# ASCILITE 2017 Conference DRAFT Program

*As at 9 October 2017*

## Monday 4 December

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 7:30  | Registration Desk Opens  
Coffee and Tea on Arrival                                           |
| 8:30 – 9:00 | Welcome to Country  
Welcome from ASCILITE President – Associate Professor Dominique Parrish  
Welcome from USQ Vice Chancellor – Professor Geraldine Mackenzie |
|       | Chair: Professor Helen Partridge, Pro Vice-Chancellor (Scholarly Information and Learning Services) University of Southern Queensland  
Room: H102 Allison Dickson Lecture Theatre |
| 9:00 – 10:00 | Keynote Address  
From blended learning to analytics: Why we keep getting IT wrong?  
**Professor James Arvanitakis**, Western Sydney University |
|       | Chair: Professor Helen Partridge, Pro Vice-Chancellor (Scholarly Information and Learning Services) University of Southern Queensland.  
Room: H102 Allison Dickson Lecture Theatre |
| 10:00-10:30 | Morning tea  
Room: Refectory |
| Stream 1 | Room: H102  
Full Papers  
Chair: TBA |
| Stream 2 | Room: R113  
Full Papers  
Chair: TBA |
| Stream 3 | Room: L206  
Full Papers  
Chair: TBA |
| Stream 4 | Room: L209  
Full Papers  
Chair: TBA |
| Stream 5 | Room: C204  
Full Papers  
Chair: TBA |
| 10:30 – 11:00 | Addressing inconsistency in use of the VLE by academic staff: A collaborative approach  
**Elizabeth Masterman**  
Using threshold concepts about online teaching to support novice online teachers: Designing professional development guidelines to individually assist academic staff (*“me”) and  
Competence-based assessment and digital badging as guidance in vocational teacher education  
**Sanna Brauer, Pirkko Siklander**  
Evaluating the sustainability of tablet devices in blended learning  
**Cynthia Nicholas Palikat, Paul Gruba**  
A learning analytics view of students’ use of self-regulation strategies for essay writing  
**Kelly Trezise, Paula de Barba, David Jennens, Alexander Zarebski, Robert** |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:30</td>
<td>Me, Us, and IT: Insiders' views of the complex technical, organisational and personal elements in using virtual worlds in education</td>
<td>Sue Gregory, Brent Gregory, Denise Wood, Scott Grant, Sasha Nikolic, Mathew Hillier, Merle Hearns, Lisa Jacka, Marcus McDonald, Torsten Reiners, Sharon Lierse, Blooma John, Suku Sukunesan, Emily Rutherford, Jay Jay Jegathesan, Des Butler, Helen Farley, Paulette Irwin</td>
<td>CMALT cMOOC: Developing a scalable lecturer professional development framework Thomas Cochrane, Vickel Narayan</td>
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<tr>
<td>11:30-12:00</td>
<td>Challenges and tensions in the role of the LMS for medical education: Time for the &quot;next generation LMS&quot;?</td>
<td>Jill Lyall, Katharina Freund, Alexandra Webb</td>
<td>Online global collaboration: Affordances and inhibitors Julie Lindsay, Petrea Redmond</td>
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<tr>
<td>12:00-1:30</td>
<td>Lunch</td>
<td>Room: Refectory</td>
<td>ASCILITE AGM</td>
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<tr>
<td>1:30 - 1:50</td>
<td>Stream 1</td>
<td>Room: H102</td>
<td>Concise Papers</td>
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<td>Stream 2</td>
<td>Room: R113</td>
<td>Concise Papers</td>
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<td>Stream 3</td>
<td>Room: L206</td>
<td>Concise Papers</td>
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<td>Stream 4</td>
<td>Room: L209</td>
<td>Concise Papers</td>
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<td></td>
<td>Stream 5</td>
<td>Room: C204</td>
<td>Concise Papers</td>
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**1:30 - 1:50**

**Stream 1**

Monash Rocks: The first step in an augmented reality journey through deep time.
Barbara Macfarlan, Marion Anderson, Julie Boyce, Tom Chandler, Thomas Bochynek, Mike Yeates, Colin Maynard

**Stream 2**

Improving the undergraduate science experience through an evidence-based framework for design, implementation and evaluation of flipped learning.
Yvonne Davila, Elaine Huber, Jorge Reyna, Peter Meier

**Stream 3**

A learning analytics pilot in Moodle and its impact on developing organisational capacity in a university.
Jean-Christophe Froissard, Danny Liu, Deborah Richards, Amara Atif

**Stream 4**

Quantext: Analysing student responses to short-answer questions.
Jenny McDonald, Adon Moskal

**Stream 5**

Me in a minute: A simple strategy for developing and showcasing personal employability.
Trina Jorre de St Jorre, Liz Johnson, Gypsy O’Dea

**1:50 - 2:10**

**Stream 1**

Visualising mixed reality simulation for multiple users.
Michael Cowling, James Birt

**Stream 2**

Using an e-authoring tool (H5P) to support blended learning: librarians’ experience.
Sarika Singh, Kirstin Scholz

**Stream 3**

Defining “data” in conversations with students about the ethical use of learning analytics.
Abi Brooker, Linda Corrin, Negin Mirriahi, Josie Fisher

**Stream 4**

Transforming exams: How IT works for BYOD e-exams
Mathew Hillier, Andrew Fluck

**Stream 5**

Developing a technology enhanced learning framework to gain a snapshot of institutional successes and challenges
Mark Bailye, Caroline Steel, Michael Sankey

**2:10 - 2:30**

**Stream 1**

Using virtual and augmented reality to study architectural lighting.

**Stream 2**

Explaining learning achievement in student experience of blended learning: What can a sociomaterial

**Stream 3**

Knowing when to target students with timely academic learning support: Not a minefield with data mining.

**Stream 4**

Understanding students’ views on feedback to inform the development of technology-supported feedback systems

**Stream 5**


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<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2.30-3:00</td>
<td>Get to know the ASCILITE SIGS (Special Interest Groups) Hazel Jones, Colin Simpson, Mathew Hillier, Thomas Cochrane, Cassandra Colvin, Linda Corrin, Sakinah Alhadad, Julie Willems</td>
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<td>Learning analytics: What's in it for me (the teacher) and us (myself and my students)? Cathy Gunn, Claire Donald, Jenny McDonald</td>
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<td>Micro-credentialing is the future of higher education. Ekaterina Pechenkina, Juliet Buchanan</td>
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<td>Computer says no? Life literacies and digital literacies for LSES non-op students in a pre-tertiary program. Susan Hopkins</td>
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<td>Collaboration and technology for engaging online learning. Sarah Cahill, Stephanie Forbes</td>
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<td>Old me, new me, IT. Changing prisoner behaviour through visual stories. Rob Steer, Lara Enever</td>
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<td>Technology in Prisons for Learning: Making the Connection Helen Farley</td>
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<td>Becoming an AJET author or reviewer session. Michael Henderson, Eva Heinrich, Petrea Redmond</td>
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<td>3:00-3.30</td>
<td>Afternoon tea Room: Refectory</td>
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<td></td>
<td>Stream 1 Room: H102 Experimental Session</td>
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<td>Stream 2 Room: R113 Open Fishbowl</td>
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<td>Stream 3 Room: L206 Open Fishbowl</td>
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<td></td>
<td>Stream 4 Room: L209 Open Experimental</td>
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<td>Stream 5 Room: T120 Open Fishbowl</td>
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<td>Stream 6 Room: T125 Experimental</td>
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<td>Time</td>
<td>Session</td>
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<td>3.30-4.30</td>
<td>Dramaturgy: A sociological perspective for conceptualising Me. Us. IT in the context of online learning</td>
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<td>Online professional learning: lessons, challenges, opportunities.</td>
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<td>Technology enhanced academic development: Exploring approaches for professional learning in higher education</td>
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<td>Future happens: Hack your way to influencing and changing pedagogical and technological strategy and practice</td>
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<td>2017 Year of Open: Is it worth celebrating in Australia?</td>
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<td>Playing the Education System: competing, exploring, socialising, disrupting, but always engaging</td>
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<td>4.30-5.30</td>
<td>Welcome reception</td>
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<td>Venue: Japanese Gardens</td>
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<td>6:00-7:30</td>
<td>ASCILITE Schools Night</td>
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<td>Venue: Refectory</td>
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<td>6:00-7:30</td>
<td>Stargazing</td>
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<td>Venue: R113 and Gumbi Gumbi Gardens</td>
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<td>7:00 onwards</td>
<td>Dine Around</td>
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**Tuesday 5 December**

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<th>Time</th>
<th>Event</th>
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| 8:00     | Registration Desk Opens  
Coffee and Tea on Arrival          |
| 8:00-9:00| First timers ASCILITE Conference Breakfast  
Room: Refectory |
| 9:00 -10.30 | Welcome to the Day  
ASCILITE Awards Presentations  
Keynote Address  
Robotics in the future of work  
*Marita Cheng*, Young Australian of the Year 2012  
Chair: TBA  
Room: H102 Allison Dickson Lecture Theatre |
| 10.30 -11:00 | Morning tea  
Room: Refectory |
| Stream 1 Room: H102  
Concise Papers  
Chair: TBA | Stream 2 Room: R113  
Concise Papers  
Chair: TBA |
| Stream 3 Room: L206  
Concise papers  
Chair: TBA | Stream 4 Room: L209  
Concise papers  
Chair: TBA |
| Stream 5 Room: C204  
Concise papers  
Chair: TBA | Stream 6 Room: T125  
Concise papers  
Chair: TBA |
| 11:00-11:20 | The effect of digital game-based language learning mobile application on the development of complexity, accuracy, and fluency in foreign language monologic oral production among Chinese Learners of English as a Foreign Language.  
The power of us: Investigating the value of interaction and community in postgraduate studies.  
*Oriel Kelly, Nuhisifa Seve-williams, Binky Laureta, Keshni Kumar*  
Key success factors to implementing an active learning platform.  
*Megan Duffy, Jenny James, Chris Campbell, Jude Williams*  
Capacity building for equity and access using open education resources (OER).  
*Carina Bossu, Julie Willems*  
Us and IT: Capacity-building for blended learning - an intersection between educator, pedagogy, and technology.  
*Kaye Cleary, Gayani Samarawickrema, Sally Gauci*  
Framing the digitally capable university: Digital literacies as shared scholarly and professional practice.  
*Fiona Salisbury, John Hannon, Jennifer Peasley* |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair</th>
<th>Room</th>
<th>Location</th>
<th>Session Chair</th>
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<tbody>
<tr>
<td>11:20 – 11:40</td>
<td>Developing virtual collaborative health team educational environments. Feifei Han, Zehua Wang</td>
<td>Thomas Cochrane, Todd Stretton, Stephen Aiello, Sally Britnell, Duncan Christie, Stuart Cook, Vickel Narayan</td>
<td>H102</td>
<td>Room: H102</td>
<td>TBA</td>
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<td>ASCILITE Session</td>
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<td>Chair: TBA</td>
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<td>11:40 – 12:00</td>
<td>Mobile learning and speech technology for language teachers' professional development: A design-based study. Tran Le Nghi Tran</td>
<td>Susan Hopkins</td>
<td>R113</td>
<td>Room: R113</td>
<td>TBA</td>
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<td>Joy Galaige, Geraldine Torrisi-Steele</td>
<td>L206</td>
<td>Room: L206</td>
<td>Lightning talks</td>
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<td>Chair: TBA</td>
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<td>Lightning round</td>
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<tr>
<td>12:00 – 12:30</td>
<td>Developing an Australian Open Educational Practice SIG. Carina Bossu, Adrian Stagg</td>
<td>Suneeti Rekhari, Anselm Paul, Rachael Lahiff, Raine Phoenix</td>
<td>C204</td>
<td>Room: C204</td>
<td>TBA</td>
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<td>David Bruce Porter, Helen Jamieson, Adrian Moody</td>
<td>L209</td>
<td>Room: L209</td>
<td>Lightning talks</td>
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<td>Chair: TBA</td>
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<td>ASCILITE Session</td>
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**Stream 1**

- Developing virtual collaborative health team educational environments.
- Mobile learning and speech technology for language teachers' professional development.

**Stream 2**

- Social media in enabling education.
- "One size does not fit all": Towards cultural adaptivity in learning management systems.

**Stream 3**

- Face-to-face and virtual mathematics enrichment for rural schools: Intersection of teachers, students, technology and pedagogy.
- A community of inquiry approach to learning design in community-engaged learning program.

**Stream 4**

- Technology-Enhanced Learning Collaboratives: A Faculty Development Initiative for the Science, Medicine, and Health Disciplines.
- The ASCILITE Community Mentoring Program: Building capacity in technology enhanced teaching and research.

**Stream 5**

- Improving transitional and industry-supported student engagement through immersive video conferencing in a 3D virtual environment.

**Stream 6**

- AJET speed editing with an AJET editor.
- AJET Editorial Team
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<th>Time</th>
<th>Event</th>
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<tr>
<td>12:30-1:30</td>
<td>Lunch&lt;br&gt;Room: Refectory&lt;br&gt;TEL edvisor SIG chat&lt;br&gt;Bring your lunch and join the TEL Edvisor SIG to catch up and chat about current and future activities.&lt;br&gt;12:45-1:15pm&lt;br&gt;Room: R113</td>
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<td>1:30 – 3:00</td>
<td>Keynote Panel&lt;br&gt;Privacy, trust, student data, and the university: an exploratory panel&lt;br&gt;&lt;br&gt;&lt;strong&gt;Dr Jasmine Thomas&lt;/strong&gt;, Casual Academic, School of Law and Justice, University of Southern Queensland&lt;br&gt;&lt;strong&gt;Kate Young&lt;/strong&gt;, Student, Bachelor of Health - Biomedical Science Major, University of Southern Queensland&lt;br&gt;&lt;strong&gt;Dr Kirsty Kitto&lt;/strong&gt;, Senior Lecturer, Connected Intelligence Centre, University of Technology Sydney&lt;br&gt;&lt;strong&gt;Mr Allan Christie&lt;/strong&gt;, Vice President eLearning, Blackboard&lt;br&gt;&lt;br&gt;Chair: Barney Dalgarno, Charles Sturt University</td>
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<td>Time</td>
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<td>3:00 – 3:45</td>
<td>Afternoon tea</td>
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<td>Poster Viewing</td>
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<td>Mingle and chat with the authors of 25 digital posters which will be on display.</td>
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<td>3.45 – 4:45</td>
<td>Are learning Analytics leading us towards a Utopian or Dystopian future, and what can we as practitioners do to influence this? A Learning Analytics SIG Session.</td>
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<td>Critical perspectives on Mobile AR and VR from the AsciTite Mobile Learning SIG.</td>
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<td>Transforming Exams - stories from across Australia: AsciTite e-assessment SIG.</td>
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<td>Assuring quality online learning: The ASCILITE Technology Enhanced Learning Accreditation Scheme (TELAS)</td>
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<td>6:00 – 11:00</td>
<td>Dinner</td>
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**Wednesday 6 December**

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<th>Time</th>
<th>Event Description</th>
<th>Room/Location</th>
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<tbody>
<tr>
<td>8:30</td>
<td>Registration Desk Open</td>
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<tr>
<td>9:30-10:30</td>
<td>Welcome to the Day</td>
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<td>Keynote Address 3 To Be Advised</td>
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<td>Chair: TBA</td>
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<tr>
<td></td>
<td>Room: H102 Allison Dickson Lecture Theatre</td>
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<tr>
<td>Time</td>
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<tr>
<td>10:30-11:00</td>
<td><strong>Morning tea</strong>&lt;br&gt;Room: Refectory</td>
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<td><strong>Stream 1</strong>&lt;br&gt;Room: H102&lt;br&gt;Full papers&lt;br&gt;Chair: TBA</td>
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<tr>
<td></td>
<td><strong>Stream 2</strong>&lt;br&gt;Room: R113&lt;br&gt;Full papers&lt;br&gt;Chair: TBA</td>
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<td><strong>Stream 3</strong>&lt;br&gt;Room: L206&lt;br&gt;Full papers&lt;br&gt;Chair: TBA</td>
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<td><strong>Stream 4</strong>&lt;br&gt;Room: L209&lt;br&gt;Full papers&lt;br&gt;Chair: TBA</td>
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<td><strong>Stream 5</strong>&lt;br&gt;Room: C204&lt;br&gt;Full papers&lt;br&gt;Chair: TBA</td>
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<td><strong>Stream 6</strong>&lt;br&gt;Room: T125&lt;br&gt;Full Papers/ASCILITE Session&lt;br&gt;Chair: TBA</td>
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<tr>
<td>11:00-11:30</td>
<td><strong>The pedagogy-technology nexus: Bridging the divide between academic and student perspectives on educational technologies. Karin Barac, Sarah Prestridge, Katherine Main</strong>&lt;br&gt;Flipping diverse classrooms: Instructor experiences and perceptions. Ekaterina Pechenkina&lt;br&gt;Generating learning through the crowd: The role of social media practices in supporting students as producers at scale. Peter Bryant&lt;br&gt;By design: Facing the academic challenges of implementing technology enhanced learning in higher education and the example of a third year biology unit. Brett Fyfield, Iwona Czaplinski&lt;br&gt;Using the perceptions of online university students to improve the pedagogy and practice of distance educators: Them helping us to improve IT. David Bolton, Maria Northcote, Peter Kilgour, Jason Hinze&lt;br&gt;The role of IT in prisoner education. Jane Garner</td>
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<td>11:30-12:00</td>
<td><strong>The changing nature of student engagement during a digital learning task. Paul Wiseman, Jason Lodge, Gregor Kennedy, Amaël Arguel</strong>&lt;br&gt;A framework for program wide curriculum transformation. Angela Nicolettou, Andrea Chester, Spiros Soulis&lt;br&gt;Metaphors postgraduates use to depict their student experience: Individual, community and digital presence. Shelley Kinash, Linda Crane, Gary Hamlin, Amy Bannatyne&lt;br&gt;From how to why: Student experiences of a university’s technology-enhanced learning over 5 years. Carol Russell&lt;br&gt;Women and rural people’s participation in tertiary education through internet resources in India: a narrative inquiry. Sandeep Kaur Sandhu&lt;br&gt;Developing a digital equity SIG. Julie Willems; Helen Farley; Chris Campbell</td>
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<td>Time</td>
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| 12:00-12:30| **Internet of Things (IOT), PBL and 3D holographic modelling for smart agriculture education at The University of Queensland.**  
**Kim Byrceson, Armando Navas Borrero, Fabian Vasuiian**  
**Using cultural-historical activity theory to describe a university-wide blended learning initiative**  
**Anselm Paul**  
**Student generated multimedia for supporting learning in an undergraduate physiotherapy course.**  
**Susan Coulson**  
**It takes a village: Supporting the integration of digital textbooks in higher education**  
**Deborah Smith**  
**Constructive alignment of materials in tertiary programs.**  
**Sook Jhee Yoon, Paul Gruba** |
| 12:30 – 1:30| Lunch  
Room: Refectory |
| 1.30 – 2:30| **Closing Address**  
Reflecting on the past and imagining the future  
**Associate Professor Barney Daigarno, Charles Sturt University**  
Conference and ASCILITE awards  
2018 Conference handover  
Conference close  
Chair: Professor Helen Partridge, Pro Vice-Chancellor (Scholarly Information and Learning Services) University of Southern Queensland. |
| 2.30 - 3.30| **Closing reception**  
Venue: Courtyard |

**Thursday 7 December [post conference extra registration is required]**

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<tr>
<th>Time</th>
<th>Workshop 1 Description</th>
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| 9:00       | **Workshop 1**  
**10:00-1:30**  
**Room: Z122**  
**It’s Pedagogy GO with location-based mobile learning games**  
**Roger Edmonds** |
| 10:00-1:30| **Workshop 2**  
**10:00-1:30**  
**Room: T125**  
**Transforming exams: Hands on with the technology**  
**Mathew Hillier, Andrew Fluck, Martin Coleman** |
| 10:00-4:00| **Workshop 3**  
**10:00-4:00**  
**Room: T122**  
**Mobile Virtual Reality**  
**Thomas Cochrane, David Sinfield** |
**SUBMISSION TYPES**

**Concise Paper**
Concise Papers are around work in progress for pilot studies, small-scale exploratory projects, and reports on highly specialized topics or conceptual papers on recent development. Concise Papers also encompass reviews of key new directions for developing research-based best practices and for conducting research into practices in technology supported teaching and learning.

