IN RESEARCH-FOCUSED INSTITUTIONS**

**Rosemary Deem<sup>1</sup>**

*1 Royal Holloway University of London, United Kingdom*

The presentation will explore some of the challenges arising from the struggle to place a significant value on teaching in those higher education institutions where research is the most valued and most desired aspect of academic work and teaching just an activity that pays the bills. There have been sustained debates about the relationships and links (or their absence) between teaching and research, including how to strengthen such connections and the possible research/teaching synergies but the outcomes of these debates, though adding to the higher education literature, have failed to have much effect on the status of teaching-versus-research in research-intensive universities. Many of the strategies adopted by those responsible for leading teaching and learning to increase the status of teaching in such institutions, ranging from encouraging the scholarship of pedagogy, through awards for teaching excellence to altering promotion criteria and developing posts based on teaching, have had little effect on the majority of research-oriented academics, who disregard, undermine or even have disdain for such measures and those who are motivated by them. It is not always evident how this resistance or indifference may be overcome, though teacher training and Continuing Professional Development, local and national excellence initiatives, student-initiated prizes and promotion incentives based on teaching for all academics are some common ways forward. But is there something we are all missing? If we are not careful we end up giving tokenistic rewards to those who love teaching whilst all the glittering prizes go to researchers. Showcasing research through teaching, as for example through MOOCs, runs the danger of narrowing the curriculum or becoming the tail that wags the dog. But until or if we recruit and work with academics who have an equal love of teaching and research, the challenges of developing academic cultures where the status of teaching is as high as that of research remain in place.





# Other Meetings

	Date	Time	Room
<b>ISSOTL Teaching &amp; Learning Inquiry</b>			
Teaching & Learning Inquiry Goes Open Access: Understanding the Benefits to Authors, Readers, and the SoTL Community. An Open Discussion with the ISSOTL Publications Advisory Committee.	Thursday 29 October 2015	1745 - 1900	16.07.007
<b>ISSOTL Students</b>			
Student Welcome Event (incorporating specific welcome from ISSOTL Board)	Wednesday 28 October 2015	1230 - 1330	16.07.008
<b>ISSOTL Interest Groups</b>			
National Teaching Fellows & Institutional Teaching Award Winners	Wednesday 28 October 2015	0700 - 0815	16.07.001
ISSOTL in History Affiliates Group	Wednesday 28 October 2015	1745 - 1900	16.07.001
Scholarship of Leading	Wednesday 28 October 2015	1745 - 1900	16.07.003
Students as Co-Inquirers and Student Engagement (combined meeting)	Thursday 29 October 2015	0700 - 0815	16.07.007
Arts and Humanities	Thursday 29 October 2015	0700 - 0815	16.07.001
Business Group	Thursday 29 October 2015	0700 - 0815	16.07.003
Advancing Undergraduate Research	Thursday 29 October 2015	1745 - 1900	16.07.001
Decoding the Disciplines	Thursday 29 October 2015	1745 - 1900	16.07.002
National Promoting Excellence Networks	Thursday 29 October 2015	1745 - 1900	16.07.008
Europe Regional Group	Thursday 29 October 2015	1745 - 1900	16.07.003



# Posters

PO01

## THE EXPERIENCE OF GIFTED STUDENTS IN AN UNDERGRADUATE NURSING PROGRAM

Joanne Hum<sup>1</sup>, Balbir Gurm<sup>1,2</sup>, Rajvir Dhillon<sup>1</sup>

*1 Douglas College*

*2 Kwantlen Polytechnic University*

Leadership in the academy: formal, informal, distributed, shared, collaborative, integrative, student-led There is a large body of research within the fields of education and psychology describing the experience of gifted students as very different from that of non-gifted individuals. In addition to high intelligence, gifted individuals are perfectionist, highly perceptive, creative, have a strong sense of justice, and have intense, complex thoughts and emotions. In nursing, the leadership potential of gifted students has been overlooked, particularly in regards to their special needs in higher education. In recent decades, the supply of potential nurse leaders in Canada has dwindled, as many bright and capable students have pursued more prestigious careers (such as engineering, medicine, and law) and many gifted students eventually leave the profession during or after completing nursing school. Yet gifted traits strongly mirror what the Canadian Nurses Association [CNA] identifies as characteristics of visionary and energetic leaders: those who think critically and independently, inform their practice with evidence, advocate for patients and communities, and push the boundaries of practice to innovate new levels. Therefore, the loss of gifted individuals has serious implications on nursing recruitment, retention, leadership and on the advancement of the profession. Our study (currently in progress) aims to understand the experience of gifted students in an undergraduate nursing program, to develop insight on how best to support these students so that the nursing profession can benefit from their leadership and contributions. Specifically, we will identify themes related to the impact of gifted traits on perception of the nursing profession, as well as factors such as mentorship, learning environment, and horizontal violence, and their relationship to attrition. Given the ability of gifted students to 'think outside the box, the retention and recruitment of gifted individuals to nursing is paramount to lead change in a profession that has historically been oppressed and struggled to advance. This poster presentation contributes a discipline-specific perspective of leadership in nursing, and the importance of recognizing the knowledge and skills of individuals with abilities and gifts that can effectively lead change

PO02

## USING QUALTRICS OFFLINE SURVEYS APP FOR PEER MARKING IN REMOTE AREAS (AND CLASSROOM)

Jorge Reyna<sup>1</sup>, Lee Mowbray<sup>2</sup>, Paul Hesse<sup>3</sup>

*1 Learning Technologist, Institute for Interactive Media and Learning, UTS*

*2 Learning and Teaching Centre, Macquarie University*

*3 Department of Environmental Sciences, Macquarie University*

The use of peer learning and assessment became popular due to its educational value and offer the opportunity to develop team skills (Hastie, Fahy and

Parratt, 2013). It has been reported that students find peer assessment valuable and enjoyable (McGarr & Clifford, 2013). In this context, Advanced Environmental Earth Science Unit decided to implement a peer marking activity within a field trip to NZ. Students delivered a 5 minute (pre-prepared) oral presentation in the field (i.e. without mobile signal coverage) which was peer-marked by all other students. The student's rate this activity very highly for learning. This is in large part due to the peer-marking which students report keeps them engaged with the talks in addition to collectively introducing them to the field environment. The existing paper-based marking system generates many pieces of paper (27 students x 26 markers = 702 sheets) which must be collected and manually entered into a spreadsheet, with attendant transcription errors. In order to address this issue, a mobile interface (smartphone/tablet) was identified as a possible solution. This would be used by students to mark the oral presentations of their peers in a remote field situation as well as being used in the classroom and for other assessment tasks (e.g. posters, tutorial participation). The functionality required for the App was specified as: (1) Works across platform i.e. in iOS and Android devices; (2) Works offline to store data to be collected in the field and when Wi-Fi is available to upload the data into the server automatically; (3) Be able to populate student's cohort by uploading Excel or CSV file; (4) Be able for the students to download the App and create a login with their university ID and/or email address; (5) Create survey questions such as multiple choice, Likert scale, open ended questions, etc.; (6) Gather student data as CSV/Excel file to download. As developing applications for mobile devices requires a heavy investment of both time and money, we decided to investigate the possibility to use Qualtrics Offline Survey Application. The advantages using this server were: (1) supported by Macquarie University; (2) Cross platform compatible (iOS and Android); (3) Free to download for any user; (4) User friendly interface, and; (5) Records data on different formats such CSV, Excel, SPSS, etc. Using Qualtrics, we were able to draft all of our questions, share the survey between the academic and educational designers, and trial the actual survey to evaluate the user interface and process. In conclusion, Qualtrics allowed a far more comprehensive and rigorous peer assessment when compared to paper based and removed the tedious and time consuming data collation. We believe it is a good alternative to implement peer marking if your institution has access to the Qualtrics Suite.

PO03

## A FLIPPED CLASSROOM MODEL TO TEACHING CHEMISTRY: STUDENTS APPROACHES TO LEARNING IN THE ONLINE COMPONENT

Rena Bokosmaty<sup>1</sup>, Louise Sutherland<sup>1</sup>

*1 The University of Sydney*

The Flipped Classroom Model, whilst virtually undiscovered a decade ago, has gradually emerged, gaining a prominent platform in the higher education sector (Hamdan, McKnight, McKnight & Arfstrom, 2013; Baker, 2000) receiving increased recognition as it has the potential to revolutionise traditional didactic teaching paradigms (Bates & Galloway, 2012; Bergmann & Sams, 2012). This instructional approach is

a form of blended learning; it delivers content that traditionally takes place inside the classroom outside the classroom and vice versa (Lage, Platt, & Treglia, 2000, p.32). More specifically, it integrates the use of face-to-face and online learning activities in order to create an active student centred learning environment (Hamdan et al., 2013). In this model, the online learning activities may include a series of videos and quizzes to introduce students to new concepts prior to their face-to-face sessions (Bergmann & Sams, 2012). In these face-to-face sessions, students are actively involved in constructing their knowledge as they work collaboratively in completing a series of in-class learning activities (Du & Taylor, 2013; Redekopp & Ragusa, 2013; George & Bridgeman, 2013). Research has suggested that the design of the Flipped Classroom Model has the potential to influence how students approach their learning. Some studies have suggested that students adopt a deep approach towards learning, particularly in the face-to-face session, as students are required to be actively engaged in their learning through integrating and applying the knowledge they acquire (Sankey & Hunt, 2012). However, this claim has only been examined within the face-to-face component of the flipped classroom with limited focus on the online component. Although, Jarvis, Halvorson, Sadeque and Johnston (2014) have suggested that the online component can be designed to promote either a surface or deep approach towards learning research, examining this claim is currently limited. An exploratory case study approach was used to examine how students approached their learning whilst completing the online component of the model. To investigate this, quantitative data from the R-SPQ-2F questionnaire (Biggs, Kember, & Leung, 2001) was collected from the participants to identify their learning approach preference. Three participants with various learning approach preferences were selected and qualitative data, in the form of observation and interview responses, were examined in detail to ascertain what students do whilst completing the online learning component. The study presents two key findings. Firstly, students' predicted learning approach preference identified from the R-SPQ-2F questionnaire was not necessarily the approach observed when examining how students approached the online component. Secondly, various factors (students' motivation, the nature of the assessment and feedback) in the presage construct of the 3P (Presage-Process-Product Model) appeared to influence how students interacted with the online component of the flipped classroom and, in turn, whether they adopted a deep or surface approach towards their learning.

#### PO05

### INCORPORATING THE PRINCIPLES OF UNIVERSAL DESIGN FOR LEARNING AND INSTRUCTION IN HIGHER EDUCATION COURSES

Nigel Davies<sup>1</sup>, Sandi Lane<sup>1</sup>

<sup>1</sup> Appalachian State University

Universal Design for Learning and Instruction (UDLI) is a philosophical perspective for guiding curricula development, course design and facilitation by integrating and expanding on the principles from Universal Design for Learning and Universal Design for Instruction. This learner-centered approach seeks to

more effectively support all learning styles, interests and abilities of the diverse student population. It is intended to enhance learning opportunities, offer greater variety for interaction and utilize technology to enhance student engagement. The purpose of this presentation is to share the impact UDLI had on student learning and student perceptions of two courses, and determine the practicality of this approach for higher education. Two undergraduate courses were re-designed incorporating these perspectives to emphasize equitable accessibility, learning flexibility and support for learning differences. Implementation challenged instructors to create a broader range of learning opportunities to limit artificial barriers to learning while maintaining quality standards. With the data being collected across the semester from actual learning environments, a pedagogical action research approach (Norton & Owens, 2013) was utilized, collecting data through peer observations; student, peer and self-analysis rubrics; and student grades. Collected data was cross-referenced to identify emergent themes and trends. Course A was content and standards oriented and re-designed to emphasize course accessibility and increase student choice of course content, ways to demonstrate learning, and leadership concepts perceived valuable for their careers. Course B focused on developing effective college student skills and behaviors. It prioritized student choice, an emphasis on more authentic and team-based experiences, and the incorporation of more technological options for demonstrating learning. Both approaches saw a transition toward greater balance between physical class meetings and learning opportunities embedded within the course's learning management system. Re-designing the courses to incorporate the UDLI perspective resulted in more responsibilities and decisions transitioned to the students, including the opportunity to choose: rubric qualities; specific technologies for assignments; action and expression formats; strategies for out-of-class group activities; and ways to learn. Instructor roles transitioned further toward resource development, course facilitation and management to support student learning, rather than the traditional content and perspective providers. Such role shifts had both positive and negative impacts on the course and student perception of their learning. Emergent positives included choosing and working on authentic projects, enhancement of critical thinking and learning skills, group learning activities, and reported gains in independence. Although choice was identified as a strength, it was also considered a challenge. Along with assignment flexibility, students perceived course/assignment choice as a lack of clarity and/or instructor disorganization. Additionally, student data indicated there too much self-learning in these courses, wanting a more traditional lecture format at least part of the time. Exploration of UDLI as a viable philosophical approach to course design offers a flexible method for analysis of student-centered course design and technology in higher education. Norton, L. & Owens, T. (2013). Pedagogical action research: Enhancing learning & teaching through a community of practice. In Slater, D. (Ed.), *Cases on quality teaching practices in higher education*, (pp. 291-303). Hershey, PA: Information Science Reference.



