

ENABLING CONNECTED LEARNING VIA OPEN SOURCE ANALYTICS IN "THE WILD"



Kirsty Kitto

Information Systems School | Learning Futures

kirsty.kitto@qut.edu.au

@KirstyKitto

Want to try it out?

(see James to sign up to simple prototype scrapers)

- Tweet to: #clatest
- Post to FB group: CLA Workshop

We will come back to this later...

[+ Create new LRS](#)

Hosted on
[Learning Locker Cloud](#)

i You are still in your trial period which
At that point you need to have entered

LRS List

Title	Description
Kirsty's LRS	
Mandy's LRS	
James's LRS	
Abelardo's LRS	
Shane's LRS	
Grace's LRS	
Zak's LRS	
Seb's LRS	
Simon's LRS	
Aneesha's LRS	

Add Module

Personalise Page

**Tools**

QUT Blackboard Mobile

My Grades

Quicklinks

QUT Virtual
Library
IT Helpdesk
Email
InPlace
QUT Media Warehouse

My Announcements*No Institution Announcements have been posted in the last 7 days.*

Environmental Resource Management

- > Groundwater prac = a) INDIVIDUAL write up b) missing data!
- > Group check in sessions tomorrow

IT Capstone Project

- > NB302 Week 6 - Week 8 workshops
- > INB302 Week 5 reminder

[more announcements... →](#)**My Units**

☰ 2015

SEM-1 (23 February 2015 - 23 June 2015)**ENB383_15se1: Environmental Resource Management**

[Lecturer]

INB302_15se1: IT Capstone Project [Lecturer]**SEB104_15se1: Grand Challenges in Science** [Coordinator]

⊕ 2014

⊕ 2013

QUT Blackboard Announcements**Check out the staff technology dashboard in the Intranet demo site**

A [staff technologies dashboard](#) has been developed as a central portal for you to access all of QUT's teaching and learning tools. It creates a common area for these tools and will provide information about emerging technologies. Take a look around the dashboard in the Intranet demo site. We'd love to hear what you think. To share your feedback or suggestions



- email ryan.hendy@qut.edu.au (Ryan Hendy, Project Manager)
- join in the discussion and vote on [Sharing Ideas](#)
- use the pink Feedback button on the dashboard page.

Pulse survey

The Pulse survey for Semester 1 is currently open. Students and teaching teams can access the survey through the link within their personal email invitation. Find out how your unit went this semester by encouraging your students and members of the teaching team to provide their feedback. The survey closes at midnight on Tuesday, 31 March, 2015.


Find out more: <https://www.intranet.qut.edu.au/teaching/review-evaluate/your-personal-evaluation-tools/pulse-survey>

My Communities**Communities where you are: Participant**[Blackboard Site Design Guide](#)[IT Security Awareness](#)[ST01 Development](#)[Science & Engineering, HDR Student Information](#)**Communities where you are: Lecturer**[ST01 Bachelor of Science](#)

How can we support people teaching beyond the LMS?

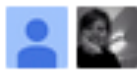
Using:

- Google+
- Facebook
- Twitter
- Wikis
- StackExchange
- Blogs
- GitHub
- ...


 **Kirsty Kitto**
Examples - 17 Oct 2014

Ooo - DALMOOC intro video went live while we were otherwise engaged...




+1 

14 comments ▾


 **Kirsty Kitto**
21 Oct 2014 +1
+Susan Savage and it has rocks! I like rocks :)

Add a comment...


 **Mandy Lupton**
Discussion - 17 Oct 2014


The K-12 connected learning classroom

Avoiding Obsolescence:
13 Standards For A Near-Future School

Publishing Is Seamless	Students Learn To Learn	Freedom From Anonymity	Students Are Connected
All Tests Are Responsive	New Definitions Of School Quality	Portfolios Are Alive	Search Is Dead
Choice Breeds Further Innovation	AI Supports Students	Bandwidth Equity For Schools	The Physical & Digital Are Blended
			


The following can be seen as a kind of set of minimum standards for the school of 2024. This can adaptively serve as a kind of minimum for public schools and districts, and the level of bar for what a school might take to achieve to avoid becoming obsolete.

 Cognitive computing
Artificial intelligence meets business intelligence




+2 

2 comments ▾

 **David Dennis**
7 Nov 2014 +1
Digging around I kinda want a personalised cognitive computing system. One that I could task about curating things on topics I am interested in, summarising the data for

Add a comment...

 **Kate Davis**
Of interest - 28 Oct 2014

There are some good tips here for improving retention for online learning, all strategies we've been using to varying extents in different units. I'd suggest though that 'blended' in tip nine doesn't have to be a blend of F2F and online. A blend of synchronous and asynchronous can be just as effective. The time



can we knit together a solution?
one that pulls together whatever we need...



