

Welcome to the LAK hackathon!

Take a seat (next to someone) & introduce yourself

History

- **2015 – Poughkeepsie**
 - Apereo Open Dashboard
- **2016 – Edinburgh**
 - scrutinized Jisc's xAPI recipes
 - tested learning record stores
 - assessed the learning analytics standards landscape
- **2017 – Vancouver**
 - actionable analytics
 - student feedback
 - embedding learning analytics in pedagogic practice
 - Jisc's student app

Hackathon has achieved lasting impact in a number of different areas

GitHub, Inc. (US) https://github.com/AlanMarkBerg/hack-at-lack16 90% ... tp://en.wikipedia.org ↗

This repository Search Pull requests Issues Marketplace Explore

AlanMarkBerg / hack-at-lack16 Unwatch 9 Star 2 Fork 2

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Branch: master hack-at-lack16 / TheEdinburghStatement-Signed.pdf Find file Copy path

kirstykitto Added the signed Edinburgh Statement 6bce773 on Sep 13, 2016

1 contributor

620 KB Download History



The Edinburgh Statement
for Learning Analytics Interoperability

As participants in the LAK16 Jisc/Apereo Hackathon, we believe that learning analytics is a key to future educational enhancement for all. As a growing community engaging with emerging

Resources and supporting infrastructure

LAK-Hackathon / LAK18Hackathon

Code Issues 0 Pull requests 0 Projects 0 Insights Settings

<https://lakhackathon.wordpress.com/>

Add topics

11 commits 1 branch 0 releases 3 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

AlanBerg Moved basic tutorial to proper place Latest commit d5602a2 3 days ago

groups Moved basic tutorial to proper place 3 days ago

logos clean repo for 2018, based on 2017 structure 20 days ago

technical_docs clean repo for 2018, based on 2017 structure 20 days ago

README.md clean repo for 2018, based on 2017 structure 20 days ago

README.md

LAK18 Hackathon

For [Learning Analytics and Knowledge Conference Hackathon 2018](#).
There is also a [Hackathon website](#).

The repository for the [2017 LAK Hackathon](#) may be of interest.

NB: there is a [separate general-purpose Learning Analytics Hackathon Support Material repository](#), which contains materials not specific to a given hackathon event. (This is a fork of a repository created by Michael Webb from Jisc)

<https://github.com/LAK-Hackathon/LAK18Hackathon>

Optimising e-portfolios through the means of xAPI and entity extraction of job advertisements

Alan Berg & Gabor Kismihok

[https://docs.google.com/presentation/d/1s1UH_Z37YQK7wAaQfnMGwoEIY9Yos-mNIDkkVVEsW4c/edit?
usp=sharing](https://docs.google.com/presentation/d/1s1UH_Z37YQK7wAaQfnMGwoEIY9Yos-mNIDkkVVEsW4c/edit?usp=sharing)

Hacking the Hackathon

<https://docs.google.com/presentation/d/17nByLefROAqNcsDk8cMaGQtI-N5oYiwC7BNTRn6rTKs/edit?usp=edit>

What role can Learning Analytics play in supporting university students to set goals for their own learning journey?

