Will Alderton
Manager, Connect for Success

- Student success and retention program, monitoring 5000+ sts/sem
- Currently using Blackboard tools to monitor at-risk students
- Reactive approach ➡ Proactive approach
- Academic analytics to identify at-risk cohorts on entry
- Learning analytics - What behaviour promotes strong performance?
- Keen to see what others are doing in this area

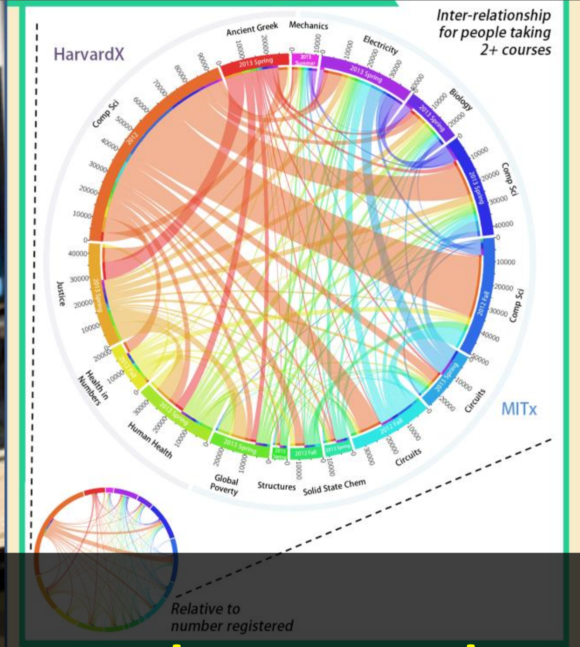
william.alderton@rmit.edu.au

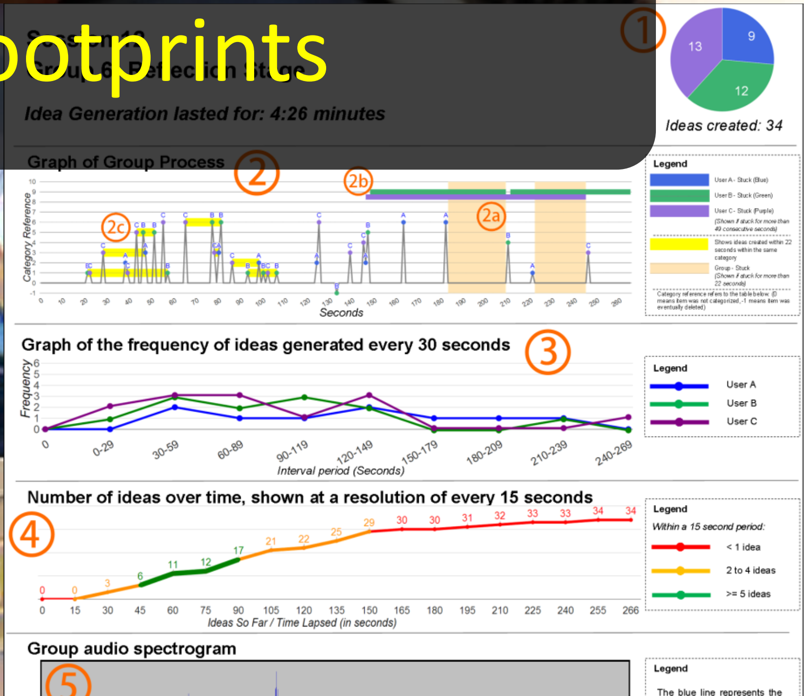
RMIT UNIVERSITY

Erika Beljaars-Harris (RMIT)

- Academic perspective:
  - Role of academics in using analytics
- Ethics
- Roll out of learning analytics in higher education institutions