**Full Paper**
Full Papers may feature significant theoretical reviews, research studies in areas of emergent or innovative educational practice, case studies, evaluations or projects. Full Papers are expected to present quality research and require that the paper be original and have the potential to produce results that are sufficiently general for theoretical and/or practical knowledge to be recognisably increased.

**Poster**
Posters offer visual representations of projects and development initiatives that provide opportunities for conference delegates to discuss the topic with presenters. Posters enable individuals or groups to display information about innovative projects or activities in an informal, interactive environment.

**Lightning Talk**
Lightning Talks are opportunities to provide a very short overview of a project, showcase a technology or implementation, or highlight a key issue. Presentations are strictly limited to 5 minutes.

**Lightning Round**
A Lightning Round features 3 to 4 short presentations (for example 5 minutes) by different speakers all critically exploring the same topic, from different perspectives.

**Debate**
A Debate involves two debaters who critically explore a hot topic. Each debater presents his or her opposing view about the topic. The audience votes on which debater provided the most compelling view or argument.

**Open Fishbowl**
Open Fishbowl sessions create a space for dialogue on a topic of broad interest to the ASCILITE community. The advantage of fishbowl is that it allows the entire group to participate in a conversation.
Experimental Session
Experimental sessions are about going beyond the traditional ‘sage on the stage’ format. These sessions have a primary focus on encouraging delegate engagement and participation. Examples may include demonstrations, performances, installations, design sessions, unsessions, maker or hackathons, or interactive experiences. Sessions might result in the creation of outputs such as videos, learning objects or writings, to further emphasise engagement.

ASCILITE Session
A number of sessions will provide delegates to learn about, obtain support from or discuss future initiatives relevant to ASCILITE. This sessions are intended to be collaborative discussions.

Workshop
Workshops contribute towards professional development in educational technology related topics. In many cases workshops are derived from staff development activities conducted previously at the presenters’ own institutions. Workshops enable participants to engage with colleagues and experts in specific fields, to acquire knowledge, enhance skills and develop broader perspective. Workshops will take place post ASCILITE 2017 conference on Thursday 7 December.
ABSTRACTS

Invited keynotes, addresses and panels

From blended learning to analytics: Why we keep getting IT wrong?
James Professor Arvanitakis, Western Sydney University

Within the educational setting, the promises of technology rarely live up to what is delivered. Be it a lack of commitment, tools that fail to deliver the flexibility desired, faculty resistance or failure to commit resources, students frequently feel let down and educators are often frustrated. While most of us aim to ensure that the pedagogy trumps technology, it is more likely to that the pedagogy is shaped by the technology we can utilise. In this presentation, I will draw on a cross cultural project involving Australian and Indian universities to outline how we can better deliver the programs we promise with the technology available, rather than being held hostage by it.

Robotics in the future of work
Marita Cheng, 2012 Young Australian of the Year

Marita Cheng will take you through the robots of tomorrow and how AI will shape our future in ways greater than we can imagine today. From machines that can see for us, process data accurately and at a greater speed than humans, and robots that get the job done and don’t answer back. There is much to think about and prepare for as we create the future of work, but most importantly – what we can do to educate and equip our graduates for this future.

Keynote Address 3 – To be advised

Reflecting on the past and imagining the future
Barney Delgarno, Charles Sturt University

A common criticism of the field of educational technology is that it has a tendency to ‘reinvent the wheel’ rather than building on learnings from the past. Although this criticism has also been levelled at the field of education as a whole, in educational technology the problem is made greater by a tendency to see each new technology as entirely novel. New technologies are often assumed to have their own unique pedagogical affordances, rather than delivering traditional learning designs on new platforms. From this standpoint I was excited to be invited to deliver a presentation which is, on the one hand, a futurist look at where we are heading as a field, and on the other consciously reflects on where we have come from.

The presentation will use the history of the ASCILITE conference as an underlying thread to reflect on the history of educational technology research and practice. An analysis of past conferences including themes, keynotes and best papers will be used to identify the foci of educational technology scholarship over the past 30 years. Parallels will be drawn with the wider education and socio-political landscape.
Building on this reflective platform, the presentation will conclude with a speculative and imaginative view of possible futures. Recent Horizon Reports will be used to help predict technological trends alongside an examination of emerging political and economic trends. A picture will be painted of possible utopian and dystopian higher education futures and the technologies which will enable them to occur.

**Privacy, trust, student data, and the university: an exploratory panel**

Jasmine Thomas, Casual Academic, School of Law and Justice, University of Southern Queensland  
Kate Young, Student, Bachelor of Health - Biomedical Science Major, University of Southern Queensland  
Kirsty Kitto, Senior Lecturer, Connected Intelligence Centre, University of Technology Sydney  
Allan Christie, Vice President eLearning, Blackboard

Applications such as Facebook, Gmail, Twitter, and iTunes offer users convenience, connection, and content for no perceived upfront cost, but the currency of digital citizenship is privacy. Data collection, use, and resale by global companies reinforces the perception of private information as a commodity, with ethical, legal, and technological consequences largely unexplored. As higher education institutions increasingly collect and use data, questions arise over student privacy and the impact on a relationship of trust. This is exacerbated by the use of third-party (and often commercial) products in the curriculum; from publisher texts and online resources that require unique student log-in, to test banks that track individual student performance, to the integration of services like G+ and Facebook into learning and teaching activities. Furthermore, questions arise when companies dealing with student data are purchased by commercial interests and the data is seen as 'goods and chattels' in the company sale. This panel seeks to explore emerging ethical, legal, educational, and technological issues surrounding the collection and use of student data by universities, and the impact these strategies have on student trust and privacy. The session will be live-streamed and accessible either in-person at the conference, or online. Participants can engage with the discussion via Twitter; the social media presence for this event will be staffed so that questions can be posed to the panel. Please join us for what will be a thought-provoking, and sometimes challenging, session at ASCILITE 2017.

**Innovation Award**

**Improving Transnational and Industry-supported Student Engagement Through Immersive Videoconferencing in a 3D Virtual Environment**

Sasha Nikolic, University of Wollongong  
Mark Lee, Charles Sturt University  
Christian Ritz, University of Wollongong  
Farzad Safaei, University of Wollongong  
Tom Goldfinch, University of Wollongong  
Wanqing Li, University of Wollongong,

The aim of this project has been to use a novel immersive video collaboration technology to enhance the learning experience of transnational students, and to facilitate student interaction and engagement with their peers and with industry representatives. The goals are twofold: firstly, to afford offshore-enrolled students (those studying at overseas satellite campuses and partner institutions) equivalent learning experiences to locally enrolled students by emulating the essence of a single university campus environment, irrespective of their physical location; and
secondly, to provide relevant and authentic learning opportunities for all students through real-time involvement of professionals and other subject-matter experts

**Concise Papers**

**A Community of Inquiry approach to learning design in community-engaged learning program**  
Glenn Mason, Western Sydney University  
Brahm Marjadi, Western Sydney University  
Kashmira Dave, Western Sydney University

The Medicine in Context (MiC) program is the flagship community-engaged learning and teaching program at the Western Sydney University School of Medicine. MiC students attend placements at community organisations, General Practice clinics and face-to-face tutorials and lectures for two 5-week blocks. Responding to students’ lack of engagement and preference for more flexible delivery modes, a blended learning approach using the Community of Inquiry framework to guide the design has been gradually introduced since 2014. The MiC webpage was revised to simplify access to key information and resources. Five lectures were transformed into online modules and one workshop was converted into a flipped classroom. Multi-media open educational resources were added to replace some reading materials. Online “Weekly Study Guide” scaffolds, paces and aligns students’ self-directed learning with MiC learning outcomes. Moving program evaluation and some assessments to an online platform enables more timely feedback. These developments have resulted in novel, engaging learning activities. Preliminary evaluation indicates students’ greater engagement with the MiC program and deeper levels of learning indicated by increased levels of reflection and the demonstration of MiC learning outcomes being satisfied.

**A learning analytics pilot in Moodle and its impact on developing organisational capacity in a university**  
Jean Christophe Froissar, Macquarie University,  
Danny Lie, Sydney University  
Deborah Richards, Macquarie University  
Amara Atif, Macquarie University

Moodle is used as a learning management system around the world. However, integrated learning analytics solutions for Moodle that provide actionable information and allow teachers to efficiently use it to connect with their students are lacking. The enhanced Moodle Engagement Analytics Plugin (MEAP), presented at ASCILITE2015, enabled teachers to identify and contact students at risk of not completing their units. We discuss a pilot using MEAP in 36 units at a metropolitan Australian university. We use existing models for developing organisational capacity in learning analytics and to embed learning analytics into the practice of teaching and learning to discuss a range of issues arising from the pilot. We outline the interaction and interdependency of five stages during the pilot: technology, policies, skills, culture and leadership. We conclude that one of the most significant is developing a culture and behaviour around learning analytics.

**Capacity building for equity and access using open education resources (OER)**  
Carina Bossu, University of Tasmania  
Julie Willems, RMIT University
Open educational resources (OER) have already impacted educational systems around the world. In higher education more specifically, it has benefited learners and educators and influenced strategic plans and policies. OER have the potential to overcome existing equity considerations for academic staff in their ongoing continuing further education, and as part of their academic professional development. This paper examines the potential of OER to build capacity of academic staff in higher education, in particular to overcome some equity and access issues. It will also examines existing activities and strategies for professional development and provide some recommendations for the academics, developers and the sector.

**Defining “data” in conversations with students about the ethical use of learning analytics**
Abi Brooker, University of Melbourne
Linda Corrin, University of Meloburne
Negin, Mirriahi, University of South Australia
Jose Fisher, University of New England

In any conversation about the development of ethical standards for practice, it is vital that all stakeholders have a shared understanding of the main concepts in order to reach agreement. In the context of higher education and learning analytics, while many conversations are underway, it is less clear that such a shared understanding exists around the concept of “data”. In order to understand this situation more fully we conducted a study to investigate students’ perceptions of the ethical and privacy considerations related to the data that universities collect and use about them for the purposes of learning analytics. In this paper, we focus specifically on the understandings students have of the types of data that can be collected about them within the educational environment. The outcomes showed that there was a diversity of understandings, but that five main data types emerged: personal data, online activity, student feedback, academic information, and resource usage. In developing a better understanding of the ways students understand data, it can assist institutions to have more effective conversations with students about the ethical use of learning analytics.

**Developing a Technology Enhanced Learning Framework to gain a snapshot of institutional successes and challenges**
Mark Bailye, Blackboard International
Caroline Steel, Blackboard International
Michael Sankey, Western Sydney

In recent years, the realisation that technology enhanced learning (TEL) has the potential to transform and improve the quality of learning, teaching and the student experience (Walker et al. 2016; Marshall, 2010) and access new student markets has weighted the priority of TEL more heavily than in the past. While higher education institutions continue to invest heavily in TEL, many still struggle to identify and to address the elements that are essential to enabling institutional success. This paper focuses on the development of a TEL Framework that aims to provide a fast and efficient institutional snapshot of institutional challenges and successes in TEL alongside a set of actionable recommendations so they can respond to challenges in a more agile way.

The motivation to develop the Framework was to create a TEL discovery process, based on conversation and deep listening, that gathered different perspectives on key elements that facilitate the success of TEL and Return on Investment (ROI) especially in terms of academics and students themselves. The Framework itself is based on a set of 8 themes that are positioned as essential to the success of TEL. The themes
form the basis of a largely dialogic process of discovery that uses a set of theme cards as a scaffolding mechanism for a 90-120 minute workshop. The decision to adopt a dialogical method and use visuals to stimulate and scaffold conversations was based on previous work undertaken using assessment and feedback artefacts developed by the JISC Viewpoints Project (http://wiki.ulster.ac.uk/display/VPR/Home). The assessment and feedback cards were used effectively as a mechanism to trigger conversations and enabled participants to easily construct and visualise any ideas they came up with. It also encouraged interaction and inclusion that encouraged participants remained on task for much longer periods of time (Nicol, 2012).

These days the focus on user and usage data often excludes important perspectives that represent ‘people’ and ‘culture’. While the hard data offers credible evidence, failure to consider and address cultural assumptions, beliefs and local pedagogical contexts can hamper progress. After all, a cultural framework exists within all organisations that influences how people interpret their views, share assumptions and express their identity (Tierney, 1999) even in relation to TEL. Equally, the local pedagogical context represents ‘the relationship between a setting and how participants interpret that setting, including the meaning of practices’ Moschkovich and Brenner (2000, p.463). For these reasons, the TEL Framework was designed to surface a range of perspectives that encompassed participants’ cultural and pedagogical contexts.

**Developing virtual collaborative health team educational environments**
Thomas Cochrane, Auckland University of Technology
Todd Stretton, Auckland University of Technology
Stephen Aiello, Auckland University of Technology
Sally Britnell, Auckland University of Technology
Dunance Christie, Auckland University of Technology
Stuart Cook, Auckland University of Technology
Vickel Narayan, Auckland University of Technology

In this short paper, we introduce a conceptual framework that is under development to create virtual educational environments to simulate collaborative health team experiences. Building on our work of developing virtual environments for authentic Paramedicine education scenarios, we are extending the concept across the seven health disciplines at the university, beginning initially with a prototype involving three health discipline teams: Paramedicine, Nursing, and Physiotherapy. Using a design based research methodology we are developing prototypes of immersive simulated environments to simulate the real-world interaction between these three health teams for our students. We leverage a low cost mobile BYOD approach enabling rapid prototyping and development of these scenarios. Through the development of virtual reality (VR) simulations we are exploring authentic interprofessional handover experiences for our students in the disciplines of Paramedicine, Nursing, and Physiotherapy. Students from each health team will be able to authentically explore and critique the critical elements of the experience of a patient through the virtual handover of the same case scenario between these three teams.

**Digital equity: diversity, inclusion and access for incarcerated students in a digital age**
Helen Farley, University of Southern Queensland
Julie Willems, RMIT University
E-learning has been touted as the way in which universities can enable participation by large numbers of students from non-traditional cohorts. There is no doubt that the flexibility of access that eLearning allows makes study accessible for a number of cohorts, including those engaged in full-time work or caring duties. However, cohorts such as incarcerated students and other students without Internet access, are sitting on the wrong side of the digital divide and are increasingly marginalised by the very technology anticipated to overcome their exclusion from study. This paper examines the fundamental issues of equity involved with eLearning, and particularly for incarcerated students. The very issue of access to the Internet is fraught with rates of access varying widely between different sectors of society. This discussion prompts higher education providers to think beyond business-as-usual when speaking of increasing participation in higher education.

Enhancing the Role of Pedagogical Beliefs in TPACK-Based Professional Development
Lis Conde, University of Melbourne
Linda Corrin, University of Melbourne
Kristine Elliott, University of Melbourne
Gregor Kennedy, University of Melbourne

Professional development programs that aim to enhance the use of educational technology in higher education have become a priority in many countries. However, educators’ pedagogical beliefs may present a barrier to the successful outcomes of these programs and are often overlooked. This paper presents a professional development approach designed to make explicit educators’ pedagogical beliefs in regards to educational technology. The outcomes of the study will provide insights into strategies to address educators’ beliefs about teaching, learning and students in general, as a launching pad for improvements in practice to occur.

Explaining learning achievement in student experience of blended learning: What can a sociomaterial perspective contribute?
Feifei Han, University of Sydney
Robert Ellis, University of Sydney

Drawing on theories of student approaches to learning and sociomaterial perspectives on learning, we investigated how a combination of sociocognitive and sociomaterial variables explain variation in 365 students’ learning achievement in a first year human biology blended learning course in an Australian research intensive university. We used student experience questionnaires to measure students’ self-reports about their approaches to learning through inquiry, approaches to using online learning technologies, and their use of on-campus physical learning spaces. We also obtained observed measures of online learning technologies in terms of frequency and duration through analytics provided by a proprietary learning management system. Students’ learning achievement was evaluated using their assessment schedule comprising six assessment tasks. Correlation analyses were conducted to examine the interrelationship between approaches, use of online learning technologies, use of on-campus physical learning spaces, and achievement. Based on the correlation results, we regressed learning achievement on approaches, use of online learning technologies and physical learning spaces. The results showed that by introducing sociomaterial variables into the regression analysis, a significant proportion of learning achievement was explained over and above the explanations offered by student experience variables alone. The results highlight an important role of combining both self-report and observational data in analyses of student experiences of blended course designs.

Face-to-Face and Virtual Mathematics Enrichment for rural schools: Intersection of teachers, students, technology and pedagogy
Linda Galligan, University of Southern Queensland
Ron Addie, University of Southern Queensland  
Linda Stern, University of Melbourne  
Taryn Axelsen, University of Southern Queensland

While many students hold negative attitudes towards mathematics, research has found that such negative perceptions can be addressed by showing students how mathematics can be relevant to their lives (Galligan & Woolcott, 2015). Indeed studies in Science, Technology, Engineering and Mathematics (STEM) education have found that students become more interested in engaging in these areas if the learning opportunities presented to them are more personally relevant and presented in a manner that involves active learning, student-focused approach (Christensen, Knezek, & Tyler-Wood, 2015; Maass & Artigue, 2013; McGregor, 2016).

The program reported in this paper has been designed to address student engagement through an active learning approach that is presented through regionally relevant group-based learning activities. The program being reported in this paper is the University of Southern Queensland’s (USQ) Mathematics Rural and Regional Communities (MRRC) project. This project is an extension to the Mathematics Enrichment Program (MEP), which has been running since 2007. Since the MEP’s inception, more than 500 students, 29 schools, 15 pre-service teachers (who are involved to gain practical teaching experience) and many volunteer university lecturers and other mathematics and education professionals have been involved. Through an interactive virtual environment, the MRRC project connects regional high schools to USQ’s two campuses to build the capacity of the teachers and students involved. In this paper the authors describe the overall aim and structure of the MRRC program, preliminary evaluations of the program, analysis of the virtual space and future plans for the program.