# Posters

**PO07**

## **USING TECHNOLOGY TO FOSTER STUDENT ENGAGEMENT IN VERY LARGE LECTURE CLASSES**

**Michelle French<sup>1</sup>**

*1 Department of Physiology/University of Toronto*

Several technologies have emerged in recent years aimed at enhancing student engagement in the classroom. These include classroom response systems, such as clickers, that allow students respond to multiple choice questions, and software for students to post questions/answers for the instructor and each other during class time. In some cases, these and other functions are combined. While several studies have demonstrated that traditional clicker-type class response systems promote student understanding (Smith MK et al. (2009) *Science* 323:122-124), far fewer have assessed systems with greater functionality. To address this gap, we trialed the use of the Active Learning Platform (ALP; echo360) in an introductory physiology course in which lectures are delivered to over 900 students at one time. The ALP allows students to use their own devices to both take notes and to type in questions/answers during class time. Activities such as responding to multiple choice or short-answer questions, ordering lists and identifying a region on an image can also be incorporated. For our trial, student use of the ALP was voluntary, and no marks were awarded for the in-class activities. We used the analytics tool within ALP to provide data on student use, and examined student perceptions of the program's usefulness via a paper-based survey that was administered at the end of the course. Of the survey respondents who used the ALP, the majority (45%) stated that the feature that they found the most useful was being able to type in questions for the instructor during the class. Analysis of the questions/answers demonstrated that students taught one another and also provided useful feedback to the instructor about areas of confusion. In addition, over 50% of the ALP users stated that the program 'helped to create a small class experience in a large lecture hall. Despite these perceived benefits, however, the overall use of the ALP was lower than anticipated. The most common reasons students gave for not using the ALP included: like to take notes by hand (45%) and 'the technology would distract me from the lecture (32%). Technical issues such as intermittent WIFI in the classroom likely also discouraged student use. During the poster session, additional data from the survey will be presented, along with tips for using these types of classroom systems. This presentation addresses the overall theme of 'Future students, future pedagogies, future learning paradigms, and specifically, the subthemes of 'the role of technology, how students, teachers . . . engage with each other and the implications of future pedagogies for physical and virtual spaces.

**PO08**

## **CHALLENGES AND LEARNING: IMPLEMENTING A FLIPPED DELIVERY MODEL IN A BACHELOR OF NURSING DEGREE CAPSTONE COURSE AT ONE AUSTRALIAN UNIVERSITY**

**Valda Frommolt<sup>1</sup>, Letitia Del Fabbro<sup>1</sup>, Sandra Goetz<sup>1</sup>**

*1 Griffith University*

In Australia and worldwide higher education delivery is rapidly evolving, characterised by the normalisation of

'blended learning' and the emergence of innovative models of teaching incorporating online technologies including the 'flipped classroom'. Bishop and Verleger (2013) define 'flipped classroom' as interactive and group-based learning activities which occur inside the classroom with direct computer based instruction occurring outside the classroom. Brame (2013) supports this definition by suggesting that a key element of the 'flipped classroom' is for students to gain exposure to content prior to class and the in-class activities focus on higher level cognitive activities. This poster reports on the challenges and learning, for students and staff, of introducing further online technology a 'flipped classroom' to a capstone Bachelor of Nursing degree course. Student feedback from past course evaluations suggested a need to include more flexible learning options to support student learning when students are off-campus for long periods of work integrated learning. An additional impetus to introduce the 'flipped classroom' model came from a broader faculty level project investigating the 'flipped classroom' model in several health courses (non-nursing). Factors adding to the complexity and challenge of implementation included that the course was delivered across three geographically separate campuses, that campus based convenors of the course were new to their roles in this course and that the change was implemented on a compressed timeline. A learning advisor supported the implementation of this 'flipped classroom' model. The online content included short videos, quizzes, mini lectures and reflection points while the workshops generated discussion to support increased problem solving skills. Arising challenges included student resistance to a new way of learning, issues with the lack of flow of online content and the amount of time that students felt was required to engage with the online content. Student feedback was elicited via the standard university process with most students reporting feeling positive towards the online delivery of content followed by workshop activities. Some students indicated a lack of time for discussion in relation to assessment items and also a perceived loss of contact with fellow students. For the academic teaching staff involved in the implementation of this 'flipped classroom' model there were unexpected opportunities for discussion and reflection upon learning theory and teaching philosophy, thereby creating a learning and development experience for the staff involved. During these conversations the academic staff discussed the theoretically different, yet complementary, approaches to teaching that informed their 'flipped classroom' rationale (from experiential learning to cooperative learning). This poster illustrates tensions between the impetus to support new technologies, and delivery methods with the ongoing requirement for teachers to rapidly learn and adapt. It is important to actively balance these tensions, acknowledge the complexity of teaching environments, take time to implement changes and undertake ongoing evaluation of these changes over time. It is via critical evaluation and reflection on these experiences that we can enter into future learning paradigms more effectively and enable teachers to maintain inspiration and active student engagement in new learning environments.

PO09

**ENHANCING STUDENT ENGAGEMENT AND LECTURE ATTENDANCE IN A BLENDED LEARNING ENVIRONMENT**

Helen Gniel<sup>1</sup>, Susan Howitt<sup>1</sup>

*1 Australian National University*

Maintaining student engagement with a course is crucial to good learning outcomes. Student populations are increasingly diverse and many students are juggling numerous competing priorities, such as paid work and caring duties, alongside their studies. Technological advances and the rise of blended learning have meant that increasing numbers of students opt to use recorded lectures and online resources as a substitute for lecture attendance. Since most courses are not designed to be delivered online, this can lead to poorer learning outcomes. While flipping the classroom is one response to this issue, there is also a need for intermediate solutions where live lectures and online resources are combined creatively to promote student engagement. We have developed and evaluated one strategy to more effectively link online activities to live lectures. 'Big Questions in Biology' is a team-taught, second year course that aims to introduce students to concepts relating to the philosophy and sociology of science and to develop critical thinking faculties. The course is modular, with each module covering a case study on a particular biological issue. Each module is assessed by a writing task of differing scope and length, with no piece of assessment contributing more than 20% of the student's final grade. Lecture material, while not directly examined, is expected to be incorporated into each assessment task. Perhaps because the course is not a traditional, content-based science course assessed by exams, many students failed to recognize the link between the lectures and assessment and thus attendance has been especially poor. To address these perceptions and enhance student engagement, the course content, assessments and online learning environment were re-designed. Learning resources were provided to the students online, alongside the delivery of two one hour live lectures and a two hour workshop each week. All assessment submission and grading occurred online and an assessable online weekly reading forum was introduced with the aim of enhancing student understanding, interest and engagement with the course modules. Readings directly relevant to the case studies were provided, with the aim of stimulating interest in the lectures and helping students develop their own opinions. Students were required to post a response to the readings before attending a discussion-based workshop and before they were able to read other posts from the student community. The course has been evaluated through the use of learning analytics and surveys. Surveys following completion of the course aimed to determine how useful students found the reading forums in stimulating their interest in the subject, enhancing their understanding of the topics and whether the readings affected their likelihood to attend the live lectures. This data is presented alongside data on the frequency of student posts, and the frequency with which students returned to re-read the forums over the course of the semester.

PO10

**COMPARISONS OF STUDENT RESPONSES TO UNIVERSITY ASSESSMENTS PRE- AND POST MOOC PLATFORMS: A FUTURE LEARNING PARADIGM FOR LEARNING AND TEACHING**

Mo Kader<sup>1,2,3</sup>

*1 LearnCorp Training Pty Ltd  
2 Top Education Institute  
3 Victoria University*

This poster presents a comparative, qualitative assessment of student responses to university assignments from 2008 to 2014 in the areas of response diversity, response depth and response correlation with industry practice. The main question posed by the analysis is whether Massive Open Online Courses (MOOC's) and social media have changed the nature of student responses to university assignments and whether the technological shift in learning has disrupted how students comprehend and articulate assignment contexts. It compares student responses and student questions raised at the time of the course leading up to assessments pre- and post-MOOC's. The study, which is qualitative, reports of greater diversity in student responses post MOOC's, but not always to the benefit of the assignment at hand. The analysis also presents the notion that the depth of responses has decreased, but that its correlation to real-world practice has increased. The findings of the analysis are that MOOC's provide for greater affiliation with the practical elements of a course and can, combined with intellectually stimulating in-class case studies, broaden the scenario-planning skills for business degree students. The analysis provides recommendations to both learners and lecturers of business studies in the design of and response to assignments in a new era of learning.

PO11

**AN INFORMATION COMMUNICATIONS TECHNOLOGY PERSPECTIVE: THE USE OF SOCIAL NETWORK SITES (SNS) TO ENHANCE PRE-SERVICE AND IN-SERVICE TRAINING PROGRAMMES**

Watson Manduna<sup>1</sup>

*1 Central University Technology*

This study explored the intuitions and usage of social network sites (SNS) in promoting pre-service and in-service teacher training programmes by ACE (Advanced certificate in Education: Computer Application Technology) students and 3rd year Information technology teacher training students. Random sampling procedure was used to elect a sample of (n=37), 3rd year Information technology teacher training students, female (n=24), with average age of 24. A multistage sampling technique was used to choose 7 ACE students, (male=3) and average age of 27. They responded to a questionnaire on SNS usage in promoting pre-service and in-service training programmes. Descriptive statistics was used to present the findings of the research. Results suggested that, although SNS is rarely used for education purposes, it can play a pivotal role in promoting in- and pre-service teaching and learning training programmes.