A RESEARCH PROGRAM:

THE CONNECTED LEARNING ANALYTICS TOOLKIT

EXPERIENCE API

- flexible data standard
- stores JSON statements of <actor><verb><object> form (e.g. Kirsty gave talk) in a Learning Record Store



SCHEMA

social media



scraping

LRS xAPI



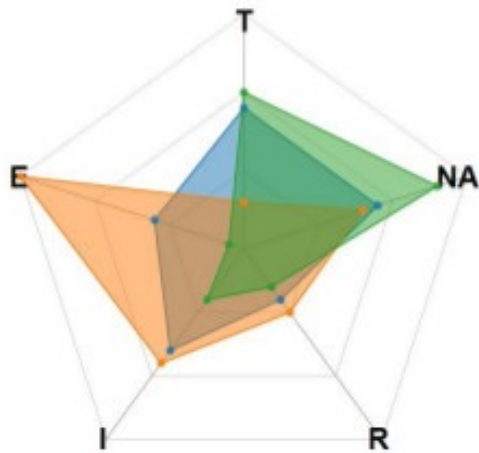
analysis

```
Triggering  Anyone else having navigation issues on blackboard. Every time I try to go to the assignment or unit tab in UBD101 I get redirected to a blank page. -> Triggering
Explanation  Another useful one (but its from the UK, some principles can be applied though) ->
Explanation
Explanation  Is that the $168 000 price looking as? andd when we want to be using the direct + comparison approach? -> Triggering
Explanation  think we're suppose to do both men, and yes 165, not sure which sale price we're t o use. current sale, which was few weeks out, or the 1991. but the apartment was inspected before the house was sold, which i think means we'd have to use the previous sale of 165. but not 100% su re we are lol. -> Integration
Explanation  i am fairly sure quiet enjoyment does not literally mean lack of noise.. i think i t is to do with pests and landlords not being able to trespass.. but i may be wrong - there all i found on it bats on and nuisance in the paper relates to the environment.. so you may be able to use the same act -> Integration
Integration  Hey Elise, Oh here goes. Think of our legal structure as this. General law rights a p top, these are ideas that are general ie quiet enjoyment. And from that we create the next layer - legislation which clarifies a little more the general law. Under this we will have codes and pla nning schemes (town plans), building code of australia another good one. etc which are clear and is what everyone will use to get stuff done. -> Integration
Integration  Formatting problems typically arise because you've pasted from Word or similar and that has inserted hidden formatting code (html) behind the text you have inserted. If you copy al l the problem text (which may include everything in the reference list) and paste it into a text e ditor (e.g. Notepad), delete the html text and paste the clean text back in, it will strip out all the hidden formatting. You can then apply formatting via the wiki. -> Integration
Integration  In the text editor bar, 2nd row, 5th button is from the left there is clear format ting button. Select it all and press it. Sometimes you have to go to the exact spot and press it a gain -> Explanation
Resolution  cheers mate, was helpful. Wish I'd known about that button a few weeks ago -> Ex planation
```