Facilitating social learning through learning design – a perspective of collaborative academic development  
Chie Adachi, Deakin University  
Julie Savage, Deakin University  
Marchs O’Donnell, Deakin University

The notion of learning design and social learning has been foregrounded lately in the field of technology-enhanced learning. The rise of Web 2.0 that has allowed social networks to develop (not just to find and share information) in connecting global learners to learn from each other through the web. Following this movement, the higher education sector has begun to embed a design of learning that socially encourages peer learning among learners themselves. This is particularly relevant to MOOC environments where there is the potential for thousands of participants to learn through multiple open source tools with minimum intervention from educators. This may in turn present a challenge for university educators to adapt to this new learning environment and ways of teaching. This paper presents a work-in-progress collaborative project designed to respond to such transformation. We in a central learning and teaching unit, designed and developed a course that sought to build the capacity of academics going through this change: they were about to teach on a MOOC platform. We applied the same learning design principles our academics were asked to employ in the development of their MOOC courses. Our purpose was to model and test the framework, but also to distil authentic social learning for academics as learners first. Further research is required to measure the impact of this capacity-building course in order to further enhance the learning experiences of academics in the course.

Framing the digitally capable university: Digital literacies as shared scholarly and professional practice  
Fiona Salisbury, La Trobe University
The proliferation of “literacies” in educational discourse reflect a diverse array of interests, encompassing computer, information, technical, media literacies, and also forms like academic, financial, and health literacies. As digital literacies have become a concern for higher education curriculum, there has been a tendency to define it as a practical type of operational know-how. This paper sets out a university-wide, holistic and critical approach that breaks from the legacy of institutional framings that narrow digital literacies to a set of skills or competencies.

In developing a Digital Literacies Framework, La Trobe University articulated a shared understanding of digital literacies as the capabilities and attitudes that are needed by staff ‘in a digitally connected world’. This marks a shift from strategies that primarily deploy institutional curriculum mapping and measurement approaches; rather it argues for an institutional approach that requires collaboration and strategic engagement of students and academic and professional staff, in order to meet goals related to building digital capability. The La Trobe Digital Literacies Framework takes a whole university perspective that integrates policy and practice, providing a rationale for the critical importance of digital literacies in domains of life, work and learning, addressing an implicit ‘Why?’ question from staff and students. The University Library coordinated the Framework development. It was a scholarly undertaking that gathered evidence and reviewed international best practice. In this endeavour, the La Trobe University Library is a leader in the implementation of a university-wide strategy for digital literacies in Australia.

Improving the undergraduate Science experience through an evidence-based framework for design, implementation and evaluation of flipped learning.
Yvonne Davila, University of Technology Sydney
Elaine Huber, University of Technology Sydney
Joyce Reyna, University of Technology Sydney
Peter Meier, University of Technology Sydney

Flipped Learning (FL) is a student-centred pedagogical approach where new content is introduced prior to class which permits more time during class for active learning. Despite the growing body of evidence of the effectiveness of FL, many educators are reluctant to adopt this approach to teaching or are unsure of how to implement FL in their classes. Many students are uncertain of how to adapt their approaches to learning to a FL curriculum. In response to these challenges and calls for a robust framework to guide the design and implementation of FL, we developed the Flipped Teacher and Flipped Learner (FTFL) Framework based on the pedagogical literature. This paper reports on the use of our FTFL framework in the redesign of a large first year science subject from a traditional delivery to a FL delivery. We evaluated the efficacy of the redesign using a mixed methods approach with data on students’ interactions with FL activities, and student and educator experiences. Findings from two iterations of the redesign indicate successful implementation of FL through high student engagement with online and class materials, and positive feedback from students and academics. Using the FTFL framework to guide the design and integration of FL, with an emphasis on clear communication, is key to our successful FL intervention and support of student learning.

Key success factors to implementing an Active Learning Platform
Megan Duffy, Griffith University
Jenny James, Griffith University
Chris Campbell, Griffith University
This study reports on the key success factors when introducing a new lecture capture platform, Echo360 Active Learning Platform (ALP), at an Australian University. This is an interactive platform, designed to actively engage students in their courses including in lectures (online and/or face to face) through a range of interactive tools. A trial of ALP, which is known within the University as the Echo360 ALP Early Adopter Program, was conducted in Semester 2, 2016. The purpose of the Echo360 ALP Early Adopter Program was to identify the key success factors required for implementation of Echo360 ALP at the enterprise level. The study reports data on students’ experience of the interactive tools in Echo360 ALP. In total, over 1250 students, seven academics from across seven courses, Blended Learning Advisors from within each of the University’s four academic groups, and support staff participated in the Echo360 ALP Early Adopter Program. The results of the study show that students were engaged when using Echo360 ALP and with support from professional staff this program can be successfully implemented by academics. Thus, the key success factors to this implementation include the academics themselves and the support staff involved in the implementation. A further success factor was the vendor themselves.

**Knowing when to target students with timely academic learning support: Not a minefield with data mining**

Elizabeth McCarthy, University of Southern Queensland

The strategic scheduling of timely engagement opportunities with academic learning support, targeting specific student cohorts requires intentional, informed and coordinated planning. Currently these timing decisions appear to be made with a limited student focus, which considers individual course units only as opposed to having an awareness of the schedule constraints imposed by the students’ full course workload. Hence, in order to respect the full student academic workload, and maximise the quantity and quality of opportunities for students to engage with learning advisors, a means to capture and work with the composition and distribution of student full workload is needed. A data mining approach is proposed in this concise paper, where public domain information accessed from the back end html language of course unit information webpages is collected and consolidated in graphical form. The resulting visualisation of the students’ academic learning activities provides a quick and convenient means for academics to make informed scheduling decisions. The case study presented describes the implementation of the data mining in the context of discipline specific academic learning advisors at the University of Southern Queensland servicing three campuses under the ‘One-University’ model.

**Me in a Minute: a simple strategy for developing and showcasing personal employability**

Trina Jorre de St Jorre, Deakin University
Liz Johnson, Deakin University
Gypsy O’Dea, Deakin University

Graduates require evidence of employability beyond marks and grades to differentiate themselves in the highly competitive labour market. Universities cannot guarantee employment, but they can engage students in learning and recognise achievement that is relevant to employment. Here, we share preliminary insights from interviews investigating student perceptions of an extra-curricular video strategy designed to develop and showcase graduate employability. The Me in a Minute video strategy provides students with support to film a one minute video pitch aimed at potential employers. Student perceptions of the strategy suggest that in addition to providing an individualised artefact that can be used to showcase achievement, the strategy engages students in reflection that helps them to better understand and
articulate evidence of their achievements relevant to employment. Furthermore, students value the learning associated with pitching, more than the video itself.

**Mobile learning and speech technology for language teachers’ professional development: A design-based study**  
Tran Le Nghi Tran, University of Queensland

This study aims to investigate the use of mobile learning to provide pronunciation training for English as a Foreign Language (EFL) lecturers from Vietnamese provincial universities. Mobile learning offers a potential solution for the delivery of professional development to lecturers based outside major cities thanks to its capacity to enable learning anytime, anywhere. Mobile learning and speech technology are expected to facilitate lecturers’ self-direct learning to fulfil their professional development needs using their own devices. This paper reports results from a pilot study which serves as the first phase of an on-going design-based research project. The pilot study was carried out to explore the feasibility of an online pronunciation course and identify potential problems for future course iterations in the context of participants living outside major cities in a developing country. The objectives of the project are to establish and test a set of fundamental principles for mobile learning to be an effective way of providing online professional development for lecturers based outside major cities and to shed light on the necessary adjustments in course design to make it a scalable model for future education planning. In this study, both qualitative and quantitative data were collected during two iterations of an online pronunciation professional development course for EFL lecturers from Vietnamese provincial universities.

**Monash Rocks – The first step in an Augmented Reality journey through deep time**  
Barbara Mcfarlane, Monash University  
Marian Anderson, Monash University  
Julie Boyce, Monash University  
Tom Chandler, Monash University  
Thomas Bochynek, Monash University  
Mike Yeates, Monash University  
Colin Maynard, Independent Game Developer

This paper describes the development of the "Monash Rocks" app - designed to bring our landscape to life through augmented reality. We describe the highs and lows of the development process, the lessons we learned along the way, and our plans for further development of the app to showcase the Monash Earth Sciences Garden and extend the space into further innovative, immersive teaching and learning experiences.

The creation of Monash University’s Earth Sciences Garden (MESG), a "living" geological map of Victoria collating nearly 500 rock specimens, gave us the perfect vehicle for an Augmented Reality (AR) experience. Students and visitors to the MESG can now use the Monash Rocks App on their phones to view a 3D display that overlays the live camera feed on the device enhancing the experience of the environment, taking it to another dimension.

The value in augmenting a learning environment is in its ability to pull virtual objects into real scenes (Green & Chandler, 2014, p.549), in this
case expanding the physical environment through time and space on a journey back millions of years. The rock now becomes alive, telling its story and supplying information that is missing in the “real life” walk through the garden.

‘One size does not fit all’: Towards cultural adaptivity in learning management systems
Joy Galaige, Griffith University
Geraldine Torrisi-Steele, Griffith University

In recent years, online learning has proliferated higher education and subsequently there are a great many learners seeking to achieve their academic goals by undertaking online courses. Online learning platforms have attracted learners with diverse cultural backgrounds. The cultural diversity evident in online learning environments presents challenges for online course designers as to design for culturally sensitivity or cultural inclusivity. It is well acknowledged that learning is embedded in the socio-cultural context and so culture impacts on cognitive processes, participation, engagement, and collaboration, among other things. However, recent studies reveal that online courses are not designed in a culturally sensitive way.

Learning Management Systems (LMS) such as Moodle, Canvas, Blackboard, and Desire2Learn among others enable instructional/course designers to easily and quickly design and deliver online courses. However, LMS enable a ‘one-size-fits-all’ approach to the design and delivery of online courses hence lack adaptive features, including those needed for cultural sensitivity.

In the current study, we investigate instructional designers’ perspectives on culturally sensitive learning design features in online learning design. In a preliminary survey, the instructional designers were asked “how important do you believe it is to consider culture during online course design?” the intent is to come up with an LMS learning design framework for culturally sensitive online learning design. We believe that this will efficiently and effectively enable design of online learning that address cultural diversity to fit a learners cultural profiles, and subsequently making positive impact on engagement, experience and learning outcomes.

Social Media in Enabling Education
Susan Hopkins, University of Southern Queensland

This paper argues that students from rural and low socio-economic status (LSES) backgrounds, who undertake enabling education, benefit from the social, cultural and network capital which digital, narrative and connective platforms may provide in pre-tertiary teaching and learning. In particular, this paper discusses the trial of the use of the social networking site Facebook as a learning management system within an enabling tertiary preparation program designed to raise the aspirations and widen the participation of economically and geographically disadvantaged young people. It also discusses the role of new media in an approach to Tertiary Preparation which recognises that to succeed in their university study, non-traditional students need to develop not only academic skills and confidence, but the skills and confidence to survive and thrive in the broader networked digital society. The presentation includes updates, images and examples from the author's most recent use of a closed group Facebook page to facilitate digital literacy, enculturation, engagement, socialisation and social networking among participants in the 2017 Life Literacies program for tertiary preparation students, funded through the Commonwealth Government's Higher Education Participation and Partnership Program (HEPPP) in 2017 (to improve the access, participation and success of students from communities under-represented in higher education).
The Combined Effects of Physical and Virtual Models in Learning Cellular Biology

Jinlu Wu, National University of Singapore
Hong Van Nguyen, National University of Singapore
Ruilin Chen, National University of Singapore
Pui Yee Fiona Fan, National University of Singapore
Kar Jun Loh, National University of Singapore

Physical models have long been used in science education for visualization of complex cellular structure and dynamics during face-to-face lecture (F2F). Recent advancement of technology has enabled us to create virtual models and to share knowledge remotely. This study aims to find out whether physical models can be integrated into digital media to enhance student engagements and learning for an undergraduate Life Sciences module. Three independent experiments were conducted to assess learning effectiveness on three different biology concepts through four learning approaches: video with virtual model only, video with integration of virtual and physical model demonstration, F2F lecture using virtual model only, F2F lecture using virtual and physical models. Participants were randomly assigned to different groups each with the different learning approach. Data collected through pre- and post-tests revealed that significant improvement in learning scientific concepts occurred in one of three controlled experiments when the video contains both virtual and physical models, while no obvious difference found in the other two experiments. This data might suggest that well-prepared digital media alone can convey scientific information well and additional physical models do not aid in information acquisition. However, survey data on student learning experience showed that all participants preferred to learn from physical models. In all three experiments, students consistently voted that the physical models attracted their attention and enhanced their interests. They made better mind maps and raised more questions. This may hint that a combination of digital media with physical models improves engagements and promotes higher order thinking.

The Effect of Digital Game-based Language Learning Mobile Application on the Development of Complexity, Accuracy, and Fluency in Foreign Language Monologic Oral Production among Chinese Learners of English as a Foreign Language

Feifei Han, University of Sydney
Zehua Wang, Shaanxi Xueqian Normal University

The study reported the effect of a digital game-based language learning (DGBLL) mobile application "Speaking English Fluently – An Automated Scoring Artificial Intelligent Tutoring System on Spoken English" on the complexity, accuracy, and fluency in foreign language (FL) monologic oral production among 31 second year Chinese university learners of English as a foreign language (EFL). The participants’ monologic oral production was measured in the first (week 1) and last week (week 21) of a semester using the same narrative picture description task. The oral production was audio-recorded and transcribed. Both the transcripts and audio-files were analyzed on the complexity, accuracy, and fluency dimensions. The complexity was measured using the number of Mean (M) words per T-unit, the accuracy dimension was measured using the number of repairs and errors per 100 words; and the fluency dimension was measured via speech rate (i.e., number of words per minute), and M length of pauses. Students were required to download the mobile application and followed the monologic practice section twice a week for 30 minutes each time. Using paired sample t-tests, we found that even though the participants’ repair rate and speech rate remained unchanged, they produced more complex monological speech, had significantly fewer errors, and reduced average length of pauses after 20 weeks treatment using the mobile application, demonstrating a positive effect of the DGBLL mobile application on FL learners’ monological oral production.
The power of Us: Investigating the value of interaction and community in postgraduate studies
Oriel Kelly, New Zealand Tertiary College
Nuhisifa Seve-Williams, New Zealand Tertiary College
Blinky Laureta, New Zealand Tertiary College
Keshni Kumar, New Zealand Tertiary College

The power of community – of Us – has long been assumed to be important in adult learning. Student interactions on discussion forums are encouraged, and it has been claimed that they foster a learning community which makes a difference to student outcomes through collaboration and joint construction of knowledge. This paper reports on interim results of a research project to establish, firstly, if there is a correlation between student participation in forums and their overall course outcomes, and secondly, shares a matrix designed to code both social and cognitive forum activity, to support an investigation into the existence of a learning community in student forum conversations – the power of Us.

The synergistic and dynamic relationship between learning design and learning analytics
Dirk Ifenthaler, University of Mannheim
David Gibson, Curtin University
Eva Dobozy, Curtin University

The synergistic relationship between learning design and learning analytics has the potential for improving learning and teaching in near real-time. The potential for integrating the newly available and dynamic information from ongoing analysis into learning design requires new perspectives on learning and teaching data processing and analysis as well as advanced theories, methods, and tools for supporting dynamic learning design processes. Three perspectives of learning analytics design provide summative, real-time, and predictive insights. In a case study with 3,550 users, the navigation sequence and network graph analysis demonstrate the potential of learning analytics design. The study aims to demonstrate how the analysis of navigation patterns and network graph analysis could inform the learning design of self-guided digital learning experiences. Even with open-ended freedom, only 608 sequences were evidenced by learners out of a potential number of hundreds of millions of sequences. Advancements of learning analytics design have the potential for mapping the cognitive, social and even physical states of the learner and optimise their learning environment on the fly.

Transforming Exams - How IT works for BYOD e-Exams
Mathew Hillier, Monash University
Andrew Fluck, University of Tasmania

This paper focuses on the 'IT' side of a bring-your-own-device (BYOD) based e-Exam system developed as part of an Australian government funded project (transformingexams.com). The context for the use of our e-Exam solution is the supervised space of the exam room. A key element of the work is to enable authentic forms of assessment. To this end we have designed the solution to allow complex constructed problems that can be addressed using a range of contemporary 'e-tools of the trade'. The system works with BYOD where students boot their own laptop using a specially crafted USB stick that contains a standardised operating system and a suite of applications. By giving teachers and students access to contemporary software tools we are providing the opportunity to greatly expand the pedagogical landscape of the exam room encouraging more authentic assessment practices. The paper provides technical details of both the e-Exam USBs used for the student
test environment and newly developed tools used to streamline the deployment of exam data and retrieval of student responses. A phased strategy is outlined for moving from paper based exams via paper-equivalent e-exams through to post-paper exams involving multimedia, a range of software applications, quiz engine and then onto whitelisted network resources and fully logged Internet access enabled during an exam. The roles of groups (Us-s) and individuals (Me-s) within the process of running an e-exam are outlined by comparing current paper-based exam workflows and that of e-exams to provide a richer description of the approach.

### Understanding students’ views on feedback to inform the development of technology-supported feedback systems
Linda Corrin, University of Melbourne
Paula de Barba, University of Melbourne

In an increasingly expanding higher education system, students have routinely said that they don’t get enough access to feedback to support their learning. While this feedback loop is recognised as a critical issue, the growing use of technology as part of teaching and learning could provide some solutions to this problem. The emergence of the field of learning analytics has the potential to provide mechanisms for reducing some of the concerns students have about receiving feedback. However, a greater understanding of how learning analytics can be used to provide meaningful assessment feedback to students is needed. This paper presents the initial findings from a study that investigated students’ perspectives on what feedback is most useful for their learning which is influenced by the type of assessment, the discipline in which the assessment takes place, the year level of the student and the ability to compare performance to others. The outcomes of this study provide evidence of what students want when it comes to analytics-based feedback which can be used to inform the development of guidelines for how such feedback can be designed and delivered in higher education.

### Us and IT: Capacity-building for blended learning - an intersection between educator, pedagogy, and technology
Kaye Cleary, Victoria University
Gayani Samarawichrema, Victoria University
Sally Gauci, Victoria University

When Victoria University (VU) Australia, adopted a new learning management system (LMS) as part of its Blended Learning Strategy and Operational Plan in 2014, it introduced a range of support structures including a staff support and training program. Complementing this, the Graduate Certificate in Higher Education (the course providing professional development for early career academic staff) offered an elective AET4010 Blended Learning Design and Development fusing the pedagogical and theoretical aspects of blended learning to foster teaching as a design science. In this study we investigate the effectiveness of AET4010 in developing participants’ capacity to design and develop blended learning. In this paper we report on the data from the first stage of this investigation. Data is derived from assessment rubrics. Complementary qualitative data will be collected in the second stage via interviews conducted after the participants complete the unit. We analyse our findings against the JISC Building Digital Capability Framework mapped to the UK Professional Standards Framework. This Framework identifies early career academics’ capabilities (Associate Fellows). The emerging findings indicated the value of capacity building through a structured unit of study enabling participants to experience learning from their own learner’s standpoint while reflecting on pedagogical perspectives and ‘teaching as design’.