# Posters

PO12

## **ADAPTING AND INSPIRING: TEACHER EDUCATION IN AN EVOLVING MOBILE DIGITAL LEARNING PARADIGM**

Kelly Bigwood<sup>1</sup>, Rena Heap<sup>1</sup>, **Adrienne Moyle**<sup>1</sup>, Paul Neveltsen<sup>1</sup>, Toni Bruce<sup>1</sup>, Steve Leichtweis<sup>1</sup>

*1 The University of Auckland*

In addressing the conference sub-theme, Future students, future pedagogies, future learning paradigms, we are asked, How will teachers adapt to evolving learning paradigms involving digital technologies, while still providing inspiring learning environments? This question seems to imply that adapting to evolving learning paradigms makes it difficult to provide inspiring learning environments. However, we contend that providing inspiring learning environments is indeed enabled and enhanced by adapting to these evolving digital learning paradigms. Within a national project, Learners and mobile devices, a six-person practitioner-researcher community of practice (CoP) at the University of Auckland is exploring ways in which to utilise the affordances of mobile devices for pedagogical transformation and empowering learners. Such transformation requires recognition that net-generation learners do not automatically apply the functionality of their devices to the attainment of deep learning outcomes. So our CoP meets weekly to discuss and apply learning theory and pedagogical research to the design of transformative mobile learning activities for the on-going development of our courses and empowerment of learners. We will use four diverse pre-service and in-service teacher education courses in this poster presentation as case studies to illustrate the adaptation of pedagogical practice while integrating mobile technologies. Key to transforming our practice has been a focus on implementing Cochrane's (2014) six critical success factors for mobile learning: the pedagogical integration of the technology into the course and assessment; lecturer modeling of the pedagogical use of the tools; creating a supportive learning community; appropriate choice of mobile devices and Web 2.0 social software; technological and pedagogical support; and creating sustained interaction that facilitates the development of ontological shifts, both for the lecturers and the students. Focusing on these factors has helped us to adapt our pedagogical practice and enhance our ability to provide inspiring learning environments within our own contexts. In implementing these success factors, and as teacher educators, we draw on technological pedagogical content knowledge the SAMR model and a bricolage of learning theories, including Laurillard's conversational framework, Lave and Wenger's communities of practice, Vygotsky's social constructivism and Aleinikov's creative pedagogies. Ever present is the duality of drawing on these frameworks and theories ourselves, while simultaneously working with our students to build the same in their own teaching practice. Analysis of our data including student assessments, student evaluations, focus group interviews, course design artefacts, lecturer reflections, and Brookfield's (1995) survival memo will be presented in the full poster as evidence of evolving learning paradigms involving digital technologies and illustrations of inspiring learning environments. In brief we have found that by implementing Cochrane's critical success factors, connections were strengthened, learning was

deepened, engagement was enhanced, and motivation was heightened. We have also found that the impact on our teaching practice is instrumental in facilitating additional and ongoing adaptation of our pedagogy and practice. References Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey Bass. Cochrane, T. (2014). Critical success factors for transforming pedagogy with mobile Web 2.0. *British Journal of Educational Technology*, 45(1), 65-82. Our study is part of a larger national project which uses the hashtag #NPF14LMD.

PO13

## **ACCESSIBLE INFORMATION ANYTIME, ANYWHERE: THE INTENTIONAL USE OF VIDEOS IN PSYCHOLOGY FOR LEARNING AND REDUCING STATISTICAL ANXIETY**

**Karin Oerlemans**<sup>1</sup>, Janie Busby Grant<sup>1</sup>

*1 University of Canberra*

Psychology at UC has undergone substantial change recently, particularly a move to flexible course delivery. The recipients of grant funding, academics embraced the opportunity to review unit content, adopted technologies, and drew on the support of teaching and learning specialists. In 2013, the psychology statistics lecturer (the second author), seeking advice from one of the T&L specialist (first author), incorporated a number of vodcasts into the unit, utilising a combination of lecture-based, enhanced and worked examples (Kay, 2012), scaffolding the learning, but also with the aim of reducing some of the anxiety students expressed around learning statistics and the SPSS software package. The mid-semester feedback was overwhelmingly positive. When an improvement in final unit results, particularly at the top end of the grade scale, was noted, the decision was made to investigate the reasons for the students' positive engagement with the unit's core learning materials. This poster presents the initial findings of the 2014 study exploring how the intentional use of vodcasts may have positively impacted students' use of SPSS and reduced statistics anxiety. Researchers surveyed the students, using a before-after design within one semester. The study also drew on other de-identified data such as unit results and Moodle access data, comparing 2014 with previous years, to understand students use of the vodcasts and other tools and see if and how they were linked to the improved results. It has been noted in the literature that there is a substantial lack of evidence based practice in higher education's use of technology. Price and Kirkwood (2014) found that whilst the adoption of technology for use in teaching and learning was widespread, the effectiveness of its use was 'open to question' and that much evidence for use was based on case study data, and anecdotal data of past practice that had worked. By using a before-after design, it is hoped to collect more rigorous data and aid our understanding of the use of vodcasts to support the improvement in flexible delivery of teaching and learning in higher education.

## PO14

### INTRODUCING STATHAND: A MOBILE APPLICATION SUPPORTING STUDENTS' STATISTICAL DECISION MAKING

Peter Allen<sup>1</sup>, Lynne Roberts<sup>1</sup>, Frank Baughman<sup>1</sup>, Dirk Van Roog<sup>2</sup>, Natalie Loxton<sup>3</sup>, Adam Rock<sup>4</sup>

1 School of Psychology and Speech Pathology, Curtin University

2 Research School of Psychology, The Australian National University

3 School of Applied Psychology - Mt Gravatt, Griffith University

4 School of Behavioural, Cognitive and Social Sciences, University of New England

Quantitative research methods are critical to the development of professional competence across a broad range of disciplines. They are also an area of weakness for many students. Students often find the task of selecting appropriate statistical tests and procedures for different types of research questions, hypotheses and data types particularly challenging, and these selection skills are not often practiced in class. Decision trees (or graphic organisers) have a long history in applied statistics education, and now commonly appear in undergraduate research methods textbooks. Theoretically, they rest on the idea that knowledge must be organised or structured to be accessible. They provide this structure by explicitly highlighting the interconnectedness and differentiation between statistical concepts. Empirically, they have been found to facilitate faster and more accurate statistical selection, when compared to more traditional methods. They are also popular amongst students. However, extant trees have limitations. Furthermore, research indicates that contemporary students are more likely to access mobile based material than content delivered via the web or face-to-face. It is within this context that we have developed StatHand, a free cross-platform mobile application designed to support students' statistical decision making. This application, developed with the support of the Australian Government Office for Learning and Teaching, guides users through a series of simple, annotated questions to ultimately offer them the guidance necessary to conduct, interpret and report a statistical test suitable for their circumstances. In the current presentation, we will briefly articulate the rationale behind StatHand, before providing delegates with a live demonstration of the application. We will then present findings from our initial experimental evaluation of StatHand, before concluding by offering suggestions for integrating it into the research methods curriculum.

## PO15

### FACEBOOK AS A NON-FORMAL LEARNING STRATEGY: A CASE STUDY IN EVOLVING LEARNING PARADIGMS

Rudi Meir<sup>1</sup>, Gail Wilson<sup>2</sup>, Airdre Grant<sup>2</sup>

1 School of Health & Human Sciences, Southern Cross University

2 Centre for Teaching & Learning, Southern Cross University

The focus This poster presents a case study illustrating the use of a digital technology (social media) to engage and inspire students in sport and exercise science

studies. Since the increased use of the online learning environment in teaching and learning, on-campus lectures are becoming less frequently attended and experience shows that students are engaging more superficially with the resources provided to support learning. Irwin et al. (2012) found that using Facebook may add to traditional e-learning tools, and deliver content that is integrated with technology applications familiar to students. In an effort to address the perceived lack of engagement, supplementary content was provided using Facebook across three undergraduate units of study. This innovation was intended to add value to the learning experience by extending students understanding and engagement with each study topic. The format of extra learning resources, the regularity with which they were provided, and the persistence of student engagement, was assessed using an online anonymous questionnaire. Connection to conference theme - Future students, future pedagogies, future learning paradigms Contribution to SoTL conversations Six students enrolled in units utilizing the Facebook strategy, agreed to participate in the focus group to explore the suitability of survey questions, their face validity and clarity. Themes arising from the focus group transcript were incorporated into a draft survey. An academic from the Southern Cross University Centre for Teaching and Learning independently reviewed and provided critical input to the draft survey questions. Data was subsequently collected from a total of 48 (20.2%) respondents from a sample population of 238 enrolled across three units; some students were enrolled in multiple units. The questionnaire included a question with 16 statements asking respondents about their use of this non-formal learning resource. Overall students found the provision of the Facebook pages to be valuable (mean value on 7 point scale = 5.44 1.18). 81.25% of respondents indicated that they found these pages either valuable, very valuable or extremely valuable. Respondents indicated that any concerns about increased volume of information, potential intrusiveness and preference for this form of content delivery were not an issue. This strategy was well received by students and seen as an effective way of disseminating additional non-formal learning content. Interestingly a significant number of site users were students from other institutions in Australia and overseas. These positive measures strongly suggest that social media can be used constructively to facilitate student engagement. Irwin, C., Ball, L., Desbrow, B. & Leveritt, M. (2012) Student's perceptions of using Facebook as an interactive learning resource at university. *Australia Journal of educational Technology*, 28(7), 1221-1232.

## PO16

### USE OF AN INTERACTIVE, DIGITAL ONLINE WEEKLY STUDY GUIDE AS A NON-FORMAL TEACHING STRATEGY IN SPORT AND EXERCISE SCIENCE

Rudi Meir<sup>1</sup>, Gail Wilson<sup>1</sup>, Airdre Grant<sup>1</sup>, Jak Carroll<sup>1</sup>, John Whitting<sup>1</sup>, Cathy Avilia<sup>1</sup>

1 School of Health and Human Sciences Southern Cross University, Lismore, Australia

2 Centre for Teaching and Learning, Southern Cross University, Lismore, Australia

What did we do? This poster reviews the use of an



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inventive strategy regarding an interactive, digital newsletter style weekly study guide. This was specifically designed and adopted as a tool for engaging students in selected sport and exercise science undergraduate units. This design was adopted as a more visually eye catching form of communication that was intended to appeal to students and encourage them to interact with and explore the information contained in each study guide. The literature on the pedagogy of online learning is extensive. In particular the work of Irwin, et al. (2012), which investigated the relationship between students and the social media tool of Facebook, and Cheung, et al. (2011) on social presence theory, underpinned the setting up of this strategy. Each weekly study guide was linked to that week's unit content and provided a synopsis of the lecture topic, the learning objectives, an outline of the tutorial, links to related online resources (e.g. YouTube video clips), additional readings for those students seeking to learn more and general unit administrative updates (e.g. assessment progress and reminders). Study guides were made available to all enrolled student in 4 undergraduate units via the institutional LMS (Blackboard). This non-formal learning tool had no assessable content and engagement with it was voluntary. What did we find? At the conclusion of the each unit enrolled students were invited to complete an anonymous online questionnaire as a way of providing feedback on the use of this strategy. Respondents were asked to indicate their level of agreement to a series of questions (5 point Likert scale) related to their use and perceived value of the study guides. A total of 52 students responded to the survey representing a response rate of 16% (total students receiving a grade in all units using the study guide = 325). Respondents rated their perceived value of this resource highly (mean = 4.3 ±0.7). They also indicated that they found this form of supplemental material worthwhile (mean = 4.4 ±0.9) and that they would like to have this resource in all their units (mean = 4.4 ±0.7). Conclusion The overall student feedback indicated that the weekly study guides helped them to positively engage with the units where this strategy was used. Additionally, the weekly nature of the study guides also served a very useful role in establishing patterns of course activity and keeping students on track with their studies. This interactive digital technology was successful in enhancing positive and constructive student engagement with the relevant units of study. As a result staff adopting this strategy believe that it has been effective at increasing student engagement, and this is supported by the research evidence.