Gabor Kismihok and Catherine Zhao

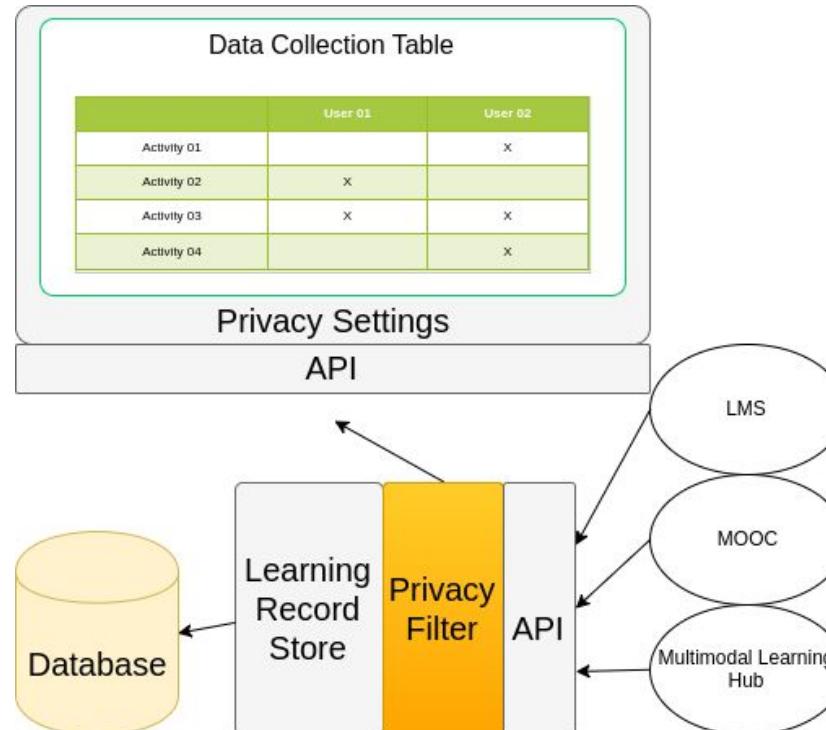
Integrating privacy into an architecture for LA

George Ciordas-Hertel

General Data Protection Regulation (GDPR)

- Right to be informed
- Right to access
- Right of rectification
- Right to restrict processing
- Right to erase
- Right to data portability
- **Right to object**
- Right in relation to automated decision making and profiling

Right to object



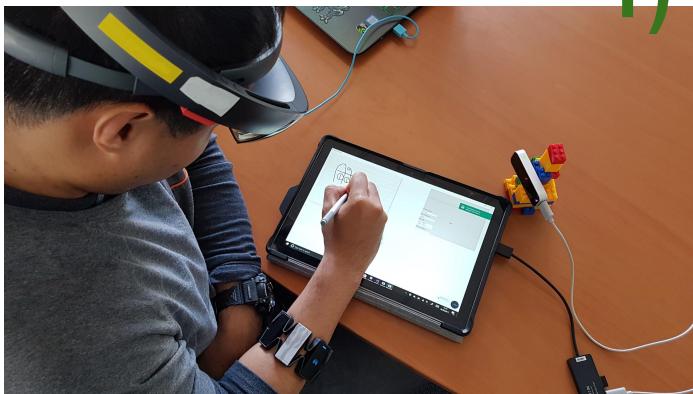
Multimodal challenge

analytics beyond user-computer interaction data

Daniele Di Mitri & Jan Schneider

Info doc: <http://bit.ly/MMLAhack>

3 core groups:



1) HUB

2) VIZ



{ 3) XAPI

```
"timestamp": "123",  
"actor": "jan",  
"verb": "waves",  
"object": "hands"
```