### Using an e-authoring tool (H5P) to support Blended Learning: Librarians’ experience
Sarika Signh, Victoria University
Kirstin Scholz, Victoria University

With an increasing emphasis on blended learning at Victoria University (VU), all the units are to be redesigned and delivered in a blended approach by the end of 2020. This presentation will outline VU librarians’ experience in the use of an open source e-authoring tool (H5P) to support the University’s blended learning strategy. We will discuss using the H5P tool to enhance library instructional videos and create interactive learning objects to support a specific unit. By using these enhanced resources, students are actively engaged with the content and can easily revisit and review at any time and are able to complete self-assessment activities at their own pace and receive immediate feedback on their performance. Furthermore, this presentation will showcase various H5P learning objects created by Librarians that are reusable and shared with all VU staff, who can access from the learning objects library in VU’s learning management system (VU Collaborate). Instead of duplicating learning resources, teaching staff and other librarians are able to save time through reusing the learning objects/activities. In addition, we will outline the data that were accessible through VU Collaborate and feedback received from the teaching staff. The benefits of the tool outweighs the limitations and future plans are suggested to continue utilising this tool for the University’s First Year Model.

Using virtual and augmented reality to study architectural lighting
James Birt, Bond University
Cassandra Colvin, Bond University
Linda Corrin, Bond University
Sakinah Alhadad, Bond University

This paper presents industry stakeholder insights from the implementation of a dual modality intervention using virtual and augmented reality simulation to study complex lighting theory in architecture design. Using a design based research method the aim is to evaluate these insights and inform a pilot study to educate first year architectural design students on the complexities of lighting the built environment and methods to improve architectural workflow. The aim is to enable learners to experience natural and artificial lighting methods comparatively in real-time through multiple comparative visualisation methods. This is important to make informed evaluations regarding architectural designs in terms of spatial quality, character, performance, and user-comfort levels. This in turn allows architects to rapidly modify their designs to accommodate or mitigate the environmental effects. Outcomes from the initial usability test highlight the ability to switch back and forth between the virtual and augmented reality simulation technology, and between lighting visualisation modes as a huge step forward by the industry stakeholders. Additionally, the idea of representing the physical building where the simulation took place virtually using a detailed mapping gave a real-world anchor that made the simulations easy to navigate, leading to improved satisfaction and engagement. However, the study also highlighted improvements in the delivery of the simulation is required to improve simulation learnability and efficiency.

Visualising Mixed Reality Simulation for Multiple Users
Michael Cowling, Central Queensland University
James Birt, Bond University

Blended reality seeks to encourage co-presence in the classroom, blending student experience across virtual and physical worlds. In a similar way, Mixed Reality, a continuum between virtual and real environments, is now allowing learners to work in both the physical and the digital world simultaneously, especially when combined with an immersive headset experience. This experience provides innovative new experiences
for learning, but faces the challenge that most of these experiences are single user, leaving others outside the new environment. The question therefore becomes, how can a mixed reality simulation be experienced by multiple users, and how can we present that simulation effectively to users to create a true blended reality environment? This paper proposes a study that uses existing screen production research into the user and spectator to produce a mixed reality simulation suitable for multiple users. A research method using Design Based Research is also presented to assess the usability of the approach.

What's in a name?: the ambiguity and complexity of technology enhanced learning roles
Kate Mitchell, La Trobe University
Colin Simpson, Australian National University
Chie Adachi, Deakin University

With the growing ubiquity of educational technology, there has been an increased need for specialised practitioners to advise on and support technology enhanced learning (TEL) within Higher Education. Academic developers, instructional designers and educational technologists are all examples of these skilled individuals typically working in ‘third space’ that crosses complex boundaries - between the pedagogical and technological, and the academic and professional. However, role titles and descriptions of duties are often unclear at best, with a lack of consistent terminology used across institutions and in the literature. This can lead to confusion and tensions when working with multiple institutional stakeholders and exacerbates ‘the academic/professional divide’ in Higher Education. This paper presents a synthesis of key literature related to contemporary TEL advisor and support roles in Higher Education alongside a preliminary analysis of the 37 recent position descriptions of these roles. The application of social practice theory as our conceptual framework enables us to further explore the significance of practices in these TEL roles. This paper offers a step forward to the ways in which clarity and consistency of these roles might be sought. Future implications of this study are included for further consideration.

Quantext: analysing student responses to short-answer questions
Jenny McDonald, University of Auckland
Adon Moskal, Otago Polytechnic

We introduce a web-based tool for teachers to support the rapid analysis of student responses to short answer or mini-essay questions. Designed to support teaching in large-class settings, it aims to bring to practicing teachers analytic tools that can reveal insights in their student text data. We background development of the tool to date, briefly describe its architecture and features, and report on a bench-test evaluation. Finally, we introduce a pilot study to evaluate the tool in classrooms at three NZ universities and one polytechnic. We conclude with options for accessing the tool and outline plans for ongoing development.

Full Papers

A cross-disciplinary evaluation of digitally recorded feedback in higher education
Michael Henderson, Monash University
Michael Phillips, Monash University
Tracii Ryan, Monash University
Research demonstrates that assessment feedback created using audio, video, and screencast recordings can offer advantages over text-based feedback. However, the majority of research and experience in this domain has largely been limited to a single disciplinary or cohort context. This project aimed to empirically investigate if recorded feedback (i.e. audio, video, and screencast) could be effectively implemented across different contexts, including disciplines. As part of this, teaching staff from five discrete subjects provided digitally recorded feedback to students on at least one assessment task. Assessment types included various forms of written assignments, completed by individuals or groups of students. This paper reports on survey data collected from 351 students who received recorded feedback or text-based feedback. Survey respondents were enrolled in five subjects across four disciplines (Education, Pharmacy, Engineering, and Management). To triangulate the survey findings, interview data from nine students are also included. Overall, the findings indicate that students in all disciplines found digitally recorded feedback to be more satisfying, more useful, and more engaging than text-based feedback alone. However, these outcomes differed across contexts; results tended to be elevated in subjects with smaller cohorts, and when richer audiovisual modalities were used. However, in two of the cases students’, while still being overall positive, indicated that the feedback was less clear, usable and satisfying than indicated in other cases. These differences are explored and issues of teacher experience, cohort size, group assessment, and disciplinary cognate traditions are considered.

A framework for program wide curriculum transformation
Angela Nicolettou, RMIT University
Pandrea Chester, RMIT University
Spiros Soulis, RMIT University

Designing and delivering higher education programs in a global climate of constant change, technological advances and uncertain futures leads to the need for curriculum transformation practices that are innovative and responsive. This paper describes a university-wide approach to developing a framework for program level transformation that is strengths-based, data-informed and design-led. A strengths-based approach builds on good practice, creating a space that is positive and forward looking. Data-informed practice and the inclusion of data wranglers on the project allowed for conversations about the known, unknowns and desirable directions to take place and inform directions. Design-led practices introduced design thinking principles such a building empathy and co-design with students, alumni and industry. The emergent framework has three key stages: vision, design and build. The vision stage focuses on the program team, its students, industry and desired direction for transformation. The design stage focuses on defining challenges, ideating, co-designing and creating a plan for development. The build stage uses a rapid prototyping and iterative approach to development that incorporates user testing early in the stage. The project has delivered a framework for program level transformation and innovation and has shown that a strengths-based approach that is data informed and engages with students as co-designers has the capacity to unite teams, inform program visions and allow for innovative practices to emerge. Taking a learner experience approach to design also highlighted the value in engaging students and industry in curriculum design from the start of the process rather than simply as end users.

A framework for the analysis, comparison and evaluation of e-assessment systems
Pedro Isaiaas, University of Queensland,
Paula Miranda, Escola Superior de Tecnologia de Setúbal
Sara Pífano, Information Society Research Lab
The use of technology within the education sector affects many aspects of the learning process, including assessment. Electronic assessment presents many advantages over traditional paper based methods and it is being widely used by teachers and educational institutions. The progressive acceptance and use of e-assessment has resulted in the development of a panoply of e-assessment systems. This paper aims to propose a framework for the analysis and comparison of e-assessment systems, to support the selection of the most suitable assessment instruments. The proposed framework is composed of eight criteria: variety of design options, scalability, security, access and usability, feedback features, personalisation, cost and interoperability, which overall were validated by the viewpoints of educational experts via an online questionnaire.

A learning analytics view of students’ use of self-regulation strategies for essay writing
Kelly Trezise, University of Melbourne
Paula de Barba, University of Melbourne
David Jennens, Vericus Pty Ltd
Alexander Zarebski, Vericus Pty Ltd
Robert Russo, Vericus Pty Ltd
Gregor Kennedy, University of Melbourne

Essay writing is a fundamental part of higher education. Students’ use of self-regulatory skills, such as time management and planning and writing strategies, while writing essays predicts better writing quality. Current characterisations of the relationship between self-regulation and essay writing are limited by the difficulty of assessing self-regulation in real-life essay writing contexts. This paper reports on a novel approach to examine students’ use of self-regulation strategies in a real-life setting, using learning analytics. Four case studies are presented to illustrate similarities and differences in students’ use of time management and planning and writing strategies. Participants managed their time in very different ways to complete the assignment. They were active over a different number of days, engaged in sessions of different durations, and at different times of the day. The participants used variety of approaches to their writing: one participant started early and allowed editing time, another typed gradually over a number of days, and two participants waited until the due date to complete the essay, with varying amounts of editing. Findings from this research contribute to a novel detailed empirical evidence of different essay preparation behaviour in real-life settings. After further studies with a variety of essay types and student samples, there may be significant value in using the approach outlined in this paper as the basis of tools to provide students with advice and support in their essay preparation.

Addressing inconsistency in use of the LMS: a collaborative approach
Elizabeth Masterman, University of Oxford

Inconsistency in the use of the learning management system (LMS) by academic staff is a source of dissatisfaction among university students in the UK. One solution is to establish a set of minimum standards (or baseline) for LMS use within an individual institution. Another is to supply templates – frameworks for LMS course sites – with a view to providing students with a seamless experience in their interactions with the LMS. This paper describes how the issue of inconsistency was addressed at a leading research university in the UK through an exploratory project, WebLearn Improved Student Experience (WISE). The widespread devolution of responsibility for site management to administrative staff, together with the ‘maverick’ creation of course sites by those academics who chose to engage with the WebLearn LMS, had resulted in
unevenness in students’ access to learning materials. The project team engaged in close collaboration with 19 departments in order to achieve the immediate purpose of improving uptake of, and consistency in, their LMS presence. The ultimate aim was to develop a support package comprising LMS templates and ‘best practice’ guidelines that would enable departments in the future to achieve the same objective, either unsupported or with minimal assistance from the central team of learning technologists. The project was evaluated using a modification of the Innovation Histories method. The evaluation findings additionally threw into relief the complex social and cultural factors at play that can inhibit a consistent student experience in an institutional LMS.

**Analysing the Learning Pathways of Students in a Large Flipped Engineering Course**

Carl Redisema, University of Queensland  
Hassan Khosravi, University of Queensland  
Melanie Fleming, University of Queensland  
Lydia Kavanagh, University of Queensland

Recent advancements in educational technologies (learning management systems, online discussion forums, peer-learning tools) coupled with new methods of course delivery (e.g. blended, flipped, MOOCs) provide significant opportunities for universities to deliver challenging, high quality, yet engaging curriculum for students. In this paper, we examine the variations and similarities of student’s approaches to learning (learning pathways) by examining how well they performed in a large (N ~ 1000 student) first year engineering flipped classroom. The analysis focused on student’s performance in their assessment (formative and summative) as well as their online interaction with a range of online tools purposely built to support students through peer learning and acquisition of resources and expertise. Analysis using k-means clustering reveals that students do in fact adopt a variety of successful pathways through the course. The unique aspects of this work lie in the use of analytics algorithms that whilst perhaps routinely utilised in data mining, are not as well utilised in better understanding patterns (successful or otherwise) of student interactions within a technology enhanced active learning environment that integrates theory with engineering practice.

**Blended learning as a disruption in a vocational education building program**

Meg Colasante, La Trobe University  
Cathy Hall-Van den Elsen, RMIT University

A building and construction teaching team in a vocational education school (within a university in Melbourne) introduced a blended learning model to one-third of their program. Traditionally, building students are accustomed to a high ratio of face-to-face learning, therefore, this new model disrupted the experience of both teacher and student. The model was examined using e-learning evaluation research methodology and findings are presented using the framework of Glazer’s (2012) characteristics of blended learning. Examination of the program identified areas in need of attention, such as active learning and online interaction and communication. Finally the authors promote the use of Glazer’s framework as a pedagogical evaluation tool for blended learning designs, while drawing out a particular focus on teacher presence as a distinct item in this framework.

**By design - facing the academic challenges of implementing technology enhanced learning in higher education and the example of a third year biology unit**

Brett Fyfield, Queensland University of Technology  
Iwona Czaplnski, Queensland University of Technology
This paper takes a design research approach to the challenge of transforming learning and teaching in higher education (HE) as it is experienced at the level of an interdisciplinary team composed of content matter experts and specialists in education. It is based on the reflections of members of the team working collaboratively to transform an undergraduate biology unit to improve both student engagement and teaching staff satisfaction.

Using semi-structured interviews and reflective inquiry the authors attempt to uncover the salient features of the process of implementing technology enhanced learning, and generate constructive design solutions. The work is situated in the scholarship of learning and teaching as it encourages "reflection-in-action" and a commitment to sharing what works in STEM teaching and learning in contemporary environments. The teaching team focus on the complex problems of preparation, attendance, and engagement in a series of intensive labs, whilst the professional staff focus on the complex problems of innovation and student engagement in HE.

A number of known and hypothetical learning design principles are integrated with the affordances of the chosen learning environment (OneNote) and used to propose plausible solutions. These solutions are used to iteratively refine the learning environment and reveal new design principles. The paper emphasises the benefits of providing for and supporting the emergence of microcultures, and suggest strategies for those that wish to emulate the approach taken.

**Challenges and tensions in the role of the LMS for medical education: time for the "next generation LMS?"**

Jill Lyall, Australian National University  
Katharina Freund, Australian National University  
Alexandra Webb, Australian National University  

In the context of discussions of a “next generation LMS” and other contemporary challenges in higher education, this case study looks at the iterative process a team of educational designers and Medical School academics used in a review of the Medical School LMS sites. Adopting the framework of the actor network theory, this reflective process discovered the tensions, dynamics and issues involved, and worked to gain and maintain key Medical School staff engagement and support for the review and for any changes that might be recommended. This paper reflects on emerging possible models for technology-enhanced learning beyond our current institutional LMS while acknowledging the institutional constraints on learning innovation within the global higher education context. Next generation LMS models may provide a more flexible future solution that could be applicable not just to medical education, but to higher education generally.

**Competence-based assessment and digital badging as guidance in Vocational Teacher Education**

Sanna Brauer, University of Lapland  
Pirkko Siklander, University of Lapland  

Digital pedagogy means applying new technologies to teaching and learning in online, hybrid and face-to-face learning environments. Digital open badges, a set of micro-credentials, support equal and egalitarian competence-based assessment models. Criterion-based digital badging combined with gamification promise learning solutions that have the potential to improve learning outcomes substantially. The aim of this study is to investigate how a competence-based assessment process in an open badge management system enhances learning and guides students to improved learning outcomes. The theoretical framework is focused on concepts of gamification and instructional badging.
Data were collected in 2016 from group interviews (n=6) of trained Finnish professional teachers (n=17) along with students in vocational teacher education (n=12) who earned 645 badges over one year in the Professional Development (PD) program, Learning Online.

Inductive thematic analysis revealed several significant features of competence-based assessment and badge management, which reflected the students’ individual experiences of the optimal form and frequency of assessments, feedback, guidance and advice. The preliminary results of this study emphasise the importance of open study groups and the option of joining and leaving the learning network freely. Shared expertise and shared learning experiences increase cohesion within freely formed study groups. The results of this study show the challenges and opportunities involved in badge management from the perspective of digital guidance and gamification, providing additional insight into the design and development of badge-driven learning in the future. This paper suggests that researchers should consider using a badge management application as an environment to guide badge-driven learning.

Constructive alignment of materials in tertiary programs
Sook Jhee Yoon, University of Melbourne
Paul Gruba, University of Melbourne

In blended tertiary programs, technology is mixed in face to face settings, and learning activities happen both on- and offline. With the move towards blended learning, tertiary programs and their curricula have become more varied and complicated. Such complexity and variation is evident, for example, in the program learning outcomes, learning activities and assessment tasks. Yet little is known how such complex factors interact, and thus influence, decisions regarding the curriculum in higher education settings from the perspective of administrators, lecturers and students. This study examines constructive alignment of materials in blended tertiary programs. Two case studies of blended programs in a large research intensive Australian university were studied. Using a pedagogical claims analysis as a means to structure the study, the researchers gathered and analysed qualitative data through a series of cycles, seeking to refine themes such that they are defensible, trustworthy and rigorous. Findings of the study point to factors that influence constructive alignment with implications for materials design and use.

CMALT cMOOC: developing a scalable lecturer professional development framework
Thomas Cochrane, Auckland University of Technology
Vicket Narayan, Auckland University of Technology

This paper outlines the design stage of a project that reimagines lecturer professional development around a network of communities of practice scaffolded by a cMOOC (connectivist Massive Open Online Course), where sustained collaborative engagement with innovative teaching practice is recognised via established international peer-based professional accreditation pathways such as CMALT (Certified Member of the Association for Learning Technology). Informed by a design based research methodology, the CMALT cMOOC leverages a network of national and international collaboration and innovative teaching expertise, providing an agile and scalable framework to support the development of participants’ CMALT portfolios as evidence of critical engagement with new modes of practice and enhanced student outcomes. The cMOOC is designed based upon up-scaling the researchers’ community of practice (COP) model of lecturer professional development (Cochrane & Narayan, 2016c). Key to this model is the embedding of the scholarship of technology enhanced learning or SOTEL (Haynes, 2016), within lecturer praxis supported by a collaborative curriculum design process. The cMOOC provides a framework to support the development of
lecturer COPs across a series of several weeks of participation throughout the academic year. The cMOOC is not conceptualised as a professional development course in the traditional sense, rather a mutual and collaborative initiative of willing participants to work together in order to enhance their understanding and knowledge of technology enhanced learning and teaching. Participation in the cMOOC is open, free and largely participant driven.

Evaluating the sustainability of tablet devices in blended learning
Cynthia Nicholas Palikat, University of Melbourne
Paul Aruba, University of Melbourne

Blended approaches to teaching and learning and higher education often demand the provision of substantial investments in professional development, curriculum change and technological resources. Given the intense effort required for successful courses, focus has turned increasingly on the sustainability of blended learning in higher education. In this study, we adopt an argument based approach to the sustainable use of tablet computers in a university pathway course. After mapping out the argument with key stakeholders, we conduct a participatory action research project that takes into account observations, interviews and personal reflections. Results of the evaluation point to a ‘weak argument’ for the continued use of tablet computers that demonstrates their use is not sustainable. We conclude with suggestions to turn to issues of curricular alignment and further adoption of argument based evaluation for educational technology.

Flipping diverse classrooms: Instructor experiences and perceptions
Ekaterina Pechenkina, Swinburne University of Technology

Flipped Classroom is a pedagogical approach in which all or some of direct instruction is moved outside of the face-to-face environment to dedicate more in-class time to ‘hands-on’, experimental and engaging activities. Usually enabled by educational technology, the Flipped Classroom approach draws on the ‘active learning’ philosophy which implies that students must share responsibility for their learning with their instructors, resulting in more impactful learner behaviours. Considering university classrooms are increasingly diverse, with international students forming a significant cohort of learners, instructor perceptions of internationals students in Flipped Classrooms are of interest. This is particularly important because international students, especially those from Asian countries, can be perceived by instructors as ‘passive’ learners regardless of students’ actual skills, learning preferences and goals. This presumed ‘passivity’ may clash with instructors’ goals, potentially creating tensions-filled dynamics between instructors and international students in Flipped Classrooms. The proposed article explores university instructors’ perceptions of international students in technology-enabled Flipped Classrooms to understand how these perceptions may influence instructors’ choices for the design of the flip. Findings demonstrate that while some instructors view international students as a barrier to impactful Flipped Classroom, others draw on their classroom’s diversity, using it as a source of inspiration, and designing the flip with international students in mind.