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## PO17

### **CREATIVITY, SOTL, AND EARLY CHILDHOOD EDUCATION: EXAMINING PRE-SERVICE TEACHERS' SELF-EFFICACY FOR ENHANCING LITERACY OF DIVERSE LEARNERS THROUGH MUSIC**

**Nancy Arrington<sup>1</sup>**

*1 Georgia Southern University*

This poster highlights a SoTL research project developed from a desire to enrich Early Childhood Education pre-service teachers' experience by (a) equipping them with skills gained from a creative arts class to apply within their practicum experience, (b) providing them opportunity for a richer and more meaningful field experience through arts integration, (c) eliciting a more

critical level of reflection, and (d) stimulating a higher sense of efficaciousness for teaching diverse learners. This project, addressing the SOTL conversation of diversity in the academy, is reflective of Hutchings and Cambridge's (1999) definition of Scholarship of Teaching and Learning (SoTL): problem posing about an issue of teaching or learning, study of the problem through methods appropriate to disciplinary epistemologies, applications of results to practice, communication of results, self-reflection, and peer review (p.7). Gardner (1993) posits that musical intelligence develops early in children, thus it is reasonable to introduce music-based activities into the early childhood classroom. As teacher preparation programs are challenged with equipping their candidates with the tools necessary for meeting needs of diverse learners, findings from studies validate that using music activities (a) involves diverse learners in lessons and (b) contributes to literacy development in young students (Hansen & Bernstorff, 2002; Isbell & Raines, 2013; Schoepp, 2001; Weidner, 2013). Paquette and Reig (2008) conclude: 'Despite a teacher's level of aesthetic appreciation and musical training, the value of fostering creativity and enhancing literacy instruction through music is vital in today's diverse early childhood classrooms (p.227). According to Bandura (1997), Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments (p. 3), and experiences (referred to as Enactive Mastery Experiences) have the most influence on self-efficacy. Twenty-four university students enrolled in a P-5 Creative Arts methods course participate in music and literacy activities during their class meetings, then plan and implement music activities with children's literature during their practicum experience in K-2 general education classrooms. Both quantitative and qualitative data are collected, including Teacher Self-Efficacy Scale (Bandura, 2006), an attitude survey, written reflections, interviews, open-ended responses, and pre-service teachers' lesson plans from their music literacy project. Quantitative results include (a) a significant increase in the pre-service teachers' self-efficacy in pre-post ratings analysis, (b) an indication that implementing music and literacy with their P-5 students contributed to their efficacy for meeting needs of diverse learners in the elementary classrooms and (c) an assertion that they are very likely to use their projects or similar projects in their future classrooms to meet needs of diverse learners. Emerging qualitative themes include: The preservice teachers' (a) planning contributed to proactive classroom management; (b) participation contributed to their knowledge and increased awareness of the benefits of implementing the arts in their literacy lessons in a diverse classroom; and (c) reflections indicated K-2 students' increased focus and participation in literacy activities. Participants will engage in discourse of best practices for infusing diversity into the curriculum. Key Words: Scholarship of Teaching and Learning; Arts Integration; Diverse Learners, Self-Efficacy

PO18

### LEARNING DIVERSITY FROM A THRESHOLD CONCEPTS PERSPECTIVE

Nigel Davies<sup>1</sup>

*1 Appalachian State University*

Threshold concepts idea/approach (Land, Meyer & Baillie, 2010) recognizes that there is knowledge and capabilities which once attained permit a new and previously inaccessible way of thinking about something, (p. ix). Threshold concept indicators include: transformation in perception; integration of previously perceived disparate facts relationships and ideas; irreversibility of learning; indicators of frustration or being troubled by learning (Land, Meyer & Baillie, 2010). Threshold concepts align with Kegan's (1994) levels of consciousness, where student learning and development is a progression to greater cognitive system complexity. Kegan proposes that much of higher education teaching and course design fails to align with the learning capabilities of the students. As a result, research suggests most first year professionals are struggling to transition to a more independent mind (Ignelzi, 1994). Kegan (1994) and others have suggested instructors create bridges to support transformation to higher levels of functioning. This presentation will propose that Universal Design for Learning and Instruction (UDLI) coupled with the establishment of course threshold concepts provides opportunities and strategies for higher education instructors to support transition to higher levels of functioning for a diverse body of learners. The UDLI philosophy focuses on embracing diversity by providing multiple ways for the learners to access, engage and convey evidence of learning. Strategies emphasized in this course included: empowering student choice at a variety of levels; integrating examples and guides; utilizing technology to broaden course accessibility and learning formats; and the provision of authentic research, group and individual projects. Within that context, the analysis used descriptive pre/post data to determine whether the course design and facilitation supported student learning and progression toward the stated course threshold concepts (goals). This presentation will discuss and share initial data related to the learning relationships between learner diversity, UDLI and threshold concepts. Learner diversity in higher education is a broad and complex concept that encompasses a relationship between the learner, the course and curriculum and the instructor(s). In higher education settings, unless the students willingly self-identify any diverse needs or challenges the instructor cannot provide support. Subsequently, college instructors need to be proactive by both expecting and planning for learner diversity. Data shared was collected from an undergraduate course designed from a Universal Design for Learning and Instruction (UDLI) philosophy, at a 4 year public university. Initial analysis indicates that students progressed in a variety of ways toward different course threshold concepts and that their perspectives broadened. References Ignelzi, M. (1994). A description of student affairs professional development in the supervisory context and an analysis of its relation to constructive development. Unpublished doctoral dissertation, Harvard University, Cambridge, MA Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard

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PO19

### PROMOTING THE DEVELOPMENT OF SOFT SKILLS IN RESEARCH HIGHER DEGREE CANDIDATES IN RESPONSE TO CHANGING GRADUATE DEMANDS

Abigail Downie<sup>1</sup>

*1 University of Queensland*

Changing political and economical demands of the scientific research field has resulted in an increased accountability by Australian universities for the quality of their research outputs, introducing an emphasis on Research Higher Degree (RHD) completion times and top-down management (e.g. graduate schools) (Pearson, 1996). The changing dynamics of the scientific research field have also resulted in a significant proportion of RHD graduates transitioning into non-traditional careers, resulting in an increased demand for transferable soft skills such as communication, organisation and time management (Mangematin, 2000; McCallin & Nayar, 2012). These factors combine to produce a system in which a traditional supervisory approach to research training is no longer meeting with student learning demands and required graduate attributes. Research training pedagogy is still in its infancy (Hum, 2015); recent publications have recognised research training as a sophisticated skill that must incorporate pastoral care, student directed learning and soft-skills training (Hum, 2015; McCallin & Nayar, 2012). While literature (e.g. Choy, Delahaye, & Siggers, 2015; Hum, 2015) is beginning to recognise the importance of generic training programs and cross-disciplinary cohort experiences, there is little discussion on how to introduce such concepts into the traditional doctorate currently engrained in the Australian university system. This project was designed to open discussions on and investigate the role of non-advisory educators when offering generic training opportunities to develop the soft skills that RHD graduates require for non-traditional careers (e.g. communication, management, networking and leadership skills). As discussed by Carter and Laurs (2014), the provision of generic/pastoral support is a relatively new form of teaching, with its own ethical, practical and pedagogical complexities. Initial stages of this project centre on the introduction of a series of generic training workshops offered by an enrolling unit to RHD candidates. Carter, S., & Laurs, D. (2014). Developing generic support for doctoral students: Practice and pedagogy. Hoboken: Taylor and Francis. Choy, S., Delahaye, B., & Siggers, B. (2015). Developing learning cohorts for postgraduate research degrees. *The Australian Educational Researcher*, 42 (1), 19-34. Hum, G. (2015). Workplace learning during the science doctorate: What influences research learning experiences and outcomes? *Innovations in Education and Teaching International*, 52 (1), 29-40. Mangematin, V. (2000). PhD job market: Professional trajectories and incentives during the PhD. *Research Policy*, 29 (6), 741-756. McCallin, A., & Nayar, S. (2012). Postgraduate research supervision: A critical review of current practice. *Teaching in Higher Education*, 17 (1), 63-74. Pearson, M. (1996). Professionalising Ph.D. education to

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enhance the quality of the student experience. Higher Education, 32 (3), 303-320.

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## PO20

### DEVELOPING A QUALITY STUDENT LEARNING EXPERIENCE BY ENABLING THE VOICE OF SESSIONAL STAFF TO BE HEARD: A DISTRIBUTED LEADERSHIP APPROACH

Owen Shemansky<sup>1</sup>, Kellyann Geurts<sup>1</sup>, Pauline Porcaro<sup>1</sup>, Laurine Hurley<sup>1</sup>, Sandra Jones<sup>1</sup>

*1 RMIT University*

The objective of this Poster is to demonstrate how a distributed leadership approach to the employment and professional development of staff on less than full-time employment contracts, can more effectively engage these staff in quality learning and teaching opportunities for students. The rationale for this poster is based in recognition of the increase in the number of academics and professional staff on limited term contracts who are involved in the design, production and delivery of a quality educational interaction for students. These staff, variously termed sessional, casual, contract, adjunct staff etc, provide an increasingly amount of teaching across universities globally. In Australian universities, it has been claimed that sessional staff provide the majority of teaching. The increased design of international higher education learning opportunities through such developments as MOOCs, ULabs etc, will inevitably lead to an increase in the number of these staff. The increase in number of employees in higher education on less than full-time contracts has implication for the quality of education. Enabling the voice of sessional staff to be heard in the design and provision of a quality student learning experience is crucial to attracting, retaining and graduating students with the employability skills for the future. This requires the provision of paid time in these contracts for time spent in team design of courses, professional development, student access and online contributions. This poster will present three Australian examples of the design of good practices in the employment of sessional staff, two examples of which were recently selected as national award winning case studies. The examples presented include the provision of timely and practical professional learning opportunities (face-to-face and digital) for sessional staff based on feedback from sessional staff on their particular development needs; provision of a quality administrative management and professional support of its sessional staff that highlights the need for timely access (within 24 hours) to digital communications - email, blackboard and employee self-service and provision of face-to-face induction, a comprehensive staff handbook and a secure staff database that tracks data collection each semester. The outcome is sessional staff confident about themselves in their teaching and support of students. The poster contributes to the conference theme of Leading learning and the scholarship of change as it presents an example of diversity in the academy from two perspectives. First, is the perspective of full-time and less than-full time academics in terms of the need to ensure paid hours for learning and teaching and facilities available for contract staff take account of team needs to design appropriate learning activities and student needs to access staff. Second, is the need for academic and

professional staff to collaborate to ensure that all staff have access to professional development and resources required to ensure a quality learning and teaching opportunity for students.

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## PO21

### THE OPPORTUNITY TO IMPLEMENT BEST PRACTICE TEACHING TO NON-TRADITIONAL STUDENTS IN A PREPARATION PROGRAM

Suzanne Owen<sup>1</sup>, Nicholas Buys<sup>1</sup>, Abdullah Karaksha<sup>2</sup>, Jacqueline Irvine<sup>2</sup>

*1 Griffith University Gold Coast*

*2 Griffith University Logan*

Background In 2014 government funding for the development of Preparation programs to assist the non-traditional student's transition into tertiary education was awarded to Griffith University Logan campus. Griffith University Preparation Program (GUPP), a full time half year tertiary enabling program, was offered for the first time in 2014. Students undertook 4 courses in English, Life Sciences, Maths and Computing and Lifespan Development. GUPP was directed toward people who wish to undertake university study but lack the formal qualifications required for University entry to an undergraduate degree. This includes those who didn't complete year 12, or did not achieve minimum university entrance requirements. Mature age applicants who may have completed yr ten or equivalent and lacked confidence in their ability to achieve academically. Many of these students came from non-traditional backgrounds and included single parents on benefits, members of local refugee communities, Aboriginal and Torres Strait Islander people, long term unemployed, younger people who had left school several years prior. This program was not just about entry into university but aimed to build confidence in prospective students learning abilities and to prepare them academically for university entrance. Majority of students had only had Yr. 10 education. The GUPP program was offered on Logan campus over 3 days per week for 26 weeks. All courses were a 20credit point courses. The limited and direct timetabling aimed to allow students to maintain their employment or seek social and economic support. Participating students were from varied social contexts and many had social psychological and economic and educational issues. The teaching team had to develop course curriculums that not only met the University requirements for entry but maintained student engagement and motivation. Innovative teaching methods were employed to help students navigate complex concepts within mathematics, science and psychology. The delivery of the course material involved both traditional teaching such as lecture and tutorial sessions as well as innovative teaching methods for example and hands on activities that allowed students to see how these concepts directly related to them. Course examples included teaching Statistics through sporting activity, Psychology was enhanced with art projects and Science was complemented by at home and laboratory sessions. Results The funding allocated places for fifty five GUPP students. Initial enrolment was slow due to limited time for promotion prior to the beginning of the program. The allocated places were filled after visiting various youth and community organisations such as Youth Health and Education services within and around the

Logan district. Interestingly over the first three weeks further twenty students sought admission. These students were placed on the waiting list for the next year's program. Of the fifty five enrolled students, 10 students withdrew and two failed. Forty three graduated completing all courses, and forty one were offered places and enrolled in an undergraduate degree across Griffiths many campuses in 2015. Reflective critique This program highlights the need to design curriculum that not only meets the needs of tertiary institutions but also the needs of the specific student cohorts. In this case those students seriously disadvantaged by educational socioeconomic, psychological and social issues. The program has shown that teaching and learning challenges can become opportunities to innovatively better educate and engage with students.