Understanding learners from their digital footprints





Motivation and Self-regulation in Online Environments

Paula de Barba

Research Fellow | PhD Candidate

cshe centre for the study of higher education

Melbourne School of Psychological Sciences

The University of Melbourne

SLRC

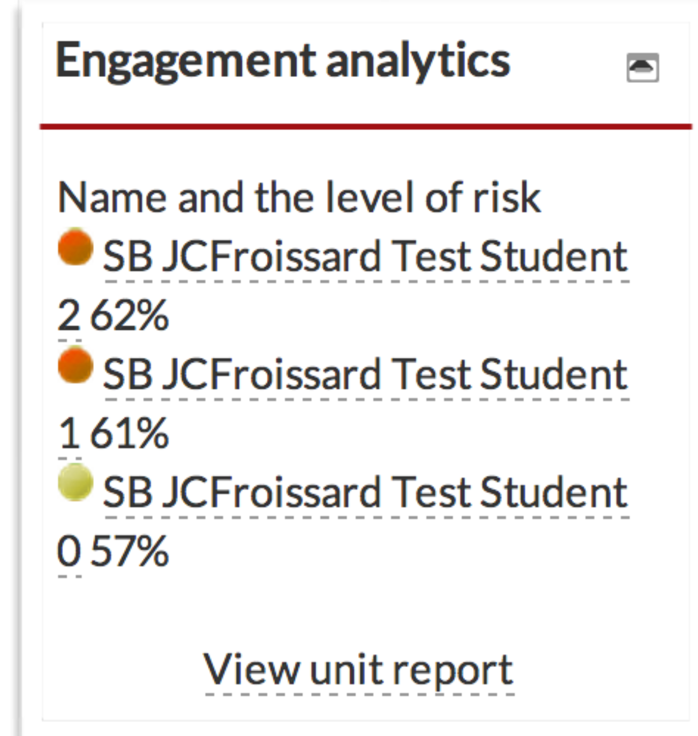
IBES Institute for a Broadband-Enabled Society

50 YEARS STILL DIFFERENT

MACQUARIE UNIVERSITY
SYDNEY ~ AUSTRALIA

Validating the effectiveness of the Moodle Engagement Block and piloting a student alert system to optimise retention

Macquarie University Teaching and Delivery grant 2015



Moodle Engagement Block

Project aims to:

- validate with historical data learning analytics tool
- survey convenors and students about attitudes and preferences to alerts
- trial use of manual alerts using tool
- develop pilot for automated alerts using tool

Chris.Froissard@mq.edu.au
Educational designer

Username	Assessment Activity	Forum Activity	Login Activity	Total
SB JCFroissard Test Student 0	1% (4%)	33% (100%)	23% (68%)	57%
SB JCFroissard Test Student 1	1% (4%)	33% (100%)	27% (82%)	61%
SB JCFroissard Test Student 2	2% (5%)	33% (100%)	27% (82%)	62%

Moodle Engagement Block: Report

Eva Heinrich's Interests

Supporting tertiary teachers to make sense of engagement data

- By integrating data external to LMS and data provided by students
- To acknowledge the widely differing student backgrounds

Supporting tertiary teachers to use engagement data

- By facilitating follow up with students inside the LMS
- To improve student outcomes
- To efficiently provide traceable interactions

Plan is to implement tools for Moodle and evaluate in real teaching settings

Our Workshop: **Classifying Learning Management System Student Activities: Sharing one approach and considering how can the data be utilised? (10:30am Thursday)**