A Learning Analytics Data Literacy Playground

Tanya Dorey Elias, Anne-Marie Scott

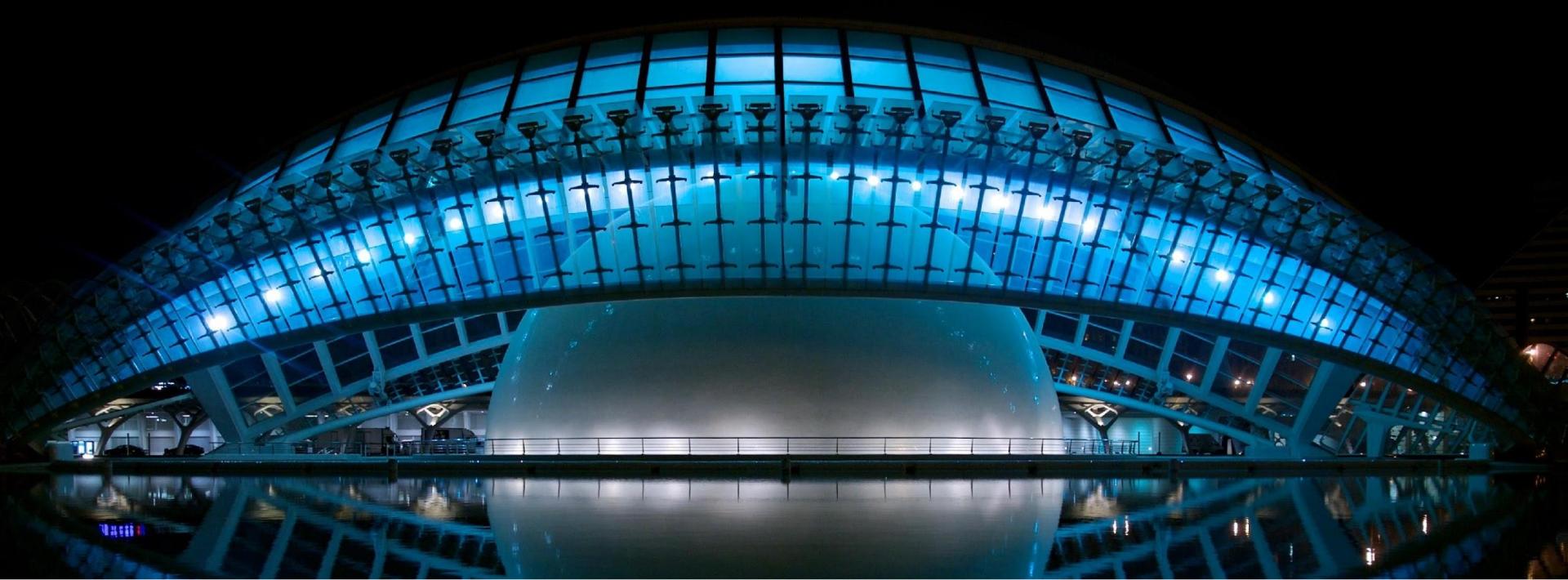
Learning Analytics Data Literacy Playground



#LAKhackathon #LAK18

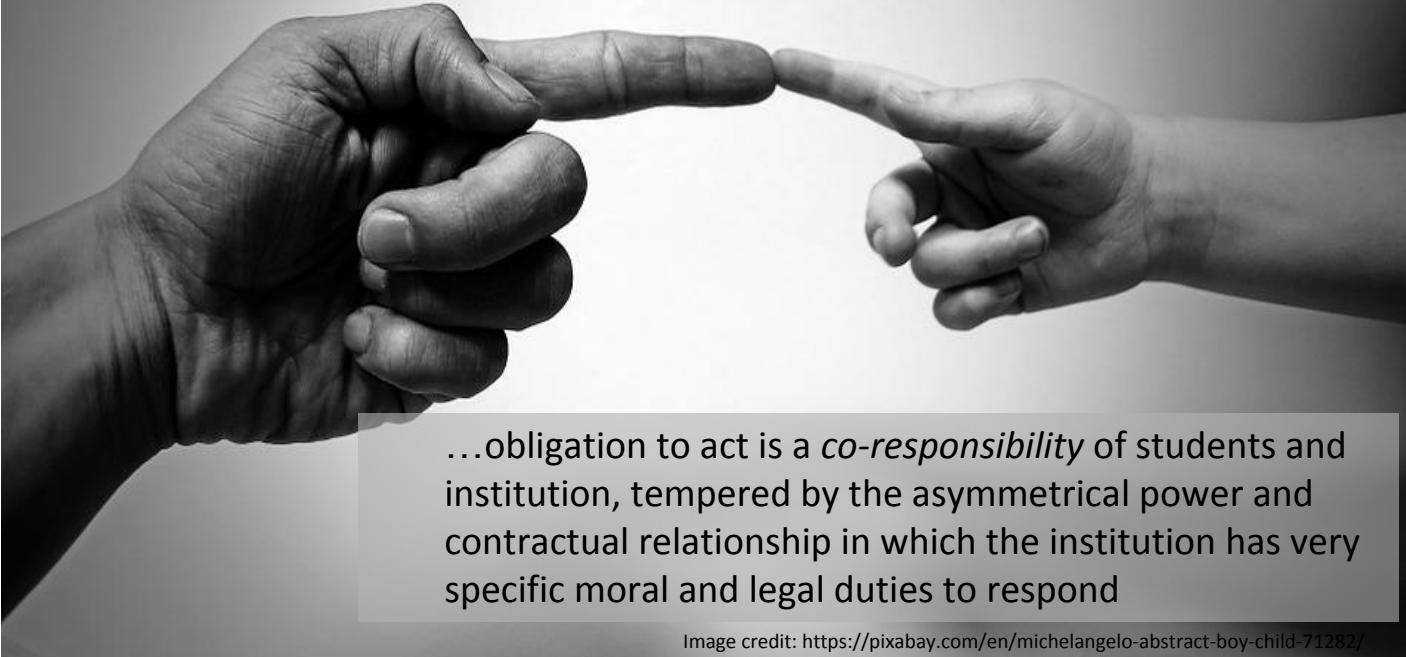
Anne-Marie Scott (Tanya Dorey-Elias, Samantha Ahern)