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## PO22

### SCIENCE STUDENTS SELF-EFFICACY AND PERCEPTIONS OF RESEARCH AND SCIENTISTS: GENDER AND COURSE DIFFERENCES

Mark Stafford-Bell<sup>1</sup>, Susan Howitt<sup>1</sup>, Sara Murray<sup>2</sup>

*1 Research School of Biology, Australian National University, Canberra, Australia*

*2 School of Teacher Education, Charles Sturt University, Australia*

Research experiences for science undergraduates can be valuable additions to the curriculum because they provide students with some experience of professional behavior and activities. However, there is a tension within science degrees because although research skills and experience are seen as desirable, much coursework focuses on mastery of content. This can lead students to adopt a right answer orientation which can prevent them from fully understanding and engaging with the greater uncertainty of research activities. In addition, views of science that exclude a role for creativity and discussion may deter some students from studying science, potentially limiting diversity within science degree cohorts. How students perceive science is likely to affect their perception of their own ability to succeed, with one important contributor to persistence being self-efficacy. It has been suggested that in male-dominated careers such as science, males and females might differ in their sources of self-efficacy and there is some evidence that this is true for successful scientists (Zeldin et al., 2008). A greater understanding of these factors could contribute to supporting a more diverse cohort to persist in science. Our study aims to examine perceptions of research and self-efficacy among different populations of science students at a research-intensive university. We have adopted a mixed methods approach, employing both quantitative and qualitative analysis. A survey including Likert scale questions allowing comparisons between groups and some open-ended questions will be followed by interviews to gain a more holistic and comprehensive understanding of the student voice. We have investigated possible gender differences and have also compared high achieving students enrolled in an elite, research-focused degree with those enrolled in the standard Bachelor of Science. The survey results show that there are no differences between male and female students in self-efficacy, sources of self-efficacy or perceptions of science. However, students enrolled in the elite degree showed higher levels of self-efficacy towards scientific research

than those in the standard degree. Preliminary qualitative analysis suggests that both male and female students in the elite degree gain confidence in their own abilities from their research experiences. This may be linked to their higher levels of self-efficacy. Despite their experiences, students in the elite degree retained somewhat idealistic expectations of the nature of science and of the behavior of scientists. We are exploring these issues further through interviews with students about their research experiences and self-efficacy. Our study will lead to a better understanding of the range of perceptions that students hold about research, scientists, and their own self-efficacy regarding scientific research. This understanding will assist in the development of strategies aimed at helping students recognise that research requires diverse talents and approaches. These strategies may be effective in fostering diversity in science.

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## PO23

### AGLTAS: ENGAGING WITH ACADEMICS, STUDENTS AND INDUSTRY TO DEFINE NATIONAL LEARNING AND TEACHING ACADEMIC STANDARDS FOR AGRICULTURE

Tina Acuna<sup>1</sup>, Amanda Able<sup>2</sup>, Yann Guisard<sup>3</sup>, William Bellotti<sup>4</sup>, Phoebe Bobbi<sup>1</sup>, Jo-Anne Kelder<sup>1</sup>, Glenn McDonald<sup>2</sup>, Paul Wormell<sup>4</sup>, Richard Doyle<sup>1</sup>, Holger Meinke<sup>1</sup>

*1 University of Tasmania*

*2 The University of Adelaide*

*3 Charles Sturt University*

*4 The University of Western Sydney*

Proposed changes in university regulations relating to the design of courses and associated learning outcomes in Australia, can lead to tensions between universities and employers. Here we outline how a scholarly approach to the consultation process was used to develop national tertiary-level education standards for agriculture to align the expectations of graduates, employers and universities. The standards first define the nature and extent of agriculture and subsequently outline the key threshold learning outcomes (TLOs) for graduates and are endorsed by the Australian Council of Deans of Agriculture (ACDA). These standards were developed to inform course development and quality assurance in Australian universities that teach agriculture. The Agriculture Learning and Teaching Academic Standards (AgLTAS) were developed through national engagement with industry, graduates and academics. Between September 2013 and March 2014 project team members organised 19 consultation workshops, which were supplemented by an online survey that was available via the AgLTAS project website. A reference group and project team used Bloom's Taxonomy of Cognition to provide a conceptual framework to guide the analysis of the aggregated participant responses and structure the draft AgLTAS statement to ensure it reflected the consensus position. The resultant AgLTAS statement includes a description of the nature and extent of the discipline as well as a set of TLOs that closely reference those for the Science discipline: Knowledge, Understanding, Inquiry and Problem Solving, Communication and Personal and Professional Responsibility. Together these represent what a pass-level graduate in agriculture should know, understand and be able to do upon graduation.



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Although agriculture fits within science it also includes core components of business and social constructs not typically captured in the science TLOs. Industry input was vital in developing the Australian standards to ensure that agriculture graduates leave university with the relevant skills and knowledge. In particular industry stakeholders highlighted the need for students to demonstrate highly-developed problem solving and communication skills whereas industry/farming specific (vocational) knowledge could largely be gained through on-the-job training both during and after graduation. Providers of tertiary-level education in agriculture and related disciplines are encouraged to build on the standards as they design and deliver programs that reflect their particular strengths and priorities. Enrolments in agriculture and related courses at Australian universities dropped to an all-time low of approximately 1500 students in 2012. Consequently, the industry has a documented skills shortage. According to the analysis by the ACDA there are currently almost four jobs for every agriculture graduate. While student enrolments have increased nationally since then, there still remains an urgent need to raise the profile and reputation of tertiary education in agriculture. Providers are encouraged to further develop the current TLOs and/or to complement them with additional TLOs, in line with the outcomes of their specific programs. If implemented as a reference point, the standards will support collaborative approaches across the tertiary sector and safeguard each higher education provider's autonomy, diversity and reputation.

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## PO24

### **ENGAGING STAKEHOLDERS IN THE EDUCATION OF HEALTH PROFESSIONALS: A CASE FOR A COMMON COURSE TO ASSIST IN LEARNING FROM, WITH, AND ABOUT OTHERS**

Anne Gilmore<sup>1</sup>, Emma Bartle<sup>2</sup>, Jacqueline Bond<sup>3</sup>, Allison Mandrusiak<sup>4</sup>, Peter Newcombe<sup>5</sup>

*1 Faculty of Health and Behavioural Sciences, The University of Queensland*

*2 Institute for Teaching and Learning Innovation, The University of Queensland*

*3 School of Pharmacy, The University of Queensland*

*4 School of Health and Rehabilitation Sciences, The University of Queensland*

*5 School of Psychology, The University of Queensland*

What constitutes a 21st century work-ready health and behavioural sciences professional? The consensus from recent national health reports highlights the need for effective multidisciplinary teams, who have a shared foundational knowledge, as key to dealing with the burgeoning number of chronic and complex illnesses. For example, the World Health Organisation strongly encourages efforts to incorporate multidisciplinary learning into health professional education programs recognising that patient and population outcomes are impacted through multidisciplinary care (Yan, Gilbert & Hoffman, 2007). The past decade has seen a shift in focus of health professional education from discipline-specific content to a richer curriculum facilitating students to develop knowledge and capabilities that will help them meet the complex societal needs of the healthcare sector. Contemporary healthcare professionals share a number of areas of common knowledge and practice, therefore, as educators of

these professionals we are obliged to provide opportunities for students to experience a multidisciplinary environment in preparation for future interprofessional practice. Integration of health professionals as students throughout multiple stages of a program, so that they can learn with and from each other, is considered one way to promote early, and subsequently sustain, the principles of teamwork (O'Halloran, Hean, Humphris & Macleod-Clark, 2006; Wilbur & Kelly, 2015). However, curriculum design is always a compromise between the 'educational idea', the teaching and learning resources available, what will work in the local context and, particularly in the health professions, accreditation standards. Designing and implementing a successful multidisciplinary course in health and behavioural sciences is a complex process of balancing these competing demands through continual engagement with internal (program directors) and external (health professional bodies) stakeholders. This poster will outline the development of common course for first year students in the Faculty of Health and Behavioural Sciences students at The University of Queensland. The Faculty offers 15 pre-qualifying programs with a combined annual intake of approximately 1,950 students. Creating a common course enables us to engage with our first year students to provide a foundation from which they can develop the essential learning attributes required of a contemporary health professional. It also allows us an opportunity to engage with our industry and professional stakeholders. Typically, educators only discuss discipline-specific end-point attributes (what core knowledge, skills and attitudes are needed to make our graduates job ready?). Now our question is What are the fundamental knowledge, skills and attributes required of a contemporary health professional at the end of their first year of study? This question gives our stakeholders an important say throughout our programs and underlines our continuing 'knowledge partnership' approach with them. References O'Halloran, C., Hean, S., Humphris, D., & Macleod-Clark, J. (2006). Developing common learning: the New Generation Project undergraduate curriculum model. *Journal of Interprofessional Care*, 20(1): 12-28. Wilbur, K., & Kelly, I. (2015). Interprofessional impressions among nursing and pharmacy students: a qualitative study to inform interprofessional education initiatives. *BMC Medical Education*, 15:53. Yan, J., Gilbert, J., Hoffman, S. (2007). World Health Organisation Study Group on Interprofessional Education and Collaborative Practice, *Journal of Interprofessional Care*, 21: 588-589.

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## PO25

### **DEVELOPING AND EVALUATING COMMUNICATION SKILLS AMONG STUDENTS IN AN UNDERGRADUATE STEM RESEARCH PROGRAM—LINKING TO THE COMMUNITY**

Carol Bender<sup>1</sup>

*1 The University of Arizona*

Public interest in science is waning at a time when it is more important than ever that individuals understand how science impacts their lives. Recognizing that it is imperative that young scientists develop communication skills that allow them to engage not only with other scientists, but also with the public, the Undergraduate

Biology Research Program (UBRP) at the University of Arizona (UA) offers a variety of activities to insure that students develop these skills. These activities include regular small group meetings where students learn to communicate about their research to each other and develop an 'elevator speech' for members of the public; an annual poster conference that requires them to write an abstract, construct a poster, and present the poster to an audience that includes scientists and the general public; an outreach program that enables them to explain science to economically disadvantaged sixth graders; and a weekly community radio program (Thursday Thesis) that allows them to talk about their research to the listening audience. Collectively these activities heighten students' sensitivity to the importance of communicating effectively with different audiences and provides them with valuable practice. Such training allows neophyte scientists to develop the communication skills needed to cultivate a more informed public - one that cares about science and sees it as relevant. These activities relate to students engagement in local communities including the local public schools, a community radio program, as well as the on campus community of students, faculty and administrators who are interested in the ways that students learn from their engagement in research. This poster will describe the development, implementation, and assessment of the UBRP program's communication skills development scheme. Data from students' annual evaluations of the impact of these experiences on their skills and their professional development, as well as data from community response to the 'Thursday Thesis,' will be presented. Enhancing students' communication skills to a variety of audiences and in a variety of formats ties into an overall initiative at UA to strive for 100% engagement - involving ALL students in activities that enable them to apply what they learn from their undergraduate education to 'real world' problems.

