

# Innovating Learning Analytics for Sustainable Impact

Simon Buckingham Shum, Cassandra Colvin, Shane Dawson,  
Danny Liu, Pablo Munguia, Yi-Shan Tsai

## 1 THE CHALLENGE: INNOVATION + IMPACT

This workshop will explore the strategies that institutions are adopting to balance two key drivers of learning analytics initiatives:

1. **Research & Innovation:** the desire and need to conduct rigorous research (e.g. in order to develop learning analytics that are not available in current products to advance future-oriented teaching and learning strategies; to answer complex questions specific to the institution's context; to build the university's research profile)
2. **Sustainable Solutions:** the need for robust, usable analytics infrastructure that is trusted by, and useful for, educators, students, the IT division, the data warehouse team, the academic development team, etc... (e.g. to ensure that tools work smoothly, and are easily learnt; to tackle immediate, pressing needs around data; to ensure that data is secure, and reliably captured).

Typically, these two drivers pull in different directions. Innovative educational technologies typically fail to move beyond the "exploratory, exciting prototype" stage (Scanlon, et al. 2013). In their analysis of the state of the field in Australia, Colvin, et al. (2016) identified two clusters of universities: those who saw analytics as a more research-intensive vehicle for pedagogical innovation, and those seeking vendor solutions for pressing problems (such as student attrition). These conceptions implicate different stakeholders, with different success criteria.

**However, are these tensions inevitable, or irreparable?** Can the academic invention and rigour of good learning analytics research be harnessed to innovate solutions to strategic problems? Can R&D be accelerated and augmented so that it benefits more end users, more quickly, in sustainable and ethical ways? Although far from being solved, progress is being made on these questions (e.g. Buckingham Shum and McKay, 2018). We might also ask how do we advance research in institutions that are not encouraging it, seeing analytics 'simply' as a technical solution to be licensed from a vendor?

## 2 WORKSHOP FORMAT

This workshop is the chance for participants to share experiences and insights, with provocations from the chairs to stimulate dialogue.

Provisional plan:

- In advance of ALASI, a blog post will invite online contributions to identify key issues. Chairs will distill these ideas and issues and share them with participants
- Who's in the room?

- Review of kickoff ideas and issues
- The workshop will break into unconference mode, with participants electing which thematic groups to join. Participants can rotate around other groups as they wish, to cross-fertilise ideas. New topics can be created as required. Groups will capture their thoughts in the workshop Google Doc as a record to share and build on after ALASI.
- A tour of the groups and notes for cross-fertilisation of ideas and reflections on next steps.

### 3 AUDIENCE AND OUTCOMES

Participants will leave with a better understanding of:

- Models for grounding LA research and innovation in practice
- The value proposition for different stakeholders to collaborate
- Implementation models that have worked or failed in different organisations and contexts

### 4 REFERENCES

Buckingham Shum, S. and McKay, T. (2018), [Architecting for Learning Analytics: Innovating for Sustainable Impact](#). *EDUCAUSE Review*, March/April 2018, pp. 25-37.

Colvin, C., *et al.* (2016). [Student retention and learning analytics: a snapshot of Australian practices and a framework for advancement](#). Canberra, ACT: Australian Government Office for Learning and Teaching.

Scanlon, E., *et al.* (2013). [Beyond Prototypes: Enabling Innovation in Technology-Enhanced Learning](#). Report for the Technology Enhanced Learning Research Programme, ESRC, UK.

### 5 WORKSHOP CHAIRS

**Simon Buckingham Shum** is Professor of Learning Informatics at UTS, where he directs the Connected Intelligence Centre, a Learning Analytics R&D centre to advance UTS strategy.

**Cassandra Colvin** is Manager of Adaptive Learning and Teaching Services at Charles Sturt University, Charles Sturt University, a role which has strategic oversight of learning analytics for the institution.

**Shane Dawson** is Professor of Learning Analytics and Director of the Teaching Innovation Unit at the University of South Australia, which is both research active and focused on service delivery.

**Danny Liu** is a Senior Lecturer at The University of Sydney, where he leads a multi-institution learning analytics platform that helps teachers personalise learning and support for students.

**Pablo Munguia** is an Associate Professor and Director of Learning Environments and Analytics within the Education Portfolio at RMIT, providing analytics services and innovation for the university.

**Yi-Shan Tsai** is a research associate in the Moray House School of Education, University of Edinburgh. She is a co-investigator on the EU SHEILA project (Supporting Higher Education to Integrate Learning Analytics) and a member of the Learning Analytics Policy Task Group at the University of Edinburgh.