NSW RUGBY LEAGUE → QLD RUGBY LEAGUE

Hazel Jones

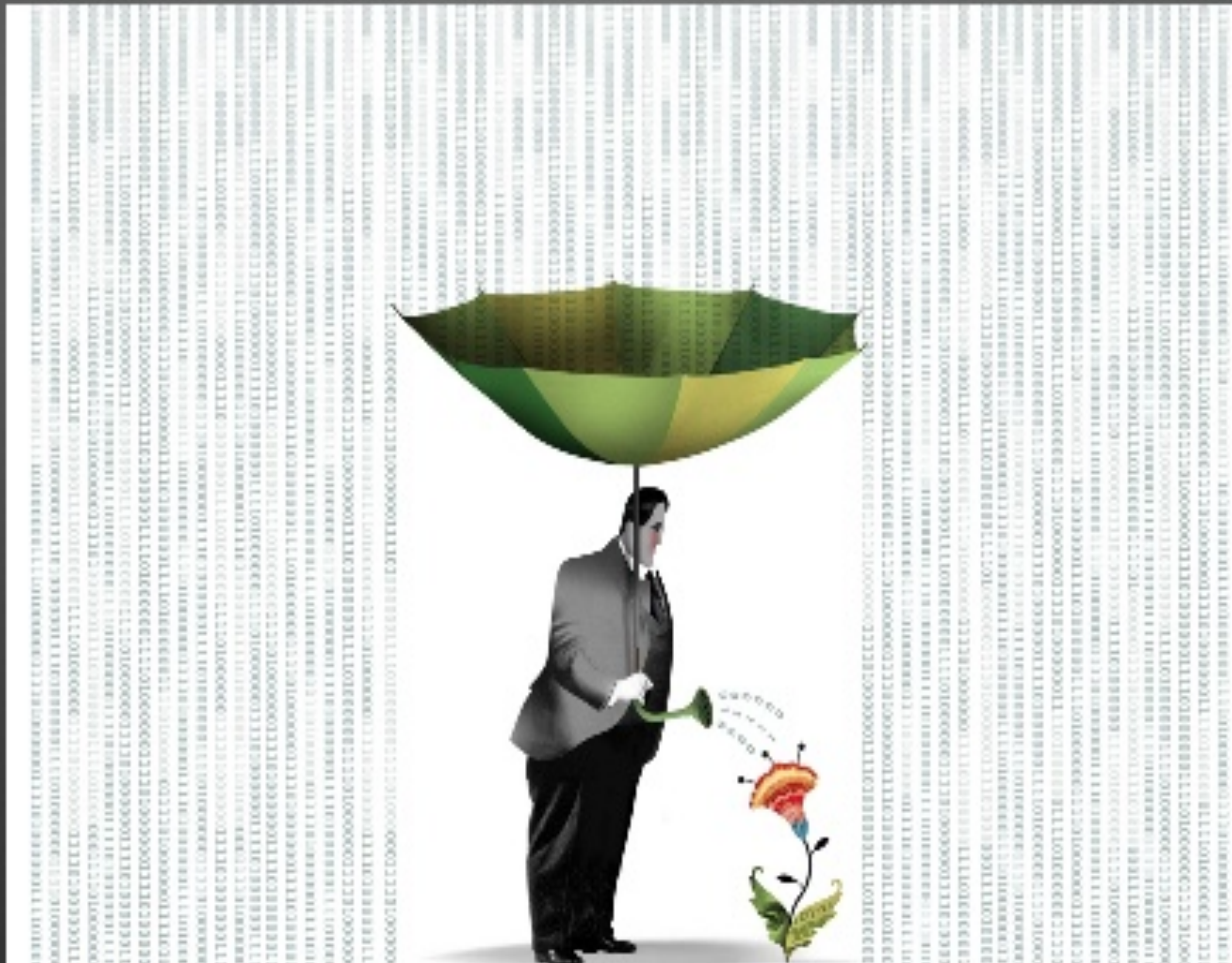
Institute for Teaching and Learning Innovation Learning Analytics and Evaluations Units

Doune Macdonald – Pro Vice Chancellor Teaching and Learning (Acting)

Marcel Lavrencic – Senior Learning Analyst

- Refocused units following restructure
- Goals of the units are to provide relevant information to:
    - encourage innovation in teaching and learning practices
    - support student engagement
    - increase student academic achievement
    - support UQx
    - advise staff professional development
    - research

Discovering Value in Data



DATA ABUNDANCE
DISCOVERING VALUE IN DATA? - HTTP://WWW.NEWSCHOOL.EDU/EVENTDETAIL.ASPX?ID=56252

http://www.slideshare.net/infoscape

Learning analytics for ....

Sandra Milligan

- measurement of complex higher order skills and capabilities (both domain-specific and for generic '21st C skills')
- by developing new forms of digital assessment, calibration, certification and regulation
- using assessment evidence generated by students, peers (crowd), and machines

Out with the old…

…in with the new… to support commercially-sustainable, 21st C learning at scale

Negin Mirriahi – UNSW Australia

Academic Developer & Lecturer

LA to inform pedagogical change:

- What are students' learning behaviour patterns or learning profiles?
- How can we improve our course design to enhance students' learning experience?
- How can we enhance students' self-regulated learning and reflective practice skills?