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#### **PO26**

##### **THE ASSESSMENT AND MENTORING PROGRAM (AMP): PRE-SERVICE PHYSICAL EDUCATION TEACHERS BUILDING REQUISITE COMPETENCIES COLLABORATIVELY**

Kate Jenkinson<sup>1</sup>, **Amanda Benson**<sup>1</sup>

*1 RMIT University, School of Medical Sciences, Discipline of Exercise Science*

Rationale In the teacher education context, most peer mentoring programs have focused on pre-service teachers and a qualified teacher mentor within school settings (Hobson, et.al., 2009; Ambrosetti, Knight & Dekkers, 2014). Few studies have focused on mentoring between pre-service teachers; specifically in physical education teacher education (PETE) programs. Le Cornu (2005) highlights the critical components of undergraduate teacher education peer mentoring programs as developing a mentoring attitude (valuing one's own and other's learning), interpersonal skills (trust, empathy, speaking, listening, valuing others, dealing with conflict and different viewpoints) and critical reflection skills (professional dialogue, challenging ideas and beliefs to engage in learning conversations). In addition to students developing collaborative partnerships between peers when mentoring, the collaboration between students and lecturers can transform learning (Allin, 2014). Providing

authentic learning opportunities for students in a PETE program and ensuring today's students, who will be tomorrow's educators, possess the requisite competencies to navigate physical education teaching can be challenging. Framework Therefore, we describe the Assessment and Mentoring Program (AMP): a four-way collaborative learning community, underpinned by social constructivism (Bruner, 1996). Mentoring occurs between fourth year physical education students as mentors, reciprocally between mentors and their year two mentees, and in collaboration with their lecturers. University Human Ethics approval was granted and informed consent obtained from 17 AMP mentors during 2014-15. The AMP provided opportunities for year four mentors to offer feedback on their second year mentee's teaching experiences and discourse between mentors. Furthermore, mentors developed, tested, implemented and moderated a lesson plan assessment tool. This scaffolded process of assessment design, implementation, and critical reflection is a unique attribute of the AMP that enables mentors to work collaboratively with each other and a University academic to develop these skills in a supportive environment. Prior to the commencement of the AMP, to understand the pre-service mentors perception of effective mentors, mentors were asked to annotate a A3 poster of a figure with the characteristics they perceived to be the 'perfect' mentor that could complete the demands of the AMP successfully and we present data of their perceptions. De-identified data were transcribed verbatim, coded and analysed using NVivo (Version10) software to explore emerging themes of the AMP mentor's perceptions of the characteristics of an effective mentor within the context of Le Cornu's (2005) critical mentoring components. Outcomes & Conclusions The AMP mentors identified characteristics in all three categories that Le Cornu (2005) described as important attributes for successful peer mentoring in pre-service teacher education. Specifically, communication (interpersonal), positive attitude (mentor attitude), knowledge (mentor attitude), feedback (critical reflection), and organisation (not identified by Le Cornu, 2005) were identified as important themes. Students perceived a diverse set of mentoring skills were required to undertake the role effectively. Given that we know many key skills developed through mentoring are important for pre-service teachers when they graduate, the challenge is how to provide relevant and context specific experiences for students that enable them to become collaborative reflective practitioners who can provide quality learning and assessment opportunities for their own diverse students.

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#### **PO27**

##### **WRITING FOR PUBLICATION: INTERVENTIONS TO SUPPORT I) INSTITUTIONAL ACADEMIC WRITING AND II) STAFF WRITING FOR A PHD BY PUBLISHED WORK**

**Susan Smith**<sup>1</sup>

*1 Head of Curriculum Development and Review, Leeds Beckett University, UK*

This workshop explores engagement methods that the Centre for Learning and Teaching at Leeds Beckett University uses to foster collaboration for our academic writers and to support those academic staff doing a

PhD by published work. Increasing numbers of staff are registering for a PhD by published work in the UK and internationally and writing for publication can be stressful, isolating and demanding (Smith and Deane, 2014). Supporting their needs to reach an appropriate standard for publication in the public domain and for the PhD threshold standard is important (O'Sullivan and Cleary, 2014) and can be achieved through writing groups where mutual engagement and a sense of joint identity are fostered through a community of practice. (Wenger, 1998). In addition, staff undertaking a PhD by published work award or, indeed, just writing up their scholarship for peer reviewed journals need to show the triple whammy: coherence, contribution to the field and originality in their work and final synthesis/reflective summary. This workshop is structured in two parts and is suitable for all academic writers, but particularly those looking to submit for a PhD by published work. Part 1 involves the sharing of key methods used in Leeds such as a) writing groups, b) draft sharing to elicit real strength in originality, coherence and contribution c) supervisor networks and d) the production of a themed edition journal will be outlined. Participants will then share practice in small groups about i) whether these strategies have been useful for them ii) the value of their own different institutional interventions to support scholarly writing and outputs. Part 2 will encourage staff to look at the triple whammy of their work and discuss these using some key questions (Smith, 2015) in pairs using the non-threatening, supportive feedback model for writing support (Ryan and Zimerelli, 2006). The learning goals: Participants will be encouraged to review their own practice to explore i) if any of these methods (a)-(d) have helped them ii) if they have any other collaborative interventions in their own institutions to enhance high quality scholarship iii) their own publications and consider, how they can strengthen their PhD by published work synthesis/reflective summary to elucidate its unique triple whammy. Outcomes: By the end of the workshop participants will have i) a greater awareness of practical support strategies to improve local academic engagement in writing support ii) used a series of tools generated from surveys, interviews and focus groups, (Smith, 2015), to strengthen the triple whammy of their own scholarly outputs. iii) the opportunity to contribute to a paper for the ISSOTL journal about supporting scholarly writing. I am a National Teaching Fellow (UK), Principal Fellow of the Higher Education Academy, researcher and author experienced in delivering conference workshops. I have recently written a book on PhD by Published Work based on qualitative research with writers, supervisors and researchers. \*Participants should bring a list (or full text) of their current and emergent peer reviewed publications to the workshop.

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## PO28

### INDUSTRY EXPERIENCE OF ACADEMICS - A MISSING LINK IN DEVELOPING STUDENT EMPLOYABILITY?

John Smith<sup>1</sup>, Nina Fotinatos<sup>2</sup>, Laurence Orlando<sup>3</sup>, Sophia Xenos<sup>1</sup>

<sup>1</sup> RMIT University

<sup>2</sup> Federation University Australia

<sup>3</sup> Monash University

Focus of the inquiry This study reports on aspects of

industry experience which current academics perceive to have informed their teaching practice. In particular, examples of teaching practice which they consider to have had positive impacts on student employability. The study provides insight into one aspect of engagement between industry and academia. The findings speak to opportunities for academics with industry experience to lead both inside and outside the academy. The study also points to what the academy and wider community is at risk of losing if industry experienced academics can only rarely be found among the teaching staff of Australian universities. Contributions to Current SOTL Conversations Interaction between universities and industry is known to have benefits for student and university staff in understanding the opportunities available in industry (Stephan, 2001, p.201). It is not unusual to hear of anecdotal accounts of the benefits to students from the industry experience of academics, for example, it is clear that many students greatly appreciate being taught by those with recent commercial experience (Roberts, 2002, p. 9). It has also been contended that academics gain professional credibility to take back the classroom through their industry experience (Sutliff, 2000, p.35). However, there is no substantiation or explanation of this assertion in the published literature. Indeed there is very little research on academic careers in general and even less on potential impacts on students engagement levels (Ladkin & Weber, 2009). Connections to the conference theme Leading Learning and the Scholarship of Change and the sub-theme of Engagement. The practice of industry contribution into the learning and teaching arena is well recognised and described by Southwell (2012) in the Good Practice Report: Revitalising the academic workforce: Industry or real-world perspectives continue to be introduced into the formal learning environment through the use of industry professionals providing guest lectures or taking roles as sessional staff and tutors. The background of Australian university academics has progressively changed over previous decades from a mix of industry experience and research to a predominance of only research trained. The extent and rate of change may have differed for different fields of study and different universities. The background and experience of academics has been shown to play a key role in the student learning and teaching educational experience. References Ladkin, A., & Weber, K. (2009). Tourism and hospitality academics: career profiles and strategies. *Journal of Teaching in Travel & Tourism*, 8(4), 373-393. Roberts, T. S. (2002). Academics in academia: The forgotten resource in the rush to new technologies. *Educational Technology and Society*, 5(2). Southwell, D. (2012). Good Practice Report: Revitalising the academic workforce. Australian Learning and Teaching Council (ALTC) Limited. Published 2012. Access via: <http://www.olt.gov.au/resource-library?page=1&text=academic> Sutliff, K. (2000). Integrating academics and industry: a challenge for both sides. *ACM Journal of Computer Documentation (JCD)*, 24(1), 33-38.

PO29

**GRADUATE CERTIFICATE IN HIGHER EDUCATION (GCHE): FROM LOCAL SCHOLARSHIP TO CHANGING TEACHING PRACTICE AT THE AUSTRALIAN CATHOLIC UNIVERSITY (ACU)**

Tina Bavaro<sup>1</sup>, Jose Sakakibarra<sup>2</sup>

1 Australian Catholic University, Learning and Teaching Centre

2 Notre Dame University

Scholarship is at the heart of the university's teaching profession (Shullman, 2000). It is the mechanism through which universities use to advance the profession of academics (Hutchings & Shulman, 1999) and teaching practice at ACU. For that reason, the scholarship of teaching (SoT) has been adopted as the overarching theme of the Graduate Certificate in Higher Education. The GCHE is an Australian Qualifications Framework (AQF) accredited professional development course for academics. This poster aims to present a reflective inquiry into the foundations unit of the course based on Trigwell's (2012) SoT processes and Mezirow's (1991) dimensions of transformative learning. It is proposed that the presenters' inquiry has the potential to progress individual, personal, local scholarship to one of changing teaching practice. The Learning and Teaching Centre is the service lead for the development and delivery of the GCHE. In 2012 LTC re-developed the foundations unit implementing learning and assessment innovations that have since been evaluated and refined. Innovations included a work-integrated project to demonstrate evidence of a scholarship of teaching. Aligned with Mezirow's (1991) transformative learning theory, SoT emphasised the crucial role of critical self-reflection as participants worked through existing beliefs and assumptions about their teaching practice. As McKinney (2006) states, scholarship involves systematic study of teaching and/or learning and the public sharing and review of such work through presentations, performance (p. 39). At ACU SoT started with an idea of how student learning might be enhanced. For GCHE participants this was a disorienting experience that led to a self-examination of their teaching practices. Based on this experience, participants were asked to formulate an investigative question related to their teaching. They then conducted either an empirical or theoretical, literature based review designed to address the question. The investigation resulted in an artefact. Within this context, an A0 size poster was used to share experiences and findings publicly at a face-to-face workshop/ seminar for peer feedback and review. Conversations that resulted allowed for participant reflections at local campuses and continued nationally online. Through two vignettes this poster will outline how this approach has been influential in transforming teaching practice at ACU. One perspective of the scholarship of teaching is from the Course Coordinator, who is also the Lecturer-in-Charge of the foundations unit. The other perspective is from an experienced, early career academic who completed the foundations unit in 2014. The vignettes will address the following key questions: - What was our theoretical framework? - What did we do? - What did we find? - What did we change? - How did we disseminate? The poster will conclude with findings of transformative teaching practice, firstly, from the perspective of the Course Coordinator/Lecturer-in-Charge and secondly from a

GCHE participant. It is envisioned that conversations initiated by means of the presenters' scholarship of teaching may potentially impact universities professional development courses and programs at the local, national and international level.