- Which design processes involve learners, educators and other users effectively in the **co-design of analytics tools?**
- Which techniques are effective in assessing **how end-users make sense of, interact with, and act on analytics feedback?**
- In what ways can learning analytics systems be biased, and can they be **made more transparent** and accountable to different stakeholder groups?
- How are educational leaders **creating the conditions** for learning analytics systems to take root and grow?
- How strong is the evidence that the adoption of learning analytics benefits stakeholders?



Successful co-design of analytics tools requires that students have a baseline level of understanding as to what data about them are being collected and what they could be used for

1. Co-responsibility in an asymmetrical power and contractual relationship



...obligation to act is a *co-responsibility* of students and institution, tempered by the asymmetrical power and contractual relationship in which the institution has very specific moral and legal duties to respond

Image credit: <https://pixabay.com/en/michelangelo-abstract-boy-child-71282/>



- How to build critical data literacy skills?
- How to develop awareness amongst students of the potential uses of their data and the possible consequences?
- How to gather more information about student perspectives?
- How to make algorithms open to interrogation?
- How to build skills for working with and interrogating data itself?

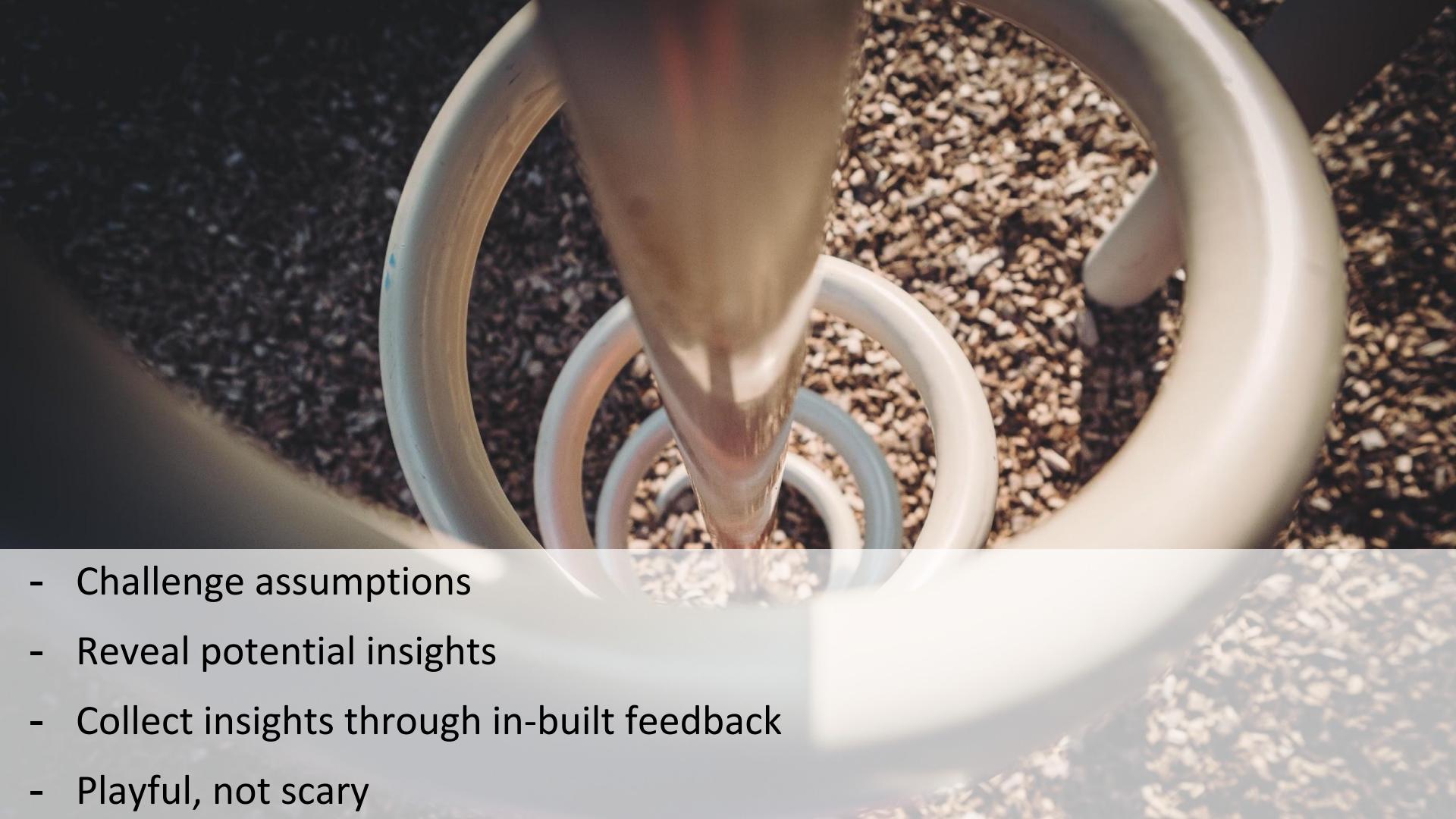
A close-up photograph of a large elephant's head and trunk. The elephant is facing slightly to the left, with its trunk extended downwards and to the left. The background shows a dry, open landscape with some greenery and hills under a clear sky.

Informed Consent



Learning Analytics Data Literacy Playground

- Scaffolded activities
- Synthetic data sets
- Interrogation / experimentation / visualisation tools

- 
- Challenge assumptions
 - Reveal potential insights
 - Collect insights through in-built feedback
 - Playful, not scary



1. Brainstorm learning analytics use cases
2. Define activities
3. Develop data and tools
4. Develop feedback mechanisms
5. Packaging and delivery

Other challenges?

Throw your hat in the ring now...