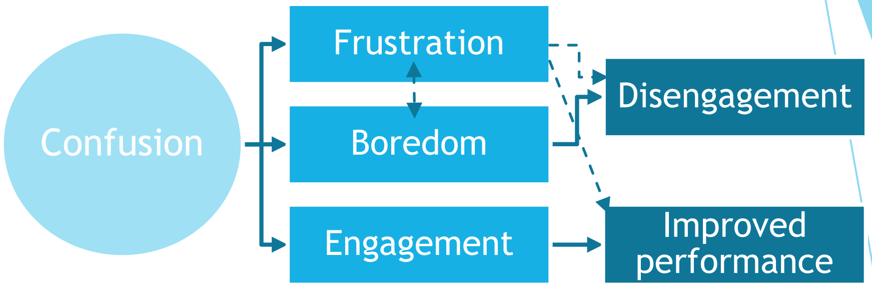
Videos

MOOCs

@neginm negin.mirriahi@unsw.edu.au

What learning analytics can tell us about confusion?

- Confusion is a part of the learning process



- Confusion can lead to engagement. Confusion during the training is a good thing “if it occurs on items designed to resolve this confusion” (Padros, Baker, San Pedro & Gowda, 2014) but not during the problem-solving.
- Frustration can be positively correlated to learning: on some occasions original frustration leads to engagement (Padros, et al., 2014) but often it also leads to boredom (D’Mello & Greasser, 2011) and disengagement (Greasser & D’Mello, 2012). Conditions under which frustration leads to engagement?
- Boredom was often found to be negatively correlated with learning outcomes, but some of the recent findings suggest that it’s bad only during the problem-solving and good during the training phase.
- Methods: machine-learning/data mining/decision trees, likelihood metric, extractions (PCA, cluster analysis)

Mariya Pachman (MQ)

Associate Head of Teaching and Learning

Learning & Affect Technologies
LATTE

Two courses
Grad/Undergrad

Tech to empower individuals and communities

Active learning

Behavioral analytics

Use of technology

User validation

DarrelBirkett Flickr

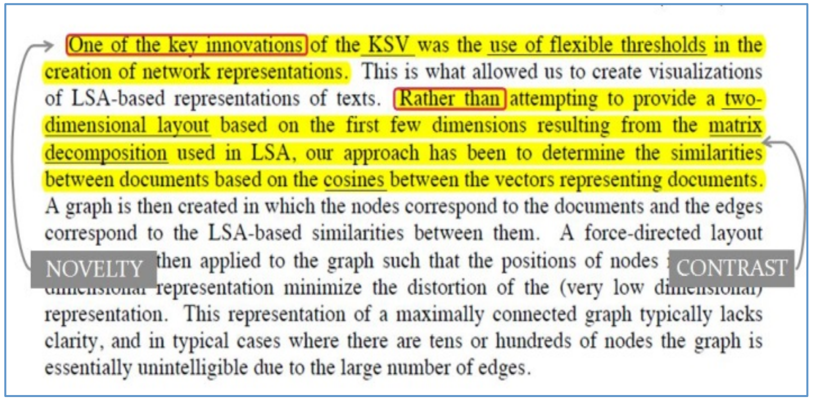
Learning Analytics in Oz: What's happening now, what's planned, and where could it (and should it) go?

UTS:CIC
CONNECTED INTELLIGENCE CENTRE

Simon Buckingham Shum
Ruth Deakin Crick

Academic Writing Analytics

Rapid formative feedback
on draft texts to provoke reflection


One of the key innovations of the KSV was the use of flexible thresholds in the creation of network representations. This is what allowed us to create visualizations of LSA-based representations of texts. Rather than attempting to provide a two-dimensional layout based on the first few dimensions resulting from the matrix decomposition used in LSA, our approach has been to determine the similarities between documents based on the cosines between the vectors representing documents. A graph is then created in which the nodes correspond to the documents and the edges correspond to the LSA-based similarities between them. A force-directed layout NOVELTY then applied to the graph such that the positions of nodes CONTRAST representation minimize the distortion of the (very low representation. This representation of a maximally connected graph typically lacks clarity, and in typical cases where there are tens or hundreds of nodes the graph is essentially unintelligible due to the large number of edges.

Dispositional Learning Analytics

Rapid formative feedback
to stimulate self-directed change