semantic technologies

contextualised reporting

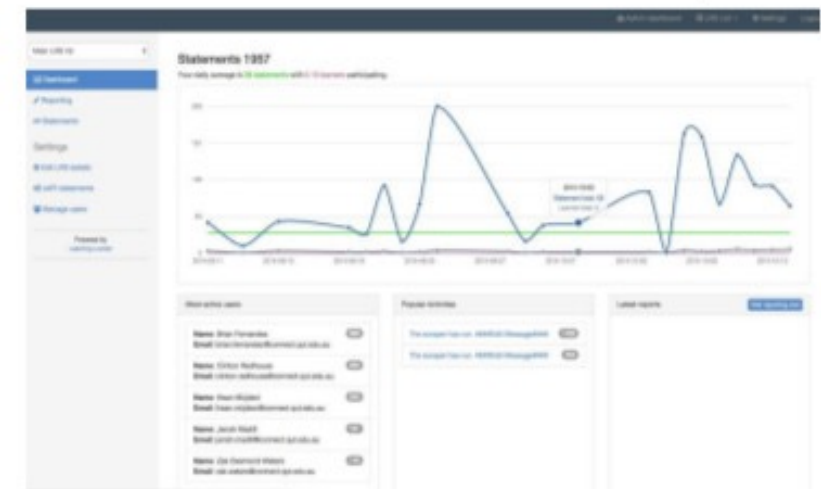
students



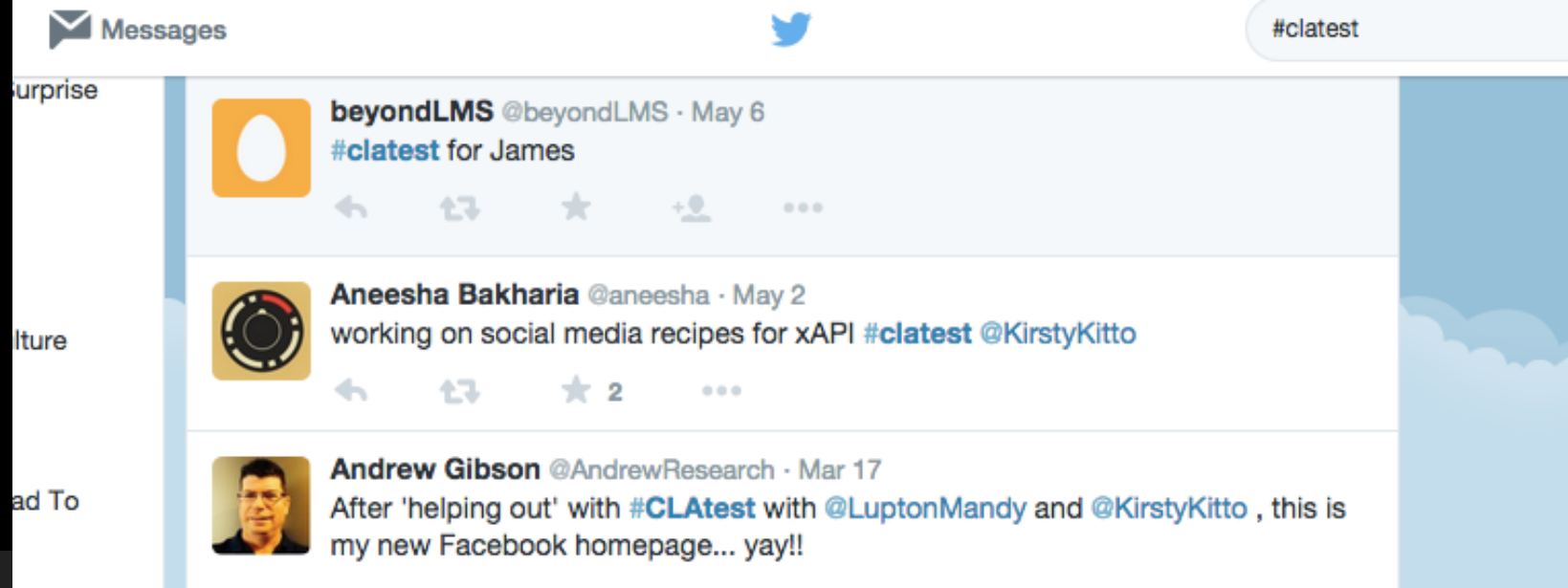
academics



admin & developers



FOR EXAMPLE



CLAToolkit

Register for Scraping

Link your social media with your QUT Connect acc

Linking up your social media accounts are essential to understand of your learning.

For both Facebook and google+ they require authentication. This is why you will need to sign-in to each browser.

Twitter requires you to enter your username (@yourusername) and a hashtag to be associated with. You can add more than one hashtag but you must always enter your username.