From how to why: student experiences of a university’s technology-enhanced learning over 5 years
Carol Russell, Western Sydney University

This is a longitudinal case study of student perspectives on Western Sydney University’s strategic initiatives to promote technology-enhanced learning (TEL) from 2012 to 2017. The study analyses data from students throughout this period, and includes consideration of how the student experience is being shaped by academic and institutional support for TEL. Initially the university focus was on use of mobile technologies and
‘blended’ learning environments; as a platform for transforming pedagogy. In 2013, teaching staff and new undergraduate students were issued with tablet devices. As well as investing in the devices and supporting campus infrastructure, the institution also provided additional support for curriculum and staff development. For two years, students’ feedback about the tablets was overwhelmingly positive about their value for learning. In 2015, most undergraduates had tablet devices and TEL was becoming business as usual. However, the evaluation feedback that year showed that use of tablets had begun to decrease and there was a corresponding increase in use of smartphones. For some activities, laptops were preferred. In 2016, multiple types of device were issued to students, with some disciplines choosing laptops and in 2017 the University provided free digital textbooks instead of devices. Students’ use of different devices for learning activity has been shifting and evidence gathered internally from students and staff has played a role in adapting to this. While TEL strategies differ between universities, the analysis provides an example of how systematic evaluation evidence can support systemic adaptation as the learning technology environment changes.

**Generating learning through the crowd: The role of social media practices in supporting students as producers at scale**

Peter Bryant, London School of Economics and Political Science

Social media and higher education pedagogy have enjoyed a chequered relationship with significant debates about the efficacy of social media as a site of student centred learning, the manager/host of an individual’s learning trajectory and as a tool of facilitating collaborative learning at scale. This paper presents the findings from the evaluation of Constitution UK, an innovative civic engagement and open learning project run by the London School of Economics in the UK. This was the lead initiative in an institution wide shift in pedagogical approach that was designed to transform the learning experiences of students through supporting students to be co-producers of knowledge. The Students as Producers project (SAP@LSE) was aligned to the School’s learning experiences curricular enhancement objectives, which sought to transform the student experience from primarily didactic to one that prepared the learner for the challenges of work and practice and engaged them in their own learning, through making. The LSE have been engaged in a number of projects that use crowdsourcing and citizenship as a catalyst for learning. The core principle behind these initiatives is that learning is a complex and agile process in the post-digital age and can be significantly enhanced through student led community learning, peer learning and informal learning. Wanting to engage our students more actively in the shaping of their study, their learning and their career, we designed a linked series of projects informed to varying degrees by social media practices. We argue that some of the behaviours inherent in social media learning (centred on fleeting connections, digital identity and discontinuous engagement) can create the conditions for effective learning through experience and practice, both at scale in open, online modes as well in the face-to-face delivery environment.

**Internet of Things (IoT), PBL and 3D Holographic modelling for Smart Agriculture Education at The University of Queensland**

Kim Bryceson, University of Queensland
Armando Navas Borrero, University of Queensland
Fabian Vasuian, University of Queensland

The project described in this paper builds an innovative educational ‘front end’ to exciting technological developments in real time biophysical data gathering that are currently happening at The University of Queensland (UQ)’s regional campus (UQGatton ~85km SW of Brisbane in SE Queensland), via an Internet of Things (IoT) UQ Smart Campus Project. This paper describes the technologies involved, the development of a multifaceted web-based interface (dashboard) to the data collected, problem based learning modules, and 3D modelling using the real time streaming data acquired through the Internet of Things (IoT) technology of the UQGatton Smart Campus Initiative. The idea is to
produce innovative teaching and assessment modules for multiple different courses in the UQ Science Faculty. The challenges and workarounds and two examples of using the data collected for problem-based learning modules will be described. Some discussion is included on what these technologies could provide in relation to delivering virtual reality, augmented reality and mixed reality environments for further teaching & learning developments in the “E” space being trialed currently with partners UQ ITS, Telstra/Readify, and Labster.

**It takes a village: Supporting the integration of digital textbooks in higher education.**
Debborah Smith, Bond University

Digital textbooks now incorporate various technological enhancements, and offer many opportunities for learning and teaching in higher education. Despite some enthusiasm for this medium, lecturers tend not to integrate the extra activities into their courses preferring instead to simply have them available as optional extra activities for students. One reason for this barrier to use is the time and effort required to integrate technology into the curriculum in a meaningful way, and lecturers may feel they lack the necessary knowledge to do this effectively. Despite the existence of institutional support to assist educators with technology enhanced learning, the services don't always align with what faculty want or need. As a result, there have been calls to improve staff training and professional development. This paper presents a theorised inquiry into educators’ reflections’ on the integration of digital textbooks using Mishra & Koehler’s TPACK framework as an underpinning theory. The findings suggest the need for training and support that is individualised to instructors’ specific needs, and allows for increased collaboration between various stakeholders. It is concluded that professional development that focusses on the development of TPACK, and operates within a collaborative and context-specific learning community could support the increased uptake of digital textbooks in higher education.

**Metaphors postgraduates use to depict their student experience: Individual, community and digital presence**
Shelley Kinash, University of Southern Queensland
Linda Crane, Bond University
Gary Hamlin, Bond University
Amy Bannatyne, Bond University

In an Australian national study into student constructions of postgraduate education, 38 students (masters and doctoral) were asked to draw literal or figurative pictures of their experience. Manual thematic analysis of interview transcripts revealed 33 metaphors. Metaphors were coded into individualistic, personal constructions (Me), relational community depictions (Us) and digital or information technology conceptualisations (IT) which were mapped to the Community of Inquiry (CoI) Framework’s elements of Cognitive, Social and Teaching Presence. The highest proportion of metaphors were about personal gain and process. The next largest thematic category was relational, mostly depicting what students think others should give, rather than student contribution. Aligned with this theme, students also used metaphors of isolation and perceptions of a missing ‘us’ factor. There were few metaphors drawn from the language of information technology and/or digital presence, which seems to flag a domain of the postgraduate student experience that requires further development. The key takeaways from this paper are expanded information about digital presence in postgraduate student experience, as well as quality improvement recommendations for universities.

**Me, Us and IT: Insiders views of the complex technical, organisational and personal elements in using virtual worlds in education**
Sue Gregory, University of New England
The adoption and pedagogical use of technologies such as virtual worlds to support teaching and learning, and research in higher education involves a complex interplay of technical, organisational and personal factors. In this paper, eighteen educators and researchers provide an overview of how they perceive a virtual world can be used in education from the perspective of themselves as individuals ‘me’, their educational organisations and as members of the Australian and New Zealand Virtual Worlds Working Group (VWWG) community of practice ‘us’, as well as the complex technology that underpins this learning environment ‘IT’. Drawing on Linstone’s (1981, 1984) Technical, Organisational and Personal (TOP) multiple perspective concept as the framework for analysis, the authors discuss their perspectives of how the personal, organisational and technical aspects of teaching through the use of virtual worlds have impacted on their teaching and research in higher education. The potential of employing the TOP framework to inform future research into the use of technologies such as virtual worlds in teaching and learning is explored.

Online global collaboration – affordances and inhibitors
Julie Lindsay, Charles Sturt University
Petrea Redmond, University of Southern Queensland

New teaching and learning approaches are emerging through the use of technology including online global collaboration. Educators involved in global collaboration forge external relationships with others beyond their immediate learning environment. They modify and adapt the curriculum to include global learning opportunities for their learners. Global collaboration provides opportunities for rich global, cognitive, social, cultural and life-changing experiences to their students. Online global collaboration broadly refers to geographically dispersed educators that use online technologies to learn with others beyond their immediate environment to support curricular objectives, intercultural understandings, critical thinking, personal, social and ICT capabilities. This paper will report some preliminary findings from an investigation into the perceptions of K-12 educators who facilitate global collaborative learning. Data were collected through semi-structured interviews that were then themed to
identify the key affordances and inhibitors to online global collaboration. The paper will provide recommendations for global collaboration in teacher education.

Recipes for institutional adoption of a teacher-driven learning analytics tool: case studies from three Australian universities
Lorenzo Vigentini, University of New South Wales
Elsuida Kondo, University of Melbourne
Kevin Samnick, University of Sydney
Danny Liu, University of Sydney
Deb King, University of Melbourne
Adam Bridgeman, University of Sydney

The changing landscape of higher education is putting increasing strain on educators, leading to a diminishing ability to provide pedagogical and pastoral support to ballooning and diversifying cohorts. Learning analytics promises solutions to these challenges for educators, including by personalising learning support and experiences, streamlining data capture and analyses, and providing teachers with new, efficient teaching approaches. However, reports of these impacts, or widespread adoption of learning analytics, or even examples of cross-institutional collaboration are sparse. We argue that this may be because of a lack of educator-driven learning analytics tools that meet their felt needs, and present case studies from three Australian universities that have collaborated to implement such a tool. This tool, the Student Relationship Engagement System (SRES), empowers educators to collect, collate, analyse, and use student engagement and success data that they consider meaningful for their particular contexts. Developed by unfunded educators and widely adopted through collegiate recommendations, the SRES enables personalisation and targeting of student learning and support using relevant data, fostering positive student-teacher relationships and enhancing student engagement. Using the three case studies as a backdrop, we present a revised learning analytics adoption framework focussing on strategy, structure, support, and impact, and use this framework to systematically evaluate the adoption and implementation of the SRES at the three institutions to derive ‘recipes’ for adopting an educator-focussed learning analytics platform. We also discuss three core themes emerging from the case studies, around the needs of academics, the role of academic and educational developers, and flexible and agile information technology practices.

Student generated multimedia for supporting learning in an undergraduate physiotherapy course.
Susan Coulson, University of Sydney

Outside the university, rapid authoring tools and ubiquitous technologies have fuelled a rise in user-generated multimedia and participatory culture. The educational equivalent, digital student-generated content, has been heralded as one approach for supporting active and student-centered learning. This is especially relevant for tertiary education, where multimedia is currently used mainly as a method for content transmission. Though student-generated multimedia may seem pedagogically ideal, especially in applied areas such as Health Sciences, the diversity of adoptions and limited literature in the area make broad claims to its efficacy difficult to support. This study uses mixed methods to assess the outcomes of a student-generated multimedia assignment within a third-year university physiotherapy subject. Findings from this study demonstrate that all students were able to complete the assessment task in a way that demonstrated key disciplinary learning and professional communication despite many not having prior experience of this kind of assessment. Student survey data demonstrated that students were able to navigate between new tools and methods to achieve a complex task. While multimedia gave students new and creative ways through which to engage with practitioners, patients and the profession, attitudes varied in accordance with student self-efficacy and
confidence. While more work has to be done in this area, the self-directed nature of the task proved both an opportunity and challenge. These findings contribute further to our understandings of implementing student-generated multimedia projects and extend this to the health sciences’ discipline.

The changing nature of student engagement during a digital learning task
Paul Wiseman, University of Melbourne
Jason Lodge, University of Melbourne
Gregor Kennedy, University of Melbourne
Amael Arguel, Macquarie University

The construct of student engagement has been useful in understanding student’s motivation in digital learning environments where they are required to show increased autonomy and independence in learning. Increasing clarity around this construct has allowed researchers to more accurately describe the nature of student engagement and the context in which it is being investigated. At a task-level, psychological states of engagement have been shown to be beneficial for student’s positive learning experience, and performance. Despite this, we still lack knowledge of how these engaged states unfold or sustain during a learning task. In this paper we report on a qualitative study that investigated undergraduate student’s experiences of psychological states of engagement in a digital learning task. Findings revealed that the three dimensions of engagement - cognition, affect, and behaviour - changed in intensity, with the subject experiencing both times of engagement and of not being engaged through the course of a digital learning task.

The pedagogy - technology nexus: Bridging the divide between academic and student perspectives on educational technologies
Karin Barac, Griffith University
Sarah Prestridge, Griffith University
Katherin Main, Griffith University

This paper reports on the early findings of a research study into academic design practices when incorporating educational technology. As part of the overall project, students were questioned on their perceptions of the use of technologies in the course. The insights gained from the students are discussed within the parameters of three major themes that emerged from the data informing implications to practice in academic development and learning design.

The role of IT in prisoner education
Jane Garner, RMIT University

Studies have consistently found that prisoners who undertake education while in prison are less likely to reoffend, and return to prison. However, in an environment where post-secondary education is increasingly being offered via online delivery, prisoners with no access to the internet are experiencing barriers to education offered by non-prison providers. This study examines the Australian prison environment, the education needs of prisoners, and their current access to education, information technology and the internet. Recent and future Australian and international developments in delivering online education to prisoners are examined.

Using Cultural-historical Activity Theory to Describe a University-Wide Blended Learning Initiative
Institution-wide evaluations of Blended Learning implementations are rare. Even less common are evaluations that report the sociocultural context in which the implementation is embedded. Recently, an Australian university in the western region of Victoria, embarked on an ambitious initiative to blend all course units over a three-year period. Stemming from a rigorous analysis of reporting documents and participant-researcher observations, an attempt has been made to describe the sociocultural context of this blended learning initiative through the lens of Engestrom’s Cultural-historical Activity Theory (CHAT). This description, along with the challenges surfaced, will serve as a precursor to the university-wide evaluation that is currently on-going. The objective of the analysis is to reify the complex processes, intricate relationships and dynamic environmental elements, which tend not to be captured by impact evaluations. Understanding what is going on will enable the University to situate evaluation findings in the context of factors that might have helped or hampered the achievement of outcomes, and remediate process-related problems in a timely manner. Staff Capacity and Engagement, a recognition of the collaborative nature of blended learning with clear accountability and communication strategies were a few of the factors that surfaced, which could make or break ‘the Blend’, if not adequately addressed. This paper argues for the necessity of process evaluations of blended learning implementations and the value of grounding these on ontological realities captured by accountability reports and observational data.

Using the perceptions of online university students to improve the pedagogy and practice of distance educators: Them helping us to improve IT
David Bolton, West Chester University
Maria Northcote, Avondale College of Higher Education
Peter Kilgour, Avondale College of Higher Education
Jason Hinze, Avondale College of Higher Education

This paper reports on the findings of an investigation into the experiences of distance education students, including both undergraduate and postgraduate students from one higher education institution, Avondale College of Higher Education. All of the institution’s current students who were enrolled in a distance course or who had previously completed a distance component of their course were surveyed using an online questionnaire. A subgroup of this population also contributed to focus group discussions. Findings from an analysis of the combined data gathered from the online questionnaire and the focus group were used to inform the institution’s professional development (PD) program that supports lecturers to design and teach online courses. Results of the study are outlined in terms of distance students’ perceptions about the institution’s distance education program, specifically in relation to course structure, interaction and communication, presentation of materials, use of media and design consistency. The paper concludes with recommendations for addressing the weaknesses of online learning programs including both curriculum design and PD strategies.

Using threshold concepts about online teaching to support novice online teachers: Designing professional development guidelines to individually assist academic staff (“me”) and collectively guide the institution (“us”)
Maria Northcote, Avondale College of Higher Education
Kevin Goaaelin, HonorHealth Research Institute
Peter Kilgour, Avondale College of Higher Education
Catherin McLoughlin, Australian Catholic University
Chris Boddey, Avondale College of Higher Education
As online learning expands across the higher education sector, individual university lecturers are required to take on roles that incorporate responsibilities for designing and teaching online courses. Their growing capacities to fulfil these roles are sometimes supported by professional development (PD) programs within their institutions while some staff engage in staff development activities outside their home institutions. These programs and activities may take place within Communities of Practice (CoPs) while others are conducted on an individual basis. While much research has been undertaken into the field of online teaching and learning, including investigations into the most useful technological tools to incorporate into the design of online courses, the design of PD curricula to support the needs of novice teachers of online courses has not been as extensively explored. This paper reports on the outcomes of an Office for Learning and Teaching (OLT) funded project which purposely set out to identify the threshold concepts about online teaching that university lecturers develop as they engage in both the individual and communal aspects of designing and teaching online courses. The paper explains how the identification of threshold concepts about online teaching informed the development of a set of curriculum guidelines for the PD of novice online teachers. Recommendations for the design of PD for individual teachers (at the “me” level) are provided along with recommendations for the institution (at the “us” level).

**Variations in coherence and engagement in students’ experience of blended learning**

Feifei Han, University of Sydney  
Robert Ellis, University of Sydney

We report a study which examines variations in coherence and engagement of 344 first year engineering students’ blended learning experience. Using self-report and observational data sources, we demonstrate that student perceptions of the blended learning environment, academic learning outcomes, and actual engagement with the online learning activities are logically related at the variable level as shown by correlation analysis; and at the level of student groupings of similar learning experience and behaviors, as revealed by cluster, ANOVA, and 2 x 2 contingency analyses. Using self-report data, we found that when students perceived the learning activities in the f2f and online environments were coherent and integrated, they tended to be more engaged with the online learning and to perform relatively higher on the assessment tasks than students with negative perceptions. Using the observational data, students who were more engaged with the online learning tended to perceive that the online learning was well integrated with the f2f learning, that the online contributions were valuable for the whole learning experience, and achieved relatively higher than less engaged students. A 2 x 2 contingency table further revealed a logical relationship between the groupings of students based on the self-report and observational data: moderate and positive association was found between students with coherent perceptions and more engagement; and between students with fragmented perceptions and less engagement with the learning experience. The use of multiple data sources and methods enabled triangulation, strengthened analysis power, and offered a more comprehensive picture of students’ blended learning experience.

**Women and rural people’s participation in tertiary education through Internet resources in India: a narrative inquiry**

Sandeep Kaur Sandhu, Federation University

India has a large formal higher education system, however, the enrolment of women and rural people in universities is not substantial. Women enrolment in tertiary education was reported only 41.5% of the total enrolment in the academic year 2010-2011 and only 7% population in rural areas have a higher education. Many socio-cultural barriers prevent people from accessing higher education in India. The integration of the Internet into the higher education sector has the potential to improve access to tertiary education in India regardless gender and area.
Using personal narrative and interview data, this article explores how Internet resources can be used to enhance women and rural people’s participation in tertiary education in India.

**Posters**

**Assessment feedback: more modality matters**
Michael Henderson, Monash University
Michael Phillips, Monash University
Tracii Ryan, Monash University
Phillip Dawson, Deakin University
David Boud, Deakin University
Elizabeth Molloy, University of Melbourne
Paige Mahoney, Deakin University

A growing body of research indicates digitally recorded (audio, video, and screencast) assessment feedback can be more detailed, clear, and personalised than text-based feedback comments. However, few studies have compared digitally recorded feedback with other modalities, such as face-to-face conversations and rubrics. In response, this poster reports on a survey of 4514 students from two Australian universities regarding the level of detail, personalisation and usability of feedback according to the most common feedback modalities: handwritten comments, electronic annotations, face-to-face conversations, digital recordings (e.g., audio, video), and marking sheets/rubrics. The results revealed three statistically significant trends. First, students who received digital recordings were more likely to agree that the comments were detailed, personalised, and usable when compared to students who received any of the other four modalities. Second, students who received more than one mode of feedback (e.g., a rubric as well as written comments) had higher levels of agreement than students who received only one mode. Third, students who received multiple modes of feedback had higher levels of agreement when one of those modes was a digital recording. The findings add to our understanding of effective feedback design, indicating that we need to consider the importance of media richness and the value of offering multiple channels or modes of feedback. The poster concludes with recommendations for the use of digitally mediated feedback design as well as further research.