Customisable dashboards linked to learning design

Kirsty Kitto

Tech Know Learn (2017) 22:377–384
DOI 10.1007/s10758-017-9314-3



ORIGINAL RESEARCH

Student Facing Dashboards: One Size Fits All?

Stephanie D. Teasley¹

Published online: 26 April 2017
© Springer Science+Business Media Dordrecht 2017

Abstract This emerging technology report reviews a new development in educational technology, student-facing dashboards, which provide comparative performance feedback to students calculated by Learning Analytics-based algorithms on data generated from university students' use of educational technology. Instructor- and advisor-facing dashboards emerged as one of the first direct applications of Learning Analytics, but the results from early implementations of these displays for students provide mixed results about the effects of their use. In particular, the “one-size-fits-all” design of many existing systems is questioned based on findings in related research on performance feedback and student motivation which has shown that various internal and external student-level factors affect the impact of feedback interventions, especially those using social comparisons. Inte-

Designing for student-facing learning analytics

Kirsty Kitto

University of Technology Sydney

Mandy Lupton

Queensland University of Technology

Kate Davis

University of Southern Queensland

Zak Waters

Queensland University of Technology

Despite a narrative that sees learning analytics (LA) as a field that aims to enhance student learning, few student-facing solutions have emerged. This can make it difficult for educators to imagine how data can be used in the classroom, and in turn diminishes the promise of LA as an enabler for encouraging important skills such as sense-making, metacognition, and reflection. We propose two learning design patterns that will help educators to incorporate LA into their teaching protocols: *do-analyse-change-reflect*, and *active learning squared*. We discuss these patterns with reference to a case study utilising the Connected Learning Analytics (CLA) toolkit, in three trials run over a period of 18 months. The results demonstrate that student-facing learning analytics is not just a future possibility, but an area that is ripe for further development.