PO30

**AIM FOR CHANGE: SUPPORTING FIRST YEAR LEARNING OF BEST PRACTICE IN SCIENTIFIC WRITING WITH A FLIPPED, EMBEDDED ACADEMIC INTEGRITY MODULE**

Yvonne Davila<sup>1</sup>, Neela Griffiths<sup>2</sup>, Andrea Leigh<sup>1</sup>

1 Faculty of Science, University of Technology Sydney

2 Institute for Interactive Media and Learning, University of Technology Sydney

Scientific writing is a fundamental professional skill but remains a daunting task for the trainee scientist. Understanding, synthesising and integrating research are essential scientific writing skills; however, appropriate use of the literature continues to be problematic with many students accidentally plagiarising because they lack paraphrasing and citation skills [1]. Materials to support students in developing these skills tend to be decontextualised, generic, and even ignored if they simply inform students about what plagiarism is without providing opportunities for hands-on training [2]. Furthermore, appropriate use of literature varies within professional disciplines, causing potential confusion if learned outside a given course of study. As writing scientific reports accounts for a substantial proportion of most undergraduate science assessments, discipline-specific academic literacy resources must be embedded early in the science curriculum. Such resources enhance student learning, build confidence and support the development of competent, employable science graduates. Integrating discipline-specific resources requires disciplinary experts to re-evaluate curriculum design and teaching practice. At our university, this re-evaluation is encouraged through both institutionally driven and grassroots level initiatives. For example, the university promotes the embedding of First Year curriculum principles [3] into subject design for a scaffolded transition to university learning and has implemented the First Year Experience project, in which small interdisciplinary teams embark on curriculum change and share their findings at faculty-developed Communities of Practice. These initiatives supported our project on embedding an interactive online Academic Integrity Module (AIM) on academic literacy and professional skills in scientific writing in a first year core subject. By blending out-of-classroom exercises (flipped learning approach) with workshops incorporating peer-to-peer interaction, students engaged in independent learning that was strengthened in a supportive, 'learning by doing' environment. In the pilot program, engagement in the project was strong, as 60% of students completed the bespoke AIM even though no marks were associated with it. Evaluation surveys revealed that students identified the importance of academic integrity to a science career (Likert score 4.19, n=245) and had a better understanding of why the correct use of the scientific literature was important for a scientific career (Likert score 4.17, n=247). On average, students who completed the online AIM performed better for the referencing criterion in their assessment than those who did not attempt the AIM. Following the



# Posters

principles of good practice of SoTL [4] we disseminated our findings locally via university forums, showcasing our working example of embedding institutional initiatives in the discipline of science. This has led to collaboration with other disciplines to further develop and reframe our online AIM for different contexts. Our project clearly demonstrates how institutional initiatives can be successfully implemented and embedded into a large, first year science subject with positive outcomes for students' learning and changing practice within the University. 1.Devlin, Gray (2007) Higher Education Research & Development, 26:181-198. 2.Bretag et al. (2014) Studies in Higher Education, 39:1150-1169. 3.Kift et al. (2010) The International Journal of the First Year in Higher Education, 1:1-20. 4.Felten (2013) Teaching & Learning Inquiry: The ISSOTL Journal, 1:121-125.

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## PO31

### AN EVALUATION OF SPACED LEARNING IN ECONOMICS

Daniel Diaz Vidal<sup>1</sup>

*1 Wabash College*

Four groups of 30 students taking introduction to economics are taught the same material by the same instructor. Two of the groups have already completed their coursework, which was designed and implemented using the traditional teaching and evaluation strategies. The two remaining groups will take 6 quizzes throughout the semester and a comprehensive final instead of two midterms and a comprehensive final. 40% of the credit obtainable in each quiz will pertain material covered since the previous quiz and the remaining 60% will be comprehensive. Furthermore, in one of the two later courses, the students will be assigned homework that is also partly comprehensive and podcasts regarding the contents of the course will be assigned two weeks after the relevant topics were covered. All four groups will be asked to retake an economics exam pertaining to their 101 material one year and 5 years after they completed the coursework to test how assessment spacing during the course has affected their long term retention of the material. The following papers, reviews of the literature, and the final keynote speech at ISOTTL14, have inspired this project: CHAI, SUSAN. 'Small changes result in big improvements.' Chief Learning Officer 8.1 (2009): 48-49. Bloom, Kristine C., and Thomas J. Shuell. 'Effects of massed and distributed practice on the learning and retention of second-language vocabulary.' The Journal of Educational Research 74.4 (1981): 245-248. Thalheimer, Will. 'Spacing learning events over time: What the research says.' Retrieved March 21 (2006): 2007. Xiong, Xiaolu, Yan Wang, and Joseph Barbosa Beck. 'Improving students' long-term retention performance: a study on personalized retention schedules.' Proceedings of the Fifth International Conference on Learning Analytics and Knowledge. ACM, 2015. If I understood its general sense well, this project would be most relevant to the fifth theme of the conference, as it directly addresses an example of how the scholarship of teaching and learning can lead to tangible, in class, changes in the way undergraduate economics are taught at an American liberal arts college.

## PO32

### MORE THAN ONE WAY TO SKIN A CAT: DISCIPLINED AND DISCIPLINARY COLLABORATIONS IN DEVELOPING ACADEMIC LITERACIES

Neela Griffiths<sup>1</sup>, Rosalie Goldsmith<sup>1</sup>

*1 University of Technology Sydney*

Despite the increased expectations for graduates to be multi-modally literate within their disciplines, students entering higher education have diverse needs and are often unaware of the discipline-specific literacies required to learn and succeed in their degrees (Devlin 2011). This situation is compounded by faculty teaching staff who may have a tacit but not explicit understanding of these discipline-specific literacies, which can result in students who do not develop the necessary disciplinary literacies to perform well in their studies. The Academic Language and Learning (ALL) team (part of the Teaching and Learning unit) in a metropolitan university in Australia is meeting these challenges through a diverse range of approaches, from grass-roots to institutional initiatives, using SoTL concepts of best practice. We seek to move beyond local communities of practice (Lave & Wenger 1991) by building collaborative relationships with disciplinary experts and developing distributed expertise. We leverage off institutional initiatives such as the first year experience grants scheme (based on transition pedagogy: Kift 2009), institution-wide and faculty-specific graduate attributes implementation (2012-2014) and the adoption of blended and flipped learning modes of instruction. It is now recognised that the development of academic literacies should be embedded in disciplinary contexts (Lea & Street 1998; Wingate 2006). Thus, our focus is to enhance student engagement and effective co-constructed learning by working collaboratively with faculty teaching staff to develop and embed discipline-specific academic literacies. These partnerships support undergraduate and postgraduate student learning from the subject-level to the program level, and integrate a variety of modes of delivery. As ALL team members are allocated to specific faculties, we have developed an 'informed outsider' understanding of the discourses and cultures of the disciplines with which we are aligned (Theis 2012). By modelling good practice in our interactions with faculty staff, we develop their understanding of current theories of student learning in their disciplines and support them to incorporate these theories in their teaching practices and subject design. We evaluate our work using both qualitative and quantitative measures including student and staff evaluations and tracking access of online resources. In this poster, we present examples of collaborative activities which showcase our diverse approaches to pedagogical good practices, enhancing student learning and developing academic literacies within specific knowledge domains. References Devlin, M. 2011, 'Bridging socio-cultural incongruity: conceptualising the success of students from low socio-economic status background in Australian higher education', Studies in Higher Education, DOI: 10.1080/03075079.2011.613991 Kift, S. 2009, Transition Pedagogy <http://www.fyhe.qut.edu.au/transitionpedagogy/firstyear> ur/ Lave, J. & Wenger, E. 1991, Situated Learning: Legitimate Peripheral Participation, Cambridge University Press, Cambridge. Lea, M.R., & Street, B.V. 1998, Student writing in higher education: An academic literacies approach, Studies in Higher Education, vol. 23, no. 2, pp.157-172. Theis, L. C. 2012, 'Increasing student participation and success: collaborating to embed

academic literacies into the curriculum', *Journal of Academic Language and Learning*, Vol. 6, no. 1, A15-A31. Wingate, U. 2006, 'Doing away with study skills', *Teaching in Higher Education*, Vol. 11, no. 4, pp. 457-469.

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### PO33

#### **USING PREDICTIVE MODELLING ANALYTICS TO DEVELOP AN EARLY WARNING SYSTEM FOR IDENTIFICATION OF AT RISK STUDENTS AT A SOUTH AFRICAN UNIVERSITY**

**Ashwini Jadhav**<sup>1</sup>, Innocent Mamvura<sup>1</sup>

*1 University of the Witwatersrand, Johannesburg, South Africa*

**Keywords:** predictive models, student performance, student success, at risk, early warning system Improving student retention and graduation rates is a fundamental challenge in higher educational institutions across South Africa (Letseka and Maile, 2008; Letseka et al., 2009). Increasingly, stakeholders expect institutions to measure their success in terms of the timely success of their students and increased throughput. This means accountability in terms of retention, graduation in a timely manner, and preparation for the workforce and citizenship. Pass rate trend analysis and analysis of distribution of average mark among first year students at a South African University indicate that first year students are at a higher risk of dropping out or failing, thereby impacting overall throughput. As a result, this study examined the use of predictive modelling techniques to develop an early warning system to identify markers, and students who are at risk of failing, understanding why they are at risk, designing interventions to mitigate that risk, and finally closing the feedback loop by assessing the success. The study interrogated a five year historical undergraduate dataset through the use of Binary Logistic and J48 techniques. Results indicate that the average matric scores, physics scores, English scores, gender and race are significant markers that determine first year pass rates.

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### PO34

#### **IMPROVING SUPPORT FOR SESSIONAL STAFF: USING THE SESSIONAL STAFF STANDARDS FRAMEWORK (SSSF) AND THE BENCHMARKING INTERACTIVE (B-BIT) TOOL**

**Dimitra Lekkas**<sup>1</sup>, Tracey Winning<sup>1</sup>

*1 School of Dentistry, The University of Adelaide*

**Focus of inquiry:** Reliance on sessional staff to provide core learning and assessment in higher education is widespread. Health professional programmes are no exception, for example, clinicians (approx. 150) who are employed casually as sessional staff, provide the majority of the clinical supervision of our dental/oral health students (n = >500). As effective support for sessional staff is critical for quality learning and teaching (L&T), we continue to review and develop our sessional staff support programme that has been recognised as good practice. The development of the Sessional Staff Standards Framework (SSSF) and Benchmarking Interactive (B-BIT) Tool (Harvey 2013) provided us with the opportunity to evaluate our current practice against national standards. Key outcomes from using the Framework and Tool include identification of evidence of achievement for each standard and development of

action plans to achieve consistency in good practice. We have run two workshops using the Framework and Tool with key stakeholders, namely academic co-ordinators (n = 11) and sessional staff (n = 12) who were experienced/new staff and supervise across different year levels. Contribution to SOTL conversation about sessional staff support: From the co-ordinators perspective, participating in the benchmarking activity enabled reflective practice in a variety of ways. It enabled clear identification of areas of good practice and areas for improvement in undertaking one of their key academic roles, i.e. supporting sessional staff. It enabled collegial discussions of approaches used to support sessional staff between colleagues and identification of gaps amongst strategies used by individual co-ordinators in comparison with others. For some co-ordinators engaging in this activity identified the need to keep better records. It also provided a customised report which can be used by co-ordinators for their own professional development and as part of a teaching portfolio. From the sessional staff perspective they were generally positive about the support they received from the co-ordinators. Their participation in the benchmarking activity also enabled reflective practice. For example, new sessional staff had not recognised the need for their own professional development related to L&T. How local evaluation has changed our practice: Using the B-Bit Tool/ SSSF Framework we identified gaps and strategies to improve our current practice in supporting our sessional staff. Our action plans for 2015 include: using our current sessional staff e-newsletter to promote L&T professional development opportunities, e.g., workshops and online fora and seek and reinforce methods for sessional staff to provide L&T feedback, e.g., email, annual survey, or in-person; implement a School-wide plan to obtain and review student feedback for all sessional staff; establish a sessional staff representative on the School L&T committee; and disseminate good practice approaches between co-ordinators. We will repeat the workshops to obtain experiences from more sessional staff and monitor the impact of our actions plans over time. The use of the B-Bit Tool and SSSF Framework enabled us to systematically review our sessional staff processes from multiple perspectives and against national standards, in addition to serving as a useful tool for ongoing professional development for participants. Harvey M (2013) Setting the standards for sessional staff: quality learning and teaching. *Journal of University Teaching and Learning Practice* 10(3) Article 4.