**Authentic technology spaces and the student experience**
Sonia Dickinson-Delaporte, Curtin University
Aneeshta Gunness, Curtin University
Eva Dobozy, Curtin University
Gayle Kerr, Queensland University of Technology

The Agency is a technology enhanced learning (TEL) space that provides opportunities for the delivery of authentic and engaging, learning-centric experiences. This research explores how The Agency, an interactive social media command centre, affects the learner experience. We contrast learner engagement and experiences in two units with distinctively different pedagogical approaches. Our findings suggest that The Agency, as a TEL can have a positive impact on the learner experience, however, the pedagogical design decisions are key to maximise student learning experiences and outcomes in TEL environments.
Benefits of enabling lecturers and students to author, share and discuss media-rich documents for online study

Gloria Gomez, Oceanbrowser Ltd
Rea Daellenbach, ARA Institute of Canterbury
Lorna Davies, ARA Institute of Canterbury
Mary Kensington, ARA Institute of Canterbury
Con Petsogolou, University of Sydney

This poster evaluates the benefits of using OB3 – a technology enhancing the online study experience. Its development was undertaken using human-centred design methods, and informed by research on 1) educational design for academic success, 2) good visual design that facilitates learning and is cognitively effective, and 3) networked learning. OB3 has features enabling lecturers, students, and administrative staff to author, create, share, and discuss media-rich study documents. All these activities are undertaken without the direct support of technologists.

One postgraduate medical programme has used OB3 for six years, and one three-year undergraduate midwifery programme has used it for four years. An evaluation of their online study activities showed a number of benefits including:

- Co-constructivist and personalised learning is supported as part of blended learning models.
- The media-rich documents, most times with embedded discussions, take the form of curriculum content or student assignments, and are created as part of asynchronous collaborative activities such as wiki-style co-written documents, templated-group activities, e-portfolios, and group projects.
- Lecturers and students consider that the technology affords study that is engaging, flexible, and helps in overcoming isolation.

The benefits of using OB3 for online study were qualified using the Creative Classroom Framework, the NMC Horizon Report Education, and the Australia and New Zealand Technology Outlooks Reports. Innovative pedagogical practices emerged when it enabled lecturers and students to author and co-create study content by themselves. Significant challenges in the adoption of higher education technology could also be addressed such as rethinking the role of educators and improving digital literacy.

Blockchain as a tool for consensus building within higher education institutions

Charles Lang, Columbia University

Discussion of Blockchain, the much-hyped backbone of the Bitcoin cryptocurrency, began to be discussed by higher education researchers and practitioners in earnest in 2014 (Lemoie, 2016). The conversation since that time has mostly centered around the use of blockchain technology to support credentialing or an “education economy” (Sharples & Domingue, 2016). In this scenario blockchain acts as a way of verifying and tracking valid educational activity and this has been implemented at several institutions, the University of Nicosia being the first (University of Nicosia, 2016). In the following poster, we discuss an alternate use for the technology, as a tool for monitoring consensus around educational goals and institutional mission. A way to bake into the IT infrastructure the negotiations and decision making relevant to goals that are currently covered by policy documents only. Such infrastructure is of growing importance as institutions look to incorporate more varied data sources into their operations.
Building academics’ SoTL capacity through a revised course on blended learning
Swiee Kit, Alan Soong, National University of Singapore
Lyn Fung Jeanette Choy, National University of Singapore
Adrian Michael Lee, National University of Singapore

The digital poster session aims to provide an insight on how a blended learning course has been revised after the pilot run in 2016. Aside from equipping academics with knowledge and skills in designing and developing a prototype of a unit within a course, the course on blended learning also aims to build academics’ scholarship of teaching and learning (SoTL) capacity. The digital poster session will focus on the following areas in the revised course: (a) describes the changes made to the framework, (b) articulates how the revised course would be implemented in 2017, and (c) describes strategies on how to build SoTL capacity of academics in the revised course. The revised course is scheduled to be rolled out in the second half of 2017 and plans to carry out a study on the course will be shared at the poster session.

Collaborative Learning in the Social Media Sphere
Blooma John, University of Canberra
Emily Rutherford, University of Canberra

Today, social media has radically transformed the way we receive and disseminate information. In this poster, we present the extent to which various social media tools such as Facebook, Twitter, YouTube, Piazza and Second life, were involved in facilitating collaborative learning among students who pursued a course in social media. We evaluated the content shared in various medium based knowledge, cognitive process and social dimensions. We the routed the elements of three dimensions to the technology focus, fundamental soft skills and domain specific coverage. We found that Twitter as well as Facebook takes the role of improving fundamental soft skills during the learning process. The students expressed emotions and exemplified a sense of group commitment. Second life was found to be in the middle of rich soft skills as well as technology focus. Particularly, the need to be accustomed with the technology focus while also being interactive and innovative made the students enhance their leadership, communication, negotiation, and critical thinking skills. We found Piazza to be in the intersection of domain specific coverage as well as the fundamental soft social skills. This is mainly because, the use of Piazza for group work, class, quiz, wiki based collaboration as well as question answering make students have a more focus on domain specific coverage which being as social as any other social media. Thus, we need to enhance knowledge and soft skills required for tomorrow’s workplace in students by using the social media sphere.

Creating a suite of DIY video production facilities to support blended and online learning
Luke Boulton, University of Newcastle

At the University of Newcastle, The BOLD Lab support academic staff transitioning to blended or fully online delivery. As both modes of delivery make heavy use of video, much of the team's time was taken up in creation of relatively simple video content. As a small team with limited resources, the BOLD Lab sought ways to reduce both the production and editing load by creating a series of easy-to-use DIY suites that allow staff to create high quality videos, without need for post-production.

Embedding technology skills for student employability
Adrian Moody, University of Wollongong
While conducting a literature review for a research project into best practices for technology-enhanced learning, a regularly recurring theme was identified around the need for students to be career ready on graduation. Many courses are not addressing employability skills, leaving students with skills gaps, particularly with regard to familiarity and competence with ‘real world’ technologies, along with critical thinking and collaborative skills.

The “New Work Mindset” report by the Foundation for Young Australians (The Foundation for Young Australians, 2016) identifies:

- traditional linear career paths as increasingly obsolete.
- 7 new job clusters in the Australian economy with closely related skills; These are the: Generators, Artisans, Designers, Coordinators, Technologists, Carers and Informers.
- the need to give young people portable generic skills which can be applied throughout a cluster

Taken together, it can be seen that graduates need a suite of transferrable digital skills to have competitive advantage in the current job market. Some examples are; spreadsheets for data storage and analysis, calendars/project management software for task management and scheduling, audio and video hardware and software for presentation, training or promotional materials, word processing skills for cloud-based documents in collaborative projects.

This has major implications for higher education. The required skills suites will impact upon and inform course and assessment design to provide authentic learning and assessment, directly applicable to real world requirements. (Department of Education, Employability Skills Framework, 2006).

If academics are required to incorporate these skills into their learning and assessment, will they also need to acquire these skills? What strategies/resources are available to assist academics in providing these training needs?

This poster will focus on the real world digital skills and literacy required by the current job market and explore options available to academics for embedding them in course and assessment design.

- In house resource development and technical support
- External sources (eg Lynda.com, YouTube)
- Active learning tasks using relevant technology
- Student collaborative research
- Assessment incorporating varied presentation formats (Oral presentation with slides, video, audio podcast, spreadsheet charts)

**Evaluating the impact on students in a whole of school transition to a blended delivery mode.**
Rebecca Scriven, Edith Cowan University
Angela Christiansen, Edith Cowan University

Do students want flexible delivery of their learning materials? Do they know and understand the benefits of a blended learning (flipped classroom) model of curriculum delivery? In 2016, the School of Nursing & Midwifery introduced a new a blended learning model, in part to
increase student engagement, address low student attendance at lectures, and to allow flexibility for their busy student cohort. Studies suggest flipped/blended learning in nurse education can promote important capabilities for nursing students.

This digital poster reports on the early stages of an ongoing project, evaluating the student’s experience of the changed delivery mode. The feedback from an online survey of the students allowed identification of issues and showed students were appreciative of the flexibility the blended model allowed in their learning.

**From Playing to Designing: Enhancing Educational Experiences with Location-based Mobile Learning Games**
Roger Edmonds, University of South Australia

This digital poster is in the form of an interactive video in which you can click or touch the screen to explore its content.

It presents the results of action-research into the benefits and deployment strategies of integrating location-based mobile learning games (LBMLGs) delivered as mobile apps into Higher Education courses.

We began piloting the playing of LBMLGs in one Business course in 2014 primarily to strengthen students’ immersion with their study material. Since then this has been extended across 10 courses representing five disciplines (Business, Education, Health, Arts and Science). Over 120 LBMLGs have been developed and played 1750 times. 54 staff and over 200 students have designed, developed and implemented LBMLGs.

In 2017 our work has focused on the educational experiences gained by students who design and develop their own LBMLGs, on evaluation and identifying the challenges and opportunities of incorporating LBMLGs into fully online courses.

Our action-research indicates that LBMLGs are an authentic and meaningful new pathway to teach and learn and offer exciting and engaging educational experiences to students. Our work reinforces existing research that already articulates the benefits of LBMLGs for learning and confirms that students playing LBMLGs engage with the content and are inspired. Furthermore, when students design and develop LBMLGs, opportunities are created for them to improve their communication and collaboration skills, digital literacy, spatial awareness and social skills.

**Harnessing digital literacy tools**
Samanthi Suraweera, University of Southern Queensland

This presentation aims to introduce The University of Southern Queensland (USQ) Library’s “Getting Started in the Library” module, which was recently implemented to encourage better use of existing Library services and facilities by students. While this module was designed to increase accessibility to the Library, to cater to the diverse on-campus and online student cohort, an important secondary aim was to increase digital literacy skills by pedagogically supporting different learning styles. This need is evident as the current student cohort comprises of school leavers, Aboriginal and Torres Strait Islanders, international students and incarcerated students along with over 70% of the overall cohort enrolled as online students. As such, USQ encounters students with varied access issues and digital literacy capabilities. Consequently, this learning module was developed to enhance student learning outcomes by relying on the evidence-based Visual, Auditory, Read/Write,
Kinaesthetic (VARK) framework and the Technical Pedagogical Content Knowledge (TPCK) framework. The module aligns with USQ’s commitment to provide flexible, personalised education supported by technology as it is an open access, online entry page that introduces the Library, its resources and services. Further, the content provided is student centric, innovative and interactive in nature, therefore representing a highly valuable and impactful resource to enhance digital literacy and student learning outcomes.

**Learning workflow using learner-generated digital media (LGDM) assignments**

Jorge Reyna, University of Technology Sydney  
Jose Hanham, Western Sydney University  
Panos Vlachopoulos, Macquarie University  
Peter Meier, University of Technology Sydney

With the implementation of Learner-Generated Digital Media (LGDM) as an assessment tool (Reyna et al., 2017), students are increasingly becoming co-creators of content in Higher Education. To implement digital media assessments, educators require an understanding of the different media types and the skills involved in effective production. This understanding will enable them to effectively allocate student workload and marks for the task. It will also inform the design of marking rubrics that assess digital media as part of communication skills. The digital media type and its complexity will define if the task should be individual or group work. If group work is required, a strategy such as peer review needs to be implemented to ensure every member of the group contributes. Additionally, if educators understand digital media types and the skills required to produce LGDM, they can scaffold student digital media literacy across curricula.

This research proposes a Learning Workflow for Digital Media Assignments (LWDMA) based on two theoretical underpinnings: the Digital Media Literacies Framework (DMLF) (Reyna et al., 2017); and the concept of digital technologies as Technological Proxies (TPs) in the learning process (Hanham et al., 2014). The DMLF proposed three domains (conceptual, functional, and audio-visual) which need to be mastered to produce effective LGDM. In contrast, TP theory identifies digital technologies as agents performing important tasks on behalf of the user. Currently, this project is collecting data that will inform the validity of the LWDMA.

**Rethinking the instructional design model: transforming from face-to-face to a technology enhanced learning environment**

Antoinett Mukendwa, Swinburne University  
Antoinette Wentworth, Namibia University of Science and Technology

This poster introduces the ADDIL model an instructional design model borne out of research conducted by the online course development team at the Namibia University of Science and Technology after they observed a misconception in the conversion of content from face-to-face to a technology enhanced learning environment (TELE). The team had observed that ‘conversion’ simply implied the copying and pasting of content from existing print study guides into the Moodle learning management system rather than transforming the teaching and learning. This misconception resulted in the LMS being erroneously used as a repository. One way of ensuring that the value and benefits that TELE offers are felt, is in adequately aligning the instructional design model for transforming traditional face-to-face courses to an online format. Using a case-study research design, the findings from this study revealed that course developers went into this exercise with the face-to-face facilitation mind set. Time allocated to undertake such activities was underestimated, both teachers and students alike indicated that they required more time. Online learning skills required a paradigm shift, which was often a difficult challenge. Training on how to use the various tools available on
Moodle for assessment became a focus and strategies on how to deliver the content was neglected. In considering all of the above, the ADDIL model was developed by incorporating existing ideas of which mainly were from the ADDIE model and supplemented by 4-SOP, ASSURE and the Morrison, Ross and Kemp models which further enhanced the student and teacher voice.

Removing barriers and driving change at La Trobe University
Brian Dunell, La Trobe University
Simon Knight, La Trobe University

The move toward blended learning in higher education teaching, together with the growth in the use of mobile technology in society, has seen an increase in the demand for video production and online courseware. Online assessments also benefit from the ability of students to self-produce video rather than being limited to traditional written submissions.

In 2015 La Trobe University began an Australian first project to roll out ten One Button Studios across six campuses. Based on the Penn State University model (http://onebutton.psu.edu) with technical enhancements and dedicated acoustically treated rooms, the studios provide a self-service video recording facility that removes the requirement to have detailed knowledge about the technical aspects of video production. Designed primarily for academic teaching staff and students to produce 'just in time' high-quality web-ready video, the studios are accompanied by a Digital Learning Strategy focused on building the capacity of staff to integrate technology into their learning and teaching activities.

Care was taken to ensure development of the technical and functional affordances of the studio design aligned to the foreseeable requirements of digitally enhanced teaching. Ongoing feedback has been sought from a range of stakeholders in an effort to ensure successful and effective implementation of this technology across the entire institution. Eales and Davis (2007) suggest that in an environment of cultural change associated with the take up of new technology, ‘learning technologists’ play an important part in interpreting pedagogical/academic requirements. In this capacity educational designers fulfilled a number of roles outside the traditional expectation of multimedia creators.

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SmartFarm Learning Hub: Next Generation Technologies for Agricultural Education
Amy Cosby, University of New England
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David Lamb, University of New England
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David Swain, Central Queensland University
Caroline Mohammed, University of Tasmania
The Australian agricultural industry faces many workforce challenges including 1. a shortage of tertiary graduates to fill available positions and 2. employees possessing the knowledge and skills of how to use the latest agri-tech tools and systems. The SmartFarm Learning Hub (the Hub) project aims to increase the employability of tertiary agricultural students by preparing them with the skills and knowledge for a successful career in an increasingly complex and highly technical industry. The Hub is a collaboration between seven universities, both here in Australia and the USA. Each participating university will produce a learning module focused on inputting genuine farm data into a Real Industry Technology Learning System (RITLS) which will be placed on the Hub web site allowing students across the world to access and analyse data and outline the subsequent management decisions they would make to increase on-farm profitability, productivity and sustainability. Each of the modules will be evaluated as part of an action research cycle with the feedback received utilised to improve them for future student cohorts. Preliminary results show that the project is achieving its aim, with students perceiving their employability skills to have increased as a result of completing the modules. This poster introduces the ADDIL model an instructional design model borne out of research conducted by the online course development team at the Namibia University of Science and Technology after they observed a misconception in the conversion of content from face-to-face to a technology enhanced learning environment (TELE). The team had observed that ‘conversion’ simply implied the copying and pasting of content from existing print study guides into the Moodle learning management system rather than transforming the teaching and learning. This misconception resulted in the LMS being erroneously used as a repository. One way of ensuring that the value and benefits that TELE offers are felt, is in adequately aligning the instructional design model for transforming traditional face-to-face courses to an online format. Using a case-study research design, the findings from this study revealed that course developers went into this exercise with the face-to-face facilitation mind set. Time allocated to undertake such activities was underestimated, both teachers and students alike indicated that they required more time. Online learning skills required a paradigm shift, which was often a difficult challenge. Training on how to use the various tools available on Moodle for assessment became a focus and strategies on how to deliver the content was neglected. In considering all of the above, the ADDIL model was developed by incorporating existing ideas of which mainly were from the ADDIE model and supplemented by 4-SOP, ASSURE and the Morrison, Ross and Kemp models which further enhanced the student and teacher voice.

Social innovation through mobile and gamed based learning
Paul Goldacre, Swinburne University

It is estimated that the building industry contributes 30% to worldwide greenhouse gas emissions and consumes 40% of global energy. One player in this industry thought to have the potential to significantly reduce carbon emissions through their own actions and through their influence over consumer decision making is the building tradesperson. This project seeks to increase learner experience in the mobile space for tradespersons. The aim of this project is to influence the attitudes and behaviours of trade apprentices and through them, future consumers of home improvement and renovation products, using their preferred tool of the trade, the mobile device. From the results of an initial survey a pedagogically apposite app, incorporating peer to peer learning, gamification and social learning elements, designed to actively engage trade
students with the curriculum within their workplace, will be developed. In line with this objective the mobile learning app will deliver a low carbon living module to the learner cohort. The project intends to gather empirical data on the learner experience at specific touch points during the mobile learner experience and measure knowledge and motivation through qualitative and quantitative data analysis. The project is supported by the Collaborative Research Centre for Low Carbon Living.

**StudyWISE Intensive: Designing and embedding an online module into an institution-wide strategy**  
Vanessa Todd, Macquarie University

How to support (potentially) high numbers of students affected by a new academic progressions policy? And how could this fit into the wider ecology of support offered by the university? StudyWISE Intensive is an online module supporting students struggling in their studies, designed to revise key academic literacy skills and habits of mind. This poster showcases the pedagogical and UX design decisions used in this module to encourage user engagement and persistence. It further describes the wider ecology of institutional support and the ways in which StudyWISE Intensive has been embedded into the workflows and processes developed to support these students, in response to the new academic progression policy at a metropolitan Australian university.