CIC repo is available... angular front end with no connections

README.md

CanvasDashboardIntegration

This project was generated with [Angular CLI](#) version 1.5.0.

Instructions

Run `ng serve` for a dev server. Navigate to `http://localhost:4200/`. The app will automatically reload if you change any of the source files.

To get more help on the Angular CLI use `ng help` or go check out the [Angular CLI README](#).

Project Structure

- src
 - app
 - **components:** Charts and other fragments of the project
 - **engagement-chart:** Engagement levels on each social media platform. Engagement = how many replies or interaction with other users. This is not equal to reach level, which only associates with amount of views.
 - **keywords:** Rank of keywords being used the most by the user, also shows the amount of times being used.
 - **network-chart:** Who the user is connected with. There can be several groups of people the user is connected with, as shown by the different node colours.
 - **social-activity-chart:** Amount of social media activities over a timeline. Focus chart below the main chart can be used to zoom in, out, and to navigate along the timeline.
 - **social-reach-chart:** Reach levels on each social media platform. Reach = how many views on posts created in the different social media platforms.
 - **topic-analysis-chart:** Analysis of how popular a topic is over a timeline. Focus chart is provided to zoom in, out, and to navigate along the timeline.



Content Manager

Activity

 Social activity Keywords

Network

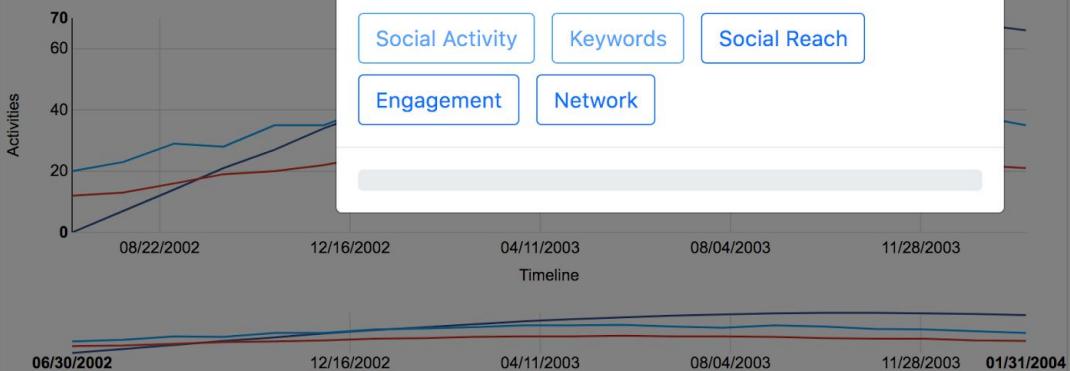
 Social reach Engagement Network

Topic

 Twitter topic analysis

Task Manager

Social Activity



Select Your Content



Select components to fill up your second row

Basic

Advanced

Custom

Social Activity

Keywords

Social Reach

Engagement

Network

Keywords

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52

DesignPrinciples

34

MobileDevelopment

25

SoftwareDevelopment

16

IXD

15

IXDEvent2017

13

canvasdashboard.utscic.edu.au/

Click here to select your content

3 of 3 spaces left

What Does Algorithmic Transparency Look Like?

(A micro-challenge riff... from Adam Cooper)

From a user-centred learning analytics perspective (which users)?

Resonances or dissonances?

- Algorithmic accountability
- Learning analytics data literacy playground

What Does Algorithmic Transparency Look Like?

Transparent or Experiential?



Synergies?

Time to start mingling around a challenge...

Groups will form after morning tea

Morning tea

Lunch

Afternoon tea