Twitter

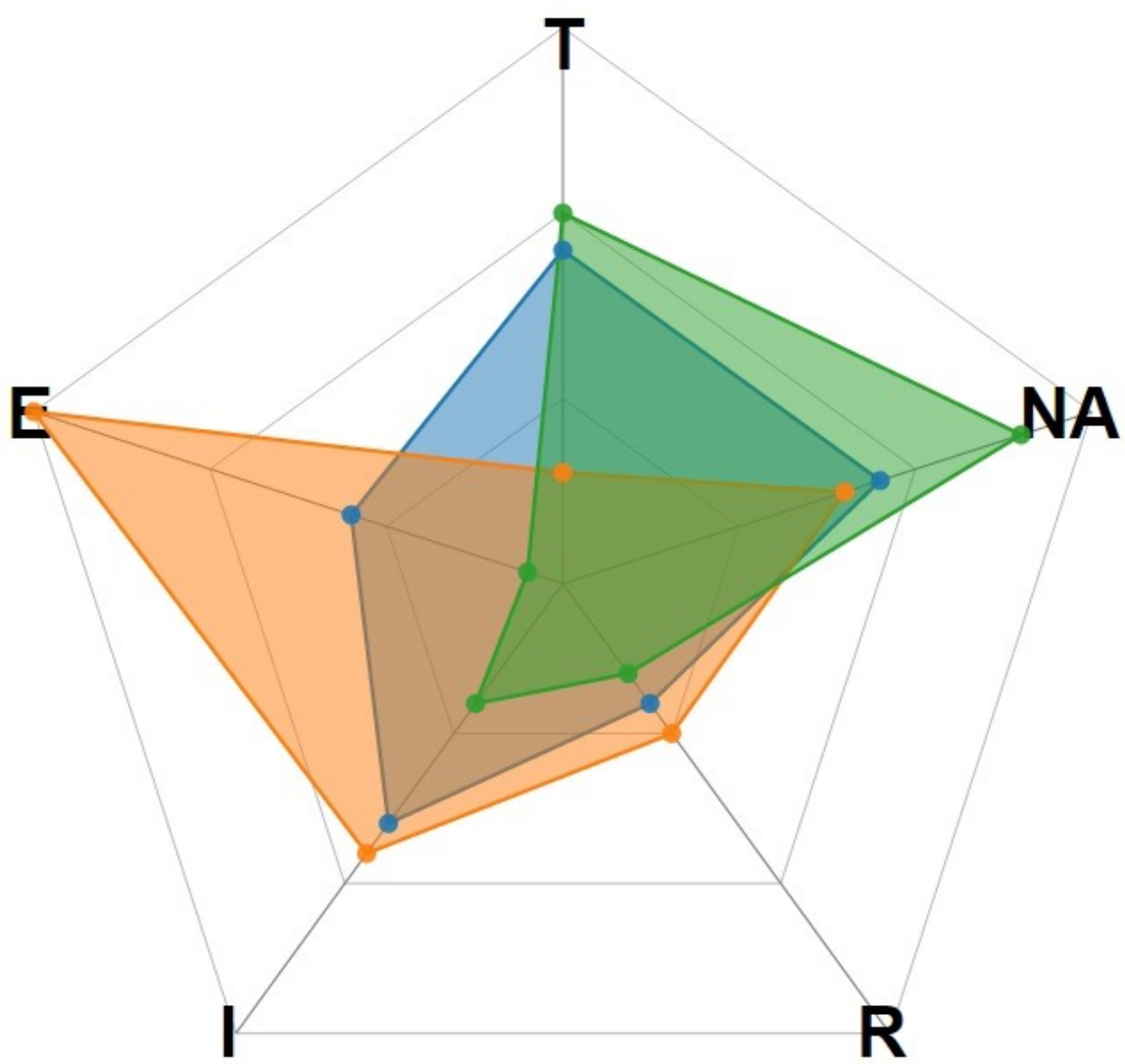
Enter your Twitter Username

Enter your Twitter User ID (Lookup [here](#))

Enter your Email

Enter Hashtag to Scrape

Register



ed.

View photo

analytics toolkit at LAK15 of

```
nt",
p://www.twitter.com/",
",
",
vitystrea.ms/schema/1.0/create",
id"
tter.com/aneesha/status/593190361255677952",
e",
having the worst luck with ordering electronic component
'activitystrea.ms/schema/1.0/note"
```

```
},
"context": {
  "platform": "Twitter",
  "contextActivities": {}
}
}
```

NOTE - THERE ARE LOTS OF DIFFERENT MEDIA...



Vimeo might say:

Tim Martin watched "How to make Grilled Cheese"

Tim Martin played the first 31 seconds of "How to Make Grilled Cheese"

Tim Martin paused "How to Make Grilled Cheese" at 31 seconds

Tim Martin exited "How to make Grilled Cheese"



YouTube might say:

Tim Martin launched "How to Make Grilled Cheese"

Tim Martin watched from 0s to 31s of "How to Make Grilled Cheese"

Tim Martin paused "How to Make Grilled Cheese" at 31s

Tim Martin closed "How to Make Grilled Cheese"

A CONSISTENT MAPPING

- Analysis across different platforms made easier with planning
- Recipes in preparation:
 - Microblogging
 - Content Creation
 - Collaborative Content Authoring
 - Content Curation
 - Association with Course, Team and Instructor

<https://github.com/kirstykitto/CLRecipe>

Modeling Social Media Interaction as an xAPI statement

The CLRecipe project:

- maps terminology from various social media platforms to a common set of objects and verb
- provides an xAPI Recipe for building xAPI statement for modeling social media interactions that include the relationship between social media posts (i.e. reply, share and like) so that advanced analytics (including content analysis and social network analysis) can be performed
- provides xAPI recipe examples for Microblogging, Content Authoring, Content Collaboration and Content Curation

Though social media platforms use different terminology, a common model of interaction exists (see figure below). The model involves:

- A user can create a post. The post could be a short microblog post or a full article.
- A user can optionally including tag/s, hashtag/s or mention other users when creating the post.
- Other users can share a post (i.e. for their followers to view) and optionally including a comment.
- Other users can replying to the original post.
- Other users can rate the original post.



The Recipe for representing social media activity as xAPI statements prescribes that:

- A common set of verbs and objects must be used to represent activity across all social media platforms. Terminology used by specific platforms like Twitter and Facebook is mapped to a standard set of object and verbs (e.g. A 'Tweet' and Facebook Timeline post will both be mapped to the Note object; Twitter 'Favorite' and Facebook 'Like' will be represented by the 'like' verb).

RECIPES FOR HIGHER ORDER THINKING?

Entree, Main Meal, Desert, ... Banquets