**The cARdiac ECG Augmented Reality application: Using it to engage and enhance student understanding**  
Colin Warren, Deakin University  
Peter Bright, Deakin University  
Sarah Burgess, Deakin University  
Karen D’Souza, Deakin University  
Billy Robinson, Deakin University

There are many textbooks and online resources on Electrocardiography (ECG) and health professional students spend many hours in lectures and tutorials learning about ECG. However medical students do not feel confident, and are often not competent, in their interpretation of ECG - as demonstrated by educational literature, student results in skills-based assessment, and our own experience. Therefore, a new method of enhancing their learning and understanding was clearly warranted to improve student confidence and competence in this field. Electrocardiography was singled out to be the focus of this project, in part due to poor student competence in this area, but also as the ECG is one of the cheapest, fastest and most widely used investigations in emergency medicine. The ECG is one of the main investigations used to detect critical heart events including heart attacks and dangerous heart rhythm abnormalities, both of which require urgent treatment to prevent serious illness and save lives. Augmented reality was recognised as a technology that could present healthcare students with a way to integrate, and overlay, a 2D ECG trace with a 3D model of the heart to help their understanding of the relationship between the two. A mobile application was developed so that students would be able to learn about this complex process and assess their understandings through using the app. Emerging technologies can add to student learning when designed and implemented in response to curriculum needs, and provides potential for student learning to be more engaging and lead to improved clinical outcomes.

**The Me, Us and IT of webinars for an ASCILITE SIG**  
Mathew Hillier, Monash University  
Geoffrey Crisp, University of New South Wales
Transforming Assessment, now the ASCILITE e-Assessment SIG, is in its eighth year. Following our 80th webinar we reflect on what has sustained the webinar series and provide guidance for running successful webinars. This update, extending from our 50th session (Crisp & Hillier 2013), comes at a time when ASCILITE SIGs are gaining momentum and looking to run their own webinars.

This digital poster presents three perspectives inspired by Harold Linstone’s Technical, Organisational and Personal (e.g. Linstone 1999), fitting well with the conference theme of Me, Us and IT. We cover the status of our SIG membership (Us) and patterns of engagement, the approach taken by the hosts and speakers (the Me-s) and an overview of the management and technology used to sustain and run the sessions (IT). Monthly webinar notices on a range of assessment topics are a regular feature in the inboxes of over 2270 'Transforming Assessment' update members from over 600 organisations in 69 countries and regions. People are motivated to be involved and return by the convenience of being globally connected from the comfort of their office, able to tap into the latest happenings and benchmark their assessment practice internationally in a way that is also time efficient (Hillier & Sheppard 2015). Technology underpins the connectivity between individuals and provides the virtual space where the group meets each month. Management processes and timelines leading to each session are designed to enhance the quality of the experience for both participants and speakers. Find us at TransformingAssessment.com

The non-recommended route worked out: A surprise learning outcome when implementing a new ePortfolio system
Samantha J McKenzie, University of Queensland
Christine Salde, University of Queensland
Jessica Tsai, University of Queensland

Typically, the recommended path with technology and teaching is to determine the teaching and learning outcome, then determine what technology will help achieve this outcome. However, we will present an example of how implementing a new technology, an ePortfolio system (IT) chosen for other reasons, has helped facilitate conversations with multiple stakeholders: program directors, academics, placement supervisors, teaching and learning chairs and the university’s learning and teaching unit, to name a few. Rather than individuals working in isolation within their own courses (Me), the stakeholders formed a more cohesive Us working together to take a holistic view of the degree for a more consistent student learning experience.

Tools for flipped classroom
Ildiko Volcz, University of Technology Sydney

This poster is based on the practical experience of implementing flipped classroom tools in a University Foundation subject: Digital Literacies. The subject incorporates blended learning elements and flipped classroom tools.

The practice of flipped classroom in this subject has four stages: preparation work prior to classes; concept checking to confirm understanding of topics in classes; deepening knowledge with teacher-led exercises and using self-reflection to internalise knowledge; and making relations to the students’ future occupation.

In the preparation stage students are required to learn basic concepts prior to classes. The content is delivered using two online tools: nearpod (www.nearpod.com) and edpuzzle (www.edpuzzle.com). The nearpod web app is designed to deliver self-paced content that includes interactive exercises like multiple choice questions, short answer questions, fill-in-the-blank activities. The Edpuzzle web app is used to create
video centred lessons that students can watch and engage with via multiple choice questions and short answer questions that are inserted into the video.

When students attend classes their understanding of the concepts is checked by using an interactive multiple choice questions platform: Kahoot (www.kahoot.com). This activity provides an opportunity to the teacher to address and respond to any unclear elements of the content. After this, the class moves on to applying knowledge giving the students an opportunity to make use of the learned materials.

The final part of this flipped model is self-reflection where students are required to write a short blog-like entry to reflect and imagine how they could use the learnt concepts in their future occupation using padlet.com. This re-focuses on the individual and raises thinking to the evaluation taxonomy.

Using live case teaching to transform student learning
Sonia Dickinson-Delaporte, Curtin University
Aneeshta Gunness, Curtin University
Eva Dobozy, Curtin University
Gayle Kerr, Queensland University of Technology

This digital poster documents the application of case-based learning in a higher education business context, providing a case study of how live case learning impacts student engagement. Live cases are characterised by interactivity, real and variable situations, and ill-structured problems that are changing minute by minute enabled through real world technology. We share our findings regarding student engagement. Evidence from 174 learners indicates that live case learning design is valuable, with high levels of intrinsic and tactical engagement apparent.

VU Scout: Creative Engagement through Real-World, Student-Led Design
Lindsay Rattray, Victoria University
Miriam Bennett, Victoria University
Kati Elizabeth, Victoria University

The increased focus on student engagement across the higher education sector requires new approaches. Our student engagement app, VU Scout was made by partnering with students in a lean approach to

• Ideation
• Design
• Creation and development
• Broader organisational integration

This is an example of such a new approach. Of course, student-led student engagement is not new: student clubs, societies, and magazines have existed for years. However, empowering student-designers with the time, space, and resources to design new, relevant, and technological ways to engage each other is novel, and proving to be efficacious. One of our presenters is the student lead and producer of the app.

One important feature of this success is that VU Scout is real: it has real users and it requires real organisational support in order to continue. More importantly, however, the app has succeeded because of its compelling and locally-relevant combination of features:
Augmented Reality, enabling students to digitally decorate the campus, and take selfies amongst that work
Location-based experiences, allowing students to check in and play different games or get location-specific information about services
Gamified community, encouraging students to have face-to-face conversations to engage the social features of the app
Incentivised engagement, based around a points and prizes system where activity in the app generates points, increasing chances to win prizes given in-kind by local businesses

Outcomes have been strong and all targets have been exceeded. We now plan to expand the student-team and enable more cross-disciplinary work on this real, live student engagement app

**Lightning Talk**

**Collaboration and technology for engaging online learning**
Sarah Cahill, University of Southern Queensland
Stepanie Forbes, University of Southern Queensland

In response to the changing landscapes of higher education in rural and remote areas, the University of New England Library developed the eSkills 2.0 project. The aim of the project was to create a durable and responsive online learning presence that was socially inclusive while providing an equitable and meaningful educational experience. Academics, Academic Skills Support and Librarians collaborated in the identification of information and research skills gaps for the development and review of interactive learning materials.

To create timely, stable and engaging online learning, a variety of technology tools were investigated for use in the project. The primary tools selected for use included Articulate Storyline for its comprehensive solutions to interactive content creation in conjunction with Camtasia Studio for professional video and screencast editing facilities. TouchCast was ideal for creating just-in-time support and response with social media providing the perfect platform for rapid promotion and dissemination.

The eSkills 2.0 project incorporated a two-tiered approach. The first approach was the creation of timely, topic-focused library QuickTips. The second was the development of a comprehensive, enduring suite of library and research skills based modular learning materials that could be adapted, embedded and re-used as necessary.

This presentation will offer an overview of the project with a brief discussion of success, failures and future recommendations. The outcomes of this project will prove beneficial for anyone with an interest in implementing asynchronous online learning strategies to effectively support students in a 24/7 educational environment.

**Computer Says No? Life Literacies and Digital Literacies for LSES non-op students in a pre-tertiary program**
Susan Hopkins, University of Southern Queensland

This short talk by project leader Dr Susan Hopkins will introduce the HEPPP funded Life Literacies initiative and series of optional support workshops (within the USQ tertiary preparation program for non-OP and non-traditional students) launched at Toowoomba and Ipswich campuses of the University of Southern Queensland in teaching semester 2, 2017. The HEPPP funded 2017 Life Literacies project targets students from low socioeconomic areas who may be suffering from financial hardship. The program aims to make their journey through higher
education less stressful, more empowering and more relevant to everyday life through innovative educational approaches and materials centred on essential ‘life literacies.’ These innovative approaches include the use of social media (and the Life Literacies closed group Facebook page) in teaching pre-tertiary students. In particular, this short talk will focus on the Digital Literacies workshop within the Life Literacies suite of enabling education workshops to consider the particular benefits and challenges of teaching digital literacy to low socio-economic, non-traditional, non-op students as part of a tertiary preparation program.

**Debating the use of social media in higher education**
Julie Willems, RMIT University
Chie Adachi, Deakin University
Francesca Bussey, Deakin University
Iain Doherty, Deakin University
Henk Huijser, Xi’an Jiaotong-Liverpool University

To an international audience on 28 November 2016, and as part of the presentations at ASCILITE 2016, a ‘great debate’ on the use of social media in higher education was conducted by a team of researchers. As part of the debate, there was an opportunity to tap into the collective wisdom of our attending experienced colleagues. Approximately 150 conference delegates attended the hour-long session in order to engage with both sides of the argument. The research team carefully crafted the arguments to ensure that the debate covered key areas of interest and concern found in the literature of teaching and learning, as well as concerns within the higher education sector as a whole. The aim was to prompt the audience to participate and contribute to a discussion reflective of multiple perspectives, albeit within a specialist group cohort. Using a roving microphone to draw contributions from the floor, as captured via the live video streaming tool Periscope, and in addition to comments captured in the live debate Twitter feed from both the audience participants and beyond, rich data was captured. As both sources of data are available in the public domain, research ethics exemption was granted. While the findings of this research will be compiled for a journal publication for further exploration, this presentation summarises the findings and expands on some key ideas that emerged from the debate and broader collegial input. These findings will form the basis for further exploration.

**Me, us and IT: Developing approaches and support strategies for changing learning spaces**
Meredith Hinze, University of Melbourne

The design of learning spaces is changing from the traditional lecture theatre style of academia. At the same time, some disciplines in Higher Education are seeing a shift in curriculum towards seminar-style teaching, with an intentional focus on active learning strategies to enhance teaching and learning. The redesign of learning spaces provides affordability for remodelling subjects. This presentation provides insight into professional development approaches and support strategies developed for staff to meet these challenges. It explores some of the eTeaching and eLearning support strategies to help teaching staff remodel their subjects for more active, seminar-styled approaches for teaching in the humanities and social science disciplines, in the redesigned learning spaces of the new Arts West building at The University of Melbourne.

**Old me, new me. Changing prisoner behaviour through visual stories**
Rob Steer, Northern Territory Correctional Services
Lara Enever, Northern Territory Correctional Services
The Northern Territory prison population has grown over the last 20 years at a rate greater than other jurisdictions and recorded the highest recidivism rate with 58% of prisoners returning to prison within two years.

One of the challenges confronting the NT correctional system is the continued over-representation of Indigenous people in prisons, with Indigenous people comprising 85% of the adult prisoner population.

Indigenous people face a number of challenges reintegrating into the community and these challenges are often exacerbated by low levels of literacy, numeracy and basic skills, with many prisoners not able to understand English.

One of the initiatives introduced by NTCS is the use of visual stories, which can be translated into different languages, including Indigenous languages. Stories on work, health and safety, food hygiene and safe driving have been translated into the five most predominant Central Australian Indigenous languages. One of the most positive stories produced is titled Old Me, New Me, which assists prisoners to recognise how their previous behaviour was unacceptable and works through how they can change for the better.

NTCS has an agreement with local company, italk Studios, to facilitate the creation of the stories, including the provision of training to prisoners in spoken English and multi-media activities.

To date, the partnership has seen male and female prisoners produce in excess of 60 work and personal stories.

The stories produced are a new medium of communicating, transforming how we share information. The organisation can turn any written information into a visual story.

**Personalised Online Professional Learning on Digital Literacies for In-service Teachers of English as a Second Language**

Trisha Poole, University of Southern Queensland

This Lightening Talk presents an overview of a study that is focused on developing a framework for personalised online professional learning (POPL) on digital literacies for in-service teachers of English as a second language, and the associated development and implementation principles. Two key issues of digital literacies and digital literacies in language teacher education are addressed through developing POPL that is provided over an extended timeframe, is situated, is personalised, and is social. These four key features of the POPL are critical to its implementation and differentiation from other professional learning. In particular, the personalised aspect of the POPL is framed around the participant being provided with opportunities to personalise the content and their experience to their context and situation. That is, the participants can “choose their own adventure” through engaging with materials and selecting the learning path that aligns best with and facilitates their learning. The personalisation in the online space provides a new perspective on professional learning that tailors the experience to the learner-identified needs. Through these aspects of the POPL, it is expected that the professional learning will be effective in developing in-service ESL teachers’ own digital literacies and integrating digital literacies into their ESL curriculum.

**Technology-Enhanced Learning Collaboratives: A Faculty Development Initiative for the Science, Medicine, and Health Disciplines**

David Bruce Porter, University of Wollongong

Helen Jamieson, University of Wollongong
Adrian Moody, University of Wollongong

The University of Wollongong Faculty of Science, Medicine, and Health is interested in the strategic integration of technology. Using Wenger and Lave’s Communities of Practice as the foundation, SMAH has launched the Technology-Enhanced Learning Collaboratives (TELCs). Each of the four TELCs takes an academic-centred, blended learning approach to addressing topics in technology-enhanced learning and teaching. Evaluation of the TELCs will employ measures of academic engagement, academic surveys, and individual community outcomes. This presentation provides an overview of the TELCs and a status report of their progress.

Technology in Prisons for Learning: Making the Connection
Helen Farley, University of Southern Queensland

The Australian Government Higher Education Participation and Partnerships Program-funded project, Making the Connection, is taking digital technologies, that do not require internet access, into correctional centres to enable prisoners, particularly Aboriginal and Torres Strait Islander prisoners, to enrol in a suite of pre-tertiary and undergraduate programs. A version of the University of Southern Queensland’s learning management system has been installed onto the education server of participating correctional centres. The second stage of the project has seen notebook computers pre-loaded with course materials, allocated to participating prisoners. At the time of writing, the project has been deployed at thirty correctional centres in Queensland, Tasmania, Western Australia, and the Northern Territory with negotiations underway for further rollout to Victoria, New South Wales and South Australia late in 2017. It is expected that the technologies and processes developed for this project will enable the delivery of higher education to other cohorts without access to reliable internet access. This presentation presents an update of the project.

Lightning Round

Learning analytics: What’s in it for me (the teacher) and us (myself and my students)?
Cathy Gunn, University of Auckland
Claire Donald, University of Auckland
Jenny McDonald, University of Auckland

Like many emergent trends in learning technology the potential for learning analytics to benefit teaching and learning is being explored with promising results. However adoption is a slow process and the level of impact on practice is so far disappointing (O’Brien, 2016). Our research found that institutions, researchers and teachers have different perceptions and use different language to talk about learning analytics. We will briefly discuss why this lack of common discourse is a barrier to progress, and runs the risk of ending in more failed expectations such as those described in the annual Gartner Hype Cycle Reports.

In three short presentations, we will describe examples of learning analytics tools and strategies developed to promote their adoption in practice by teachers and learning designers. A guiding principle is to produce easy to use tools that teachers can use or adapt to their own practice (Datnow & Hubbard, 2016; Ferguson et al., 2016). The tools must also serve a useful purpose, e.g. by supporting common tasks or addressing common challenges, and aligning with familiar teaching and assessment cycles.
Links will be provided to the open source tools and creative commons licensed resources produced by a nationally funded learning analytics research project in New Zealand.

**Students-as-Staff: Co-Creation, Co-Inquiry and Becoming Change Agents in a University Blended Learning Initiative**

Suneeti Rekhari, Victoria University  
Anselm Paul, Victoria University  
Rachael Lahiff, Victoria University  
Raine Phoenix, Victoria University

In 2009, Victoria University, Melbourne piloted the Students-as-Staff (SAS) program, which proved to be very successful, leading to full-scale implementation in 2011. This session looks at the ways in which the SAS program has enriched the higher education experience of students and, contributed to enhancing the teaching and learning experiences of units and courses run across the university. Two SAS presenters will outline their experience of this program and provide first-hand knowledge of becoming the ‘agents of change’ in the educational experience.  
They will explore the role students can play as a bridge between educators and technologically innovative learning tools: the student voice can be harnessed to encourage adoption and improve the confidence of teachers using technology in and out of the classroom. Along with this, two Learning Designers, who work closely with the SAS, will discuss the transformative potential of this program for the design and development of units, building of staff capacity and the creation of a more cohesive university community. They will cover the process of designing collaboratively to incorporate the use of technology in a pedagogically sound manner to enhance student and teacher experience alike.

**Debate**

**Micro-credentialing is the future of higher education**

Ekaterina Pechenkina, Swinburne University of Technology  
Juliet Buchanan, Swinburne University of Technology

The debate features an education researcher and a learning designer coming together to discuss pros and cons of micro-credentialing. Traditionally understood as an alternative credentialing practice, micro-credentialing draws on the principles of the competency-based approach and employs various micro-rewards (e.g. digital badges) to signify learner achievements, such as mastering a skill or gaining knowledge of a particular subject. Micro-credentialing can also be understood more broadly as a dis/re-aggregation of learning process, in which students are allowed greater control over their educational pathway choices. In addition to discussing benefits and challenges associated with increased student control over their learning, the debate addresses other matters of relevance to micro-credentialing, such as universities’ responsiveness to student expectations and how micro-credentialing can be used to improve graduate outcomes in alignment with industry specific needs. The learning designer will debate the affirmative side and the academic will debate the negative side of micro-credentialing, leaving it up to the audience to decide who makes the most convincing argument.

**ASCILITE Sessions**
Are learning Analytics leading us towards a Utopian or Dystopian future, and what can we as practitioners do to influence this?
Cassandra Colvin, University of South Australia

In 2015 the Learning Analytics Community Exchange (LACE) developed a series of eight scenarios of the future of learning analytics which were designed to engender provocative discussion and reactions. The ASCILITE Learning Analytics Special Interest Group accepts this challenge and presents a panel discussion based on these scenarios. Our facilitator will lead the session through a series of questions, bringing together a range of discussants, each with their unique perspectives on the value and future of Learning Analytics. Will the year 2025 see a utopian future where students and academics have ready access to a diverse range of data and associated recommendations or a dystopian future in which learning analytics are rarely used. Delegates will be invited to join in the discussion through voicing their own opinions via a live twitter feed and polling.

Assuring quality online learning – the ASCILITE technology enhanced learning accreditation scheme (TELAS)
Dominique Parrish, ASCILTE

There has been a significant increase in the number of students choosing to engage in online learning (Hodge et al., 2014). Estimates suggest that in the last twelve years there has been a 263% increase of students enrolling in online courses (OLC, 2016). Additionally, institutional leaders are progressively recognizing that online learning is crucial to long-term institutional success and profitability (Bowen, 2013). However, while online learning has the potential to transform the business and viability of higher education institutions, there is also a critical need to identify how the quality of online learning can be assured (Kidney, Cummings, & Boehm, 2007; Salmon, 2013). Professional associations, such as ASCILTE have a major role to play in regard to assuring the quality of online learning in higher education (Frydenberg, 2002). This presentation will provide an overview of an ASCILTE initiative – The Technology Enhanced Learning Accreditation Scheme (TELAS), which is being conceptualized to develop an internationally benchmarked scheme that will assess and assure the quality of online learning.