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### PO35

#### **DISTANCE EDUCATION ONLINE - ACADEMIC CHARACTERISTICS FOR EXCELLENCE**

**Eleanor Mitchell**<sup>1</sup>, Angelo D'Amore<sup>1</sup>

*1 School of Rural Health, Monash University*

**Background:** Distance education can be isolating for both students and lecturers. Distance education units tend to involve smaller student cohorts than face-to-face units and often receive poorer student evaluations. Distance educators often struggle to assess best practice within their small cohorts and struggle to engage with students through online modalities. **Aims:** To gather evidence from distance educators to ascertain what academics feel creates a positive experience for

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distance education students. To determine if there are particular characteristics consistent across high-performing distance education units, based on consistently good student evaluations. Method: This study was approved by Monash University Human Research Ethics Committee. Unit Co-ordinators across Monash University were interviewed regarding their training and experience in online teaching, the pedagogical approaches used within their distance education Unit; what components within their Unit create positive student experiences, and the biggest challenges as an online tertiary educator. Results and conclusion: Themes and findings from these interviews will be presented. These will highlight some distinctive educational commonalities for positive student learning and high-performing distance education units, which will provide the basis for the development of a framework for excellence within the distance education online teaching modality.

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## PO36

### LOCAL INNOVATION: RESPONDING TO KEY CURRICULUM DRIVERS AND DEVELOPING A SPECIALIST EVIDENCE-BASED CURRICULUM FOR A SPECIALIST POSTGRADUATE NURSING STREAM

Lael Ridgway<sup>1</sup>, Creina Mitchell<sup>2</sup>

1 La Trobe University

2 Griffith University

Aim: This poster describes a local initiative to amalgamate disparate postgraduate offerings and respond to external change agendas. The primary focus is the scholarly approach taken to develop an evidence-based specialist postgraduate nursing curriculum for nurses wishing to enter the Maternal, Child and Family Health (MCAFH) nursing workforce. Background: With the change in national funding for tertiary education and a new Australian Qualifications Framework (AQF), there was a need to review and amend postgraduate course offerings. There was also a need to maintain the alignment with past accreditation standards, current nursing professional competencies and University graduate outcomes, while maintaining the consistently high student satisfaction ratings of previous years. La Trobe University (LTU) was one of the early pioneers of nursing education in Victoria and for over 40 years has provided postgraduate education for future MCAFH nurses. Past students have completed a stand-alone Postgraduate Diploma or Master of Nursing in the specialty Child, Family and Community Nursing. Changes to funding models resulted in some specialty postgraduate courses no longer being viable. To address this while maintaining the breadth of specialty options, there was a local push to create a single Master of Nursing course. This course incorporated multiple specialty nursing streams, including Child, Family and Community. Framework Recognising the influence a well-designed curriculum has on overall student learning outcomes, the specialist course drew on a student-centred curriculum design model (Prideaux, 2003) as a framework to inform the local changes. The curriculum design process incorporated scholarly approaches to learning and teaching, including constructive alignment and deep learning principles. New curriculum The change resulted in a singular curriculum structure; a Master of Nursing (MN). The MN program contains multiple specialty streams and

multiple exit points (Grad Cert, Grad Dip and MN). It has clinical, research, management and education pathways. The intended learning outcomes (ILOs) for the course incorporate both university graduate attributes and outcomes desired by the speciality profession, namely ILOs that indicate clinical competence as described by statewide MCH service frameworks (DEECD, 2009) and MCH professional standards (VAMCHN, 2009). Curriculum development was supported by community input through an advisory group made up of key stakeholders including academics, practitioners, recent graduates and current students. Implementation of the curriculum was underpinned by a need to meet the academic, student and clinical requirements for all specialties. Reflective critique A scholarly approach to curriculum development was vital to achieve a specialist curriculum which had integrity yet was part of a broader, generic MN curriculum structure. Although the curriculum design and implementation were generally successful, the changes may have created new problems. Anecdotal feedback is that the Child, Family and Community Nursing specialty focus is no longer obvious amongst course offerings and prospective students may be reluctant to enrol in a Master of Nursing, when this is not their required level of qualification. This may result in loss of market share as future students are unaware of the course, are confused by its structure or choose to enrol in a course that has a specialty title.

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## PO37

### VARIATIONS TO PEER ASSISTED TEACHING SCHEME

Lynette Zeeng<sup>1</sup>, Alison DeKruiff<sup>1</sup>, Mary Miceli<sup>1</sup>

1 Swinburne University of Technology

The issue of underperforming units in the School of Design, in the Faculty of Health, Arts and Design required resolution. This poster will illustrate how beginning with using Angela Carbone's™s Peer Assisted Teaching Scheme (PATS) and the rationale for adapting the concepts and processes used in PATS to create a Peer Assisted Unit Scheme (PAUS). This variation of PATS will also contribute to a national Office for Learning and Teaching project to compile cases of adaptations and extensions of PATS across a range of institutional contexts into a Guide. Initial trials of PATS in 2014 identified that individual staff members often responded to problems of underperforming units with defensiveness and were unresponsive to opportunities to identify and address issues. Following collaborative discussion within the school it was agreed to change the initial focus from teacher to unit, ensuring teaching staff did not perceive this process as a criticism of their teaching performance, but rather a shared process effectively leading change towards improving curricula and enhance the student learning experience. The design and trialling PAUS through 2015, was anticipated to improve the learning and teaching culture across a diverse group of units identified as needing reinvigoration. We expected to achieve this through leadership, collaboration and sharing of knowledge. Like PATS, the PAUS system employs mentoring but places more emphasis on discussing content and delivery within the unit. Similar to PATS, the essential elements begin with planning and creating



a realistic weekly timeline over the semester, setting goals, review periods and possibly include classroom observations. The PAUS process encourages staff members to reflect on best practice, review better performing units and includes peer-to-peer encouragement. It is envisaged these new strategies will result in rectifying problems with flow-on effects to improving all units maintaining higher standards for students and staff. For this PATS variation, four units were selected that covered a diverse range of delivery modes, structure and class sizes across several year levels. Key features of PAUS include regular leadership group meetings to analyse reports and task sheets, update and share information and review progress. Meetings with staff members are arranged to address issues and consider ways they may think differently regarding content and delivery to effectively improve student engagement, enhance feedback and encourage higher standards. This knowledge is shared and distributed across disciplines and units to create a better 'fit' for delivery and content. Part way through this trial, our collaborative approach has resulted in significant upgrading of student attendance and teaching quality with potential for further growth. On completion of the PAUS trial the researchers will conduct interviews and focus groups to determine the effect of the modified curriculum in the selected units and investigate their experience with the PAUS scheme. These results may inform and influence all staff within the School of Design with potential to be implemented within the whole Faculty of Health, Arts and Design and the broader University community.

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#### **PO38**

##### **BUILDING AND LEADING SCHOLARSHIP OF TEACHING AND LEARNING (SoTL) PRODUCTIVITY IN SCIENCE**

**Kay Colthorpe<sup>1</sup>**, Louise Kuchel<sup>1</sup>, Kirsten Zimbardi<sup>1</sup>

*1 School of Biomedical Sciences, The University of Queensland*

Position descriptions for science academics which require or mandate the undertaking of scholarship of teaching and learning (SoTL) are relatively new, but growing, in Australia. At most universities with this type of Teaching-Focussed (TF) position description, discipline-based TF academics are expected to perform and meet similar promotion criteria to their science research colleagues (Probert 2013). However, research productivity by most science academics is largely driven by the productivity of the postgraduate students under their supervision. Successful recruitment, retention and publication of and by postgraduate science students enable a science researcher to grow the impact of their research. In addition, the training of postgraduate students is viewed as a key academic role. Although it is relatively common for TF staff in Australia to co-supervise postgraduate students within their scientific disciplines, it is rarer for them to supervise research students in SoTL. This lack of postgraduate students may significantly limit TF academics productivity in SoTL research. TF academics face challenges in recruiting, formulating projects for and ensuring equitable assessment of students undertaking SoTL projects within the existing science research higher degree frameworks (Rowland and Myatt 2014). However, despite these challenges, for some Bachelor of Science

students seeking to undertake an Honours year research project, SoTL offers a desirable alternative to laboratory-based research. These students may be attracted to SoTL through an interest in scientific communication, science teaching or student learning, which is often stimulated by their personal experiences. This presentation describes a compilation of our experiences in recruiting students, designing and supporting SoTL projects for Bachelor of Science Honours students across a number of Science schools, in a research intensive Australian university. We outline some of the major challenges that may face others looking to initiate SoTL Honours projects within science and solutions that have worked in our context. Among these challenges and solutions are issues around recruitment of students, the design, presentation of results and assessment of SoTL projects within science schools, and the ongoing support for SoTL science students and supervisors. References Probert, B. (2013). Teaching-focused academic appointments in Australian universities: Recognition, specialisation, or stratification? Australian Government - Office for Learning and Teaching. Canberra, Australia Rowland, S. L. and P. M. Myatt (2014). Getting started in the scholarship of teaching and learning: A how to guide for science academics. *Biochemistry and Molecular Biology Education*, 42(1): 6-14.

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#### **PO40**

##### **PILOTING PLURALISTIC FINANCIAL PEDAGOGY: URGENCY, CHALLENGES, AND LESSONS LEARNED**

**Vicki Jingjing Zhang<sup>1,2</sup>**

*1 University of Toronto*

*2 Canadian Progressive Economic Forum*

Focus of the Program: Even after the recent financial crisis, current financial education follows a strictly neoclassical model. How should we reimagine the way finance can be taught in undergraduate programs? What are the alternatives and how can we facilitate changes? In the past two years, I developed and implemented a series of pedagogical experiments to explore an alternative model incorporating financial ethics, moral reasoning, critical thinking and communication skills into the limited curriculum space educators are given. This poster will describe the series of pedagogical experiments and preliminary outcomes based on both classroom observation and deliberate student feedback. The experiments were conducted in a large-classroom second-year financial mathematics and a small fourth-year seminar course. They were a juxtaposition of individual and team-based activities - research projects that repurpose finance (community/climate bonds, green mortgages), product research that involves interactions with financial sector as consumers, reflective writing, and debates from the perspectives of various stakeholders. Course materials were drawn from various disciplines including economic history, risk management and quantification, political economy, and strive to provide a holistic understanding of the industry and its socio-economic impact. Preliminary findings highlight the urgency and efficacy of introducing elements of humanity education and critical thinking into the financial pedagogy. The poster will also describe an on-going study based on the new pedagogy, aiming to formulate a grounded theory of the effectiveness of financial ethics education that takes



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into account the unique cultural background of the student body, as well as students' past educational and/or working experiences. How it contributes to SOTL conversations and connections to conference theme: The poster contributes to the much-needed conversation on reimagining and 'reteaching' economics and finance in a post-crisis world. While it touches upon most of the conference sub-themes, it is most connected to sub-theme 6 leading SoTL in the disciplines. Educators leading a non-neoclassical pedagogical approach face various structural challenges in the current academia, which is heavily influenced by the financial industry and external professional organizations. The latter often control universities' curriculum setting and methods of student evaluation. The poster will briefly discuss these structural challenges and strategies to alleviate their impact while pushing forward the pedagogical reforms.

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