The TELAS will be implemented across three operational phases. The first phase will result in the production of a TEL accreditation framework, which will be the basis of the instrument used to conduct the quality assessment of online learning and a TELAS web portal. This presentation will showcase the TELAS framework and outcomes from Phase 1, explain the details of the next two phases and describe the intended approach and perceived benefits of the entire accreditation scheme.

References
Frydenberg, J. (2002). Quality Standards in e-Learning: A matrix of analysis. The International Review of Research in Open and Distributed Learning, 3(2)

**Becoming an AJET Author**

Michael Henderson, Australasian Journal of Educational Technology, Editor
Eva Heinrich, Australasian Journal of Educational Technology, Editor
Petrea Redmon, University of Southern Queensland, Editor

Join the editors of the Australasian Journal of Educational Technology for a session that will provide an overview of the AJET editorial process, including details of both the screening and the peer review processes and criteria. It will also encourage a general discussion of tips and tricks for publishing in the field of educational technology. The session will feature a short presentation from the editors followed by a question and answer session, with plenty of opportunity for discussion.

**Critical perspectives on Mobile AR and VR from the Ascilite Mobile Learning SIG**

Thomas Cochrane, Auckland University of Technology
Helen Farley, University of Southern Queensland
Claudio Aguayo, Auckland University of Technology
James Birt, Bond University
Michael Cowling, Central Queensland University
Roger Edmonds, University of South Australia

This symposium discussion is based around the special issue of AJET on mobile Augmented Reality & Virtual Reality that the Ascilite Mobile Learning SIG has coordinated this year - due for publication in September 2017 – the authors will use the articles to spark discussion around the critical issues surrounding the educational use of mobile AR and VR.

**Developing a Digital Equity SIG**

Julie Willems, RMIT University
Helen Farley, University of Southern Queensland
Chris Campbell, Griffith University

Digital equity is a vital consideration in higher education. In line with the Bradley Report (2008), higher education institutions are aiming to widen participation for certain equity groups including those from low socio-economic backgrounds, Aboriginal and Torres Strait islander Australians among others. In addition, there are differences in the use and adoption of technologies between genders, with women being less likely to access both technology and the internet. As universities strive to recruit an ever more diverse student cohort, they are struggling to meet those cohorts’ needs in terms of technology and access. The aims of the Digital Equity SIG are to: identify and explore the issues, challenges and opportunities relating to digital equity and to bring these to the attention of ASCILITE members and the broader higher education community; provide guidance and advice to members on issues relating to digital equity; foster the development of initiatives, innovation and practices relating to digital equity; and to foster collaboration around digital equity projects, publications and practices. In light
of this, the Digital Equity SIG will promote the scholarship of digital equity as a core, continuing, and ethical stream for ASCILITE; promote scholarship in the field of digital equity; award research in digital equity; and act as a focus for the digital equity community and disseminate research findings and best practice.

Developing an Australian Open Educational Practice SIG
Carina Bossu, University of Tasmania
Adrian Stagg, University of Southern Queensland

There have been some important Open Educational Practices (OEP) developments in Australia, but unfortunately the potential of OEP to meet some of the national and institutional targets has not been fully realised and acknowledged yet. This session will attempt to engage the ASCILITE community in discussions around the issues related to OEP at individual, institutional, and national levels. This will also be an important opportunity to establish the foundations of a national Special Interest Group (SIG) in OEP in Australia. This group would provide practitioners, researchers, and advocates a platform for collaboration, support and development, not only at individual level, but also institutionally and nationally. Outcomes of this presentation would be:
- to further engage the ASCILITE community in this topic;
- to establish the basis for a SIG in OEP;
- to start a conversation about the role that the SIG could play in Australia;
- to provide OEP with a national representation at higher education level, which could in turn further progress OEP in Australia.

Getting to know the ASCILITE SIGs (Special Interest Groups)
Hazel Jones, University of Southern Queensland
Colin Simpson, Australian National University
Mathew Hillier, Monash University
Thomas Cochrane, Auckland University of Technology
Cassandra Colvin, University of South Australia
Linda Corrin, University of Melbourne
Sakinah Alhadad, Griffith University
Julie Willems, RMIT University

ASCILITE supports a range of Special Interest Groups (SIGs) to provide "ASCILITE members the opportunity to work together to pursue common interests in research and practice and to create a 'buzz' around their focus, goals and achievements both within and beyond the ASCILITE community." (ASCILITE, 2014). The purpose of this lighting round session will be to introduce each of the ASCILITE SIGs to delegates. SIG leaders will provide a brief overview of the purpose and focus of their respective SIGs, as well as a summary of the activities undertaken during 2017. They will also outline what their SIG considers the top 2-3 online learning/education issues/questions are for the immediate future. Following the overview presentations and a brief Q&A discussion session, attendees will have the opportunity to network in a Meet and Greet format.

Learning Design SIG
Eva Dobozy, Curtin University
Leanne Cameron, Southern Cross University

The Learning Design Special Interest Group (LD SIG) aims to develop a supportive environment for learning design researchers and learning designers in Australia and beyond who are engaged in, or wish to engage with the emerging field of Learning Design. Come and share the latest developments in Learning Design.

Speed editing with an editor of AJET
AJET Editorial team

This session gives you the opportunity to meet one-on-one with an AJET editor to discuss your draft paper or publishing idea. These short, sharp, speed editing sessions will allow prospective authors to discuss with a Lead Editor of AJET an idea for a paper that could be submitted to the journal. Sessions will last 15 minutes and can be booked through the registration desk at the conference. Some authors may have completed their draft paper or still be in the process of conducting their research. In either case, authors should be able to bring along a maximum one page summary of their proposed paper. In this summary please try to address each of these headings: (1) Proposed title, (2) Research problem, aim or question this study addresses, (3) Methodology, method, and materials, (4) Main results/findings - key points, (5) Key conclusions/implications - further research, theory, practice and/or policy

The ASCILITE Community Mentoring Program: Building capacity in technology enhanced teaching and research
Helen Farley, University of Southern Queensland

Every year, mentors and mentees from a diversity of higher education institutions across Australia and New Zealand come together in formal mentoring arrangements under the auspices of ASCILITE. Mentees and mentors choose a focus which may range from building research capabilities, writing journal articles or planning an educational technology project. This presentation provides a snapshot of what the 2017 cohort achieved in the words of the mentors and mentees themselves.

Transforming exams: stories from across Australia
Mathew Hillier, Monash University
Andrew Fluck, University of Tasmania
Michael Cowling, Central Queensland University
Kenneth Howah, Central Queensland University
Matt Bower, Macquarie University
Scott Grant, Monash University
Amy Hubbell, University of Queensland

This panel style session will explore the stories of academics and institution support staff that have trailed the OLT e-Exam system in 2017. The 'Transforming Exams Across Australia' project has evolved to include 10 Australian universities, a national accreditation agency and several international institutions forming collaborative connections.

Stories from project member institutions will provide insights into a particular element of practice from differing institutional contexts. Each
The speaker will contribute one or two perspectives to form an overall rich picture of running BYOD based e-exams in Australian universities. Areas to be covered will include, academic, logistical, policy, governance, technology support and student experiences perspectives. The e-Exam system uses BYO laptops running from customised version of Linux loaded onto bootable USB sticks that non-invasively 'locks down' the device for the duration of the exam. The system allows for a consistent, full desktop operating environment regardless of the laptop being used. A range of software tools can be run including an office suite, graphics tools, spreadsheets, multimedia and on-board web applications (Moodle) without the requirement for a network connection. The project is undergoing trials in 2017 where word documents are used as the question and response environment. Such exams can be run as paper-equivalent giving students a choice of handwriting or typing. Taking it a step further, high definition multimedia, resource files, and third party software tools takes an exam into the post-paper paradigm where all students use a computer to construct complex responses in the exam room. Read more at transformingexams.com

Experimental Sessions

Dramaturgy: a sociological perspective for conceptualising Me, Us. IT. In the context of online learning
Dawn Gilmore, Swinburn University of Technology

A dramaturgical analysis seeks to understand people’s everyday lives through the aspects of a theatre. I propose that this is a useful analogy for illustrating how students experience learning in an online subject. Based on this analogy, an online student is an actor who crafts performances within the front stage and backstage of a particular university subject.

At the start of this session attendees are introduced to three theatre stages. These stages are defined as the front stage (the LMS), the backstage online (internet websites and social media), and the backstage offline (conversations with family, friends, and colleagues). Following this, attendees will meet student-avatars who play the theatre roles of performer, cameo, extra, and stagehand. The creation of the student-avatars was informed by a fourteen-month study of online university students. During this time data was collected from 224 student observations, 120 questionnaires, 26 interviews, and the content analysis of 1,857 discussion board posts.

Each student-avatar will communicate their learning journey by briefly sharing how they experience learning in the front stage, backstage online, and backstage offline. Through their stories, their preferences and patterns for individual experiences, group experiences, and the tools they most commonly use for university related tasks come to light. With the student-avatars in mind, attendees will design a short learning experience that acknowledges how students enact multiple identities across the three performance stages. The learning experiences will be collated into an online book that will be shared with conference attendees. This book symbolises how we can harness our collective intelligence to support online students.

Playing the Education System: competing, exploring, socialising, disrupting, but always engaging
Dan Laurence, La Trobe University

Through discovering your ‘gamer type’ as part of this experimental session participants will actively explore, compete, socialise and disrupt their way into the enquiry: what aspects of the education system are ‘gameful’, and how do different students play?
There is contention around the usefulness of the idea that learners fall into different types. Some research shows that curating teaching based on ‘learning styles’ (sensory processing) is of questionable value. However, evidence from learning analytics shows that there are radically differently behaviours exhibited by students and there are impassioned calls for increased personalisation in education.

After a very brief introduction to some leading theories on student engagement we quickly segue into a ‘Gamer Type’ quiz that will determine participants teams. The teams will then compete live using a series of leading game/learning apps as we delve deeper into the enquiry of what aspects of education are gameful, are there different ways students play and if so, does it matter?

BYO device or phone.

**Future happens: hack your way to influencing and changing pedagogical and technological strategy and practice**

Peter Bryant, London School of Economics and Political Science

Using the changehack approach successfully run in the UK for the last two years by Future Happens (http://www.futurehappens.org - a collaboration between two leading UK institutions, the London School of Economics and the University of the Arts, London), this experimental session is designed to collectively engage participants in changing the discourses around the role of technology in shaping institutional/faculty wide pedagogical change. This lightning changehack will generate approaches to scaling and sustaining the lessons and innovations that arise from grassroots practice into approaches that can be included in strategic thinking across disciplines, levels, cohorts and potentially across the whole institution. This workshop will challenge you to think about the ways you are able to influence your institutions strategic direction and commitments to technology and learning and be a part of the conversation that shapes how they do it. Attendees will participate in a collective hack that draws on the power of the crowd to solve problems. Previous Future Happens hacks in the UK have collectively generated insightful, useful and pragmatic ways to bridge the discourses between the practices of learning technology and how they can be scaled up to be part of the institutional, faculty or School wide strategic approach to innovative pedagogy. Attendees will collectively own the outputs which will be shared globally as part of the Future Happens movement.

**Open Fishbowl**

**2017 Year of Open - is it worth celebrating in Australia?**

Amelia Dowe, University of Southern Queensland
Tamara Heck, University of Southern Queensland
Neil Martin, University of Southern Queensland
Adrian Stagg, University of Southern Queensland
Catherine Wattiaux, University of Southern Queensland

Whilst 2017 is internationally celebrated as the Year of Open, the fishbowl discussion aims at critically discuss the current state of the art of openness in higher education. We concede that open educational practice, including for example the use, creation and sharing of open educational resources, is neither widely understood, nor widely engaged within Australia. Reasons are that research is mostly focusing on open
educational resources, not on overall practices. The latter includes investigations in practical issues applying open practices. As holistic solutions have yet to mature - regarding for example staff development, organisational policy and commitment, as well as business models - the community is still reluctant in engaging in open practices.

Our core questions we want to discuss with the audience are:

1. What does an Australian higher education sector that embraces OEP look like? and
2. What are the key factors that act as barriers to widespread adoption of open educational practices in Australia?

We refer to five major barriers that we think hinder and partly lock off the success of openness in higher education, which are lack of recognition in policies, value proposition, institutional prestige, competitiveness as well as guidelines. The open fishbowl concept aims at discussing those barriers together with the audience, but as well allows participants to come up with their own opinions and perceptions about current openness processes and developments.

**Online professional learning: lessons, challenges, opportunities**
Jonathan Powles, University of New England
Shelley Kinash, University of Southern Queensland
Aliya Steed, Australian National University
Jennifer Larence, University of Canberra

Often, our default pedagogies for professional, authentic, and/or work-integrated learning start with face-to-face assumptions. The “placement” is the starting-point for many academics’ thinking about how to provide students with authentic experience of professional work, and the placement is predicated on the assumption of physical presence in the workplace. Often, academics’ experience of other pedagogical strategies for authentic learning – for instance, problem-based learning, role play, action research – start with an assumption of physical presence.

On the other hand, we now have many rich experiences of professional, work-integrated and authentic learning that have been situated online. This fishbowl session allows participants to share, analyse and learn from these experiences. What are the challenges and opportunities in moving role play or simulation online? What have MOOCs taught us about how people seek to develop their professional education? What technologies and tools exist to capture authentic learning in the workplace and curate these as online records of professional practice? How do employers respond or react to professional learning conducted online? What sorts of pedagogical and business models have universities adopted around online professional qualifications, and how do these differ from more traditional models? Given that the great majority of students who study online are simultaneously working, how have we or can we leverage this body of existing professional experience as part of students’ learning journeys?

**Technology enhanced academic development: exploring approaches for professional learning in higher education**
Katharina Freund, Australian National University
Sarah Thorneycroft, University of New England
Emily Rutherford, University of Canberra
As universities move towards new methods of delivery for their teaching, academic development in higher education still relies heavily on face-to-face contact (Thorneycroft & Landrigan, 2014; Cochrane & Narayan, 2016). This fishbowl session will explore how technologies can facilitate new methods and paradigms for designing and delivering professional development. The combined pressures of increasing academic workloads and changing teaching methods make timely professional development essential and challenging (Gregory & Lodge, 2015). We will discuss the complexities and challenges of delivering effective staff professional development in this environment, and consider new solutions and opportunities using technologies. This session examines the issue of faculty professional development and how tools and technological innovations can inform and support effective practice.

The fishbowl participants represent a range of contexts in Australian higher education and will debate issues in professional development including:

- Working with the limitations of staff time
- Affordances and challenges for different modes of delivery, including face-to-face, self-paced, and synchronous online delivery
- Working in partnership with faculty, central teams, and support teams
- Options for encouraging, recognising, and incentivizing participation
- Methods for recognition or credentialing professional development
- Innovative and creative approaches to professional development

This session will present a realistic and research-informed view on the complexities of providing academic development in universities and will be of interest to educational designers, academic developers, academics, academic librarians, managers, and strategic leaders.

**Workshops (Post Conference)**

**It’s Pedagogy GO with Location-based Mobile Learning Games**
Roger Edmonds, University of South Australia

What can bonsai tells us about authentic learning with educational technology?

In this interactive workshop we will take you through all the steps of designing and developing a location-based mobile learning game using an online platform which is made for anyone to use to create and explore their stories at locations of their choosing.

We’ll begin indoors by sharing our recent experiences in designing, developing and delivering location-based mobile learning games into courses across multiple disciplines in a University setting. Next, it’s outdoors into the adjacent Japanese Gardens to play a prototype location-based mobile learning game with your smart mobile devices. We then return inside to deconstruct how it was designed and developed.
Then it’s your turn.

In small groups (or individually) you’ll begin to create your own prototype location-based mobile learning game. We will start with the scope, consider narratives, show how to add media to locations and implement means of interactivity and simple gamification techniques. You will digitize the games in an online gamemaker, and spend the last 30 minutes of the workshop playing your games on your own mobile phones. This way, we’ll study location-based mobile learning games in a very practical way. At the end, you’ll understand what the underlying principles of location-based mobile learning games are and what challenges have to be dealt with in their design and development. Having created your own prototype mobile game, you’ll be ready to start doing so in your University or institution.

Before the workshop please download and install the free Mobile Learning Academy app on your iOS or Android phone from either the Apple App Store or Google Play. Delegates will also need to bring a laptop computer to the workshop. Plus, don’t forget to bring a long hat and sunglasses!

**Mobile Virtual Reality Workshop**
Thomas Cochrane, Auckland University of Technology
David Sinfield, Auckland University of Technology

The workshop will explore user generated mobile 360 video production and integration into interactive virtual reality environments for education. Participants will experience using a low-cost, BYOD, rapid prototyping framework to create and share their own immersive mobile VR scenarios. Participants will need to bring their own mobile devices, including a smartphone and wifi enabled laptop. The workshop will explore the unique affordances of mobile devices for enabling participant-generated content and experiences using mobile VR.

Mobile Virtual Reality (VR) and Augmented Reality (AR) are anticipated to become multi-billion dollar industries in the near future, but how will this impact higher education? This workshop will introduce the basics of mobile Virtual Reality to explore and discuss the potential and issues surrounding the rapidly developing field of mobile Virtual Reality. Building upon the development of simple ecosystems for user-generated mobile VR, such as Google Cardboard, and the Samsung Gear VR, there is now widespread interest in these technologies, but still little expertise in integrating these within authentic educational experiences beyond another form of interactive content delivery. We will discuss the potential of mobile VR for user generated content and contexts, and share recent practice-based research, and invite interaction from the wider Ascilite conference attendees.

**Transforming Exams: hands on with the technology**
Mathew Hillier, Monash University
Andrew Fluck, University of Tasmania
Martin Coleman, Monash University

This workshop will explore the rationale behind the OLT e-Exam system for high stakes exams, however, the majority of the session will be spent getting hands-on with the technology!
Participants will explore different features or modes of the e-Exam system. Starting with paper-equivalent exams centred on word documents, through to post-paper exams that can use spreadsheets, multimedia, third party software tools and potentially an off-line Moodle. From a pedagogical viewpoint, the e-Exam system aims to promote authentic assessment using realistic 'e-tools of the trade' to enable constructed activity types in the exam room (Hillier & Fluck 2013, Fluck & Hillier 2014). However, we face a number of challenges in implementing such a dramatic shift. One of these is the need to re-think how high stakes assessments can be designed and deployed. This session will provide some inspiration by way of hands-on examples.

The running an e-exam needs to be doable within the resources and environment of contemporary universities. The project team have recently developed guides and graphical user tools to help with the transfer of data and set-up of e-Exam USBs. Workshop participants will have an opportunity to test drive the GUI Admin tool and other approaches to administering e-Exam USBs.

The 'Transforming Exams Across Australia' project has evolved to include 10 Australian universities, a national accreditation agency and several 'birds of a feather' international institutions. The project is running 2016 to 2018, details at http://transformingexams.com Participants will need to bring a compatible laptop, see http://ta.vu/eexam-laptops