

# Open Data and Higher Education: future gains and current practice

1<sup>st</sup> Open Data Working Group

Pisa, Italy, 2014

ERCIM 25<sup>th</sup> anniversary meeting

Su White, Web and internet Science, ECS,

University of Southampton, UK

# Su White



@suukii



UNIVERSITY OF  
Southampton

Web and Internet Science Research Group

# Southampton: home to open data

The screenshot shows the University of Southampton Open Data Blog homepage. The top right features the University of Southampton logo. A search bar is located on the left. A vertical navigation menu on the left includes links to Home, Open Data Blog, Data Catalog, Contact Us, Web Team Blog, and University Home. The main header area displays 'Southampton Open Data Blog' with a feed icon. Below this, a featured article titled 'Building Entrance Data' by Ash Smith is dated August 7, 2014. The article text discusses the University's Web and Intelligence team's annual 'WAIS Fest' and their work with open data. A sidebar on the right contains the 'open data institute' logo, a search bar, and navigation links. At the bottom, a large banner for the 'ODI Summit 2014' is visible, featuring a colorful geometric design and the text 'Knowledge for everyone'.

UNIVERSITY OF  
Southampton

Search

This site • University •

Home

Open Data Blog

Data Catalog

Contact Us

Web Team Blog

University Home

Southampton Open Data Blog

Building Entrance Data

August 7, 2014  
by Ash Smith

The University's Web and Intelligence team had their annual "WAIS Fest", which the researchers all found interesting. It gives them all a chance to share their work, which may not always work with – it also it allows the group to try get done in their normal line of work. In the past, WAIS prize-winning research public Data Service have benefited from always make a point of getting

This year, I ran my own theme, good at getting information from usually by showing its parts. But there

open data institute

Search ODI

GO

Contact us

About ▾

Get involved ▾

Learning & courses ▾

What's happening ▾

News & blog ▾

ODI SUMMIT 2014

3-4 NOV

BOOK NOW

Knowledge for everyone

ODI Summit 2014

<http://data.southampton.ac.uk>

# Open scholarship and research

Eprints, Dspace, etc

Adventures in semantic publishing,  
Shotton et al 2009

Self archiving mandates

Data as well as publications

Observational lessons  
from the OS  
community





# Increasingly a matter of principle



The Future of Research Communications and e-Scholarship

[Home](#)[About](#)[Community](#)[Members](#)[Groups](#)[Resources](#)[News + Events](#)[Publications](#)[Contact](#)

## Force 11 Manifesto

Attachment:

 [Force11Manifesto20120219.pdf](#)

[Go to the discussion area](#)

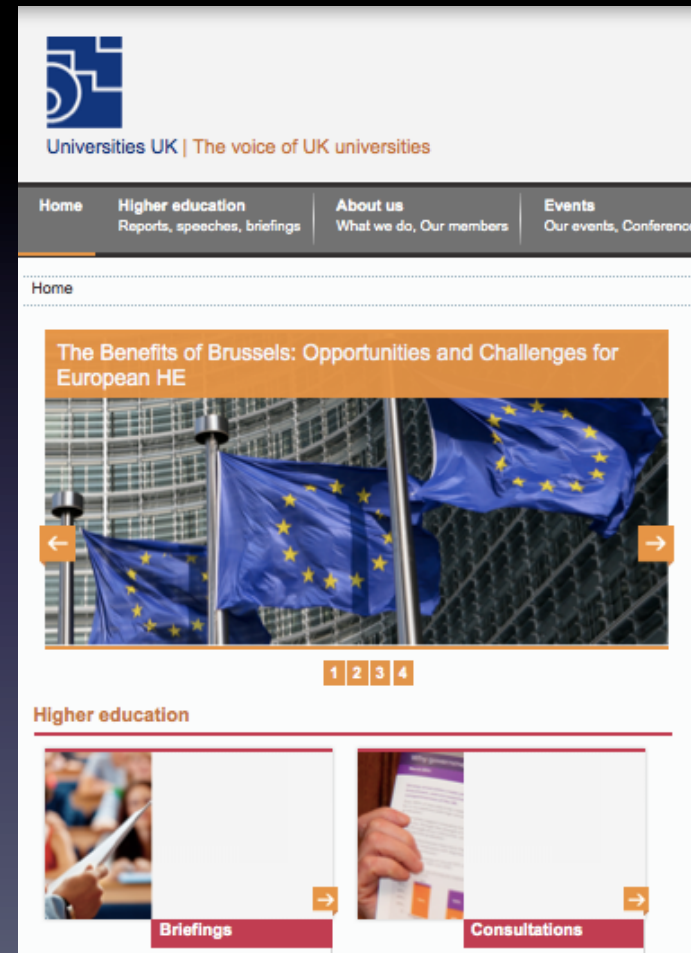
Improving Future Research Communication and e-Scholarship

**Editors:** Phil E. Bourne<sup>a</sup>, Tim Clark<sup>b</sup>, Robert Dale<sup>c</sup>, Anita de Waard<sup>d</sup>, Ivan Herman<sup>e</sup>, Eduard Hovy<sup>f</sup>, and David Shotton<sup>g</sup>

**Contributors:** Bradley P. Allen<sup>d</sup>, Aliaksandr Birukou<sup>h</sup>, Judith A. Blake<sup>i</sup>, Philip E. Bourne<sup>a</sup>, Simon Buckingham Shum<sup>j</sup>, Gully A.P.C. Burns<sup>f</sup>, Leslie Chan<sup>k</sup>, Olga Chiarcos<sup>l</sup>, Paolo Ciccacese<sup>b</sup>, Tim Clark<sup>b</sup>, Laura Czerniewicz<sup>m</sup>, Robert Dale<sup>c</sup>, Anna De Liddo<sup>j</sup>, David De Roure<sup>g</sup>, Anita de Waard<sup>d</sup>, Stefan Decker<sup>n</sup>, Alex Garcia Castro<sup>o</sup>, Carole Goble<sup>p</sup>, Eve Gray<sup>m</sup>, Paul Groth<sup>q</sup>, Udo Hahn<sup>r</sup>, Ivan Herman<sup>e</sup>, Eduard H. Hovy<sup>f</sup>, Michael J. Kurtz<sup>s</sup>, Fiona Murphy<sup>t</sup>, Cameron Neylon<sup>u</sup>, Steve Pettifer<sup>p</sup>, Mike W. Rogers<sup>v</sup>, David S. H. Rosenthal<sup>w</sup>, David Shotton<sup>g</sup>, Jarkko Siren<sup>v</sup>, Herbert van de Sompel<sup>x</sup>, Peter van den Besselaar<sup>q</sup> and Todd Vision<sup>y</sup>

# According to Universities UK

- Decision making and organisational change
- Student choice and recruitment
- The research process
- Teaching and learning
- Driving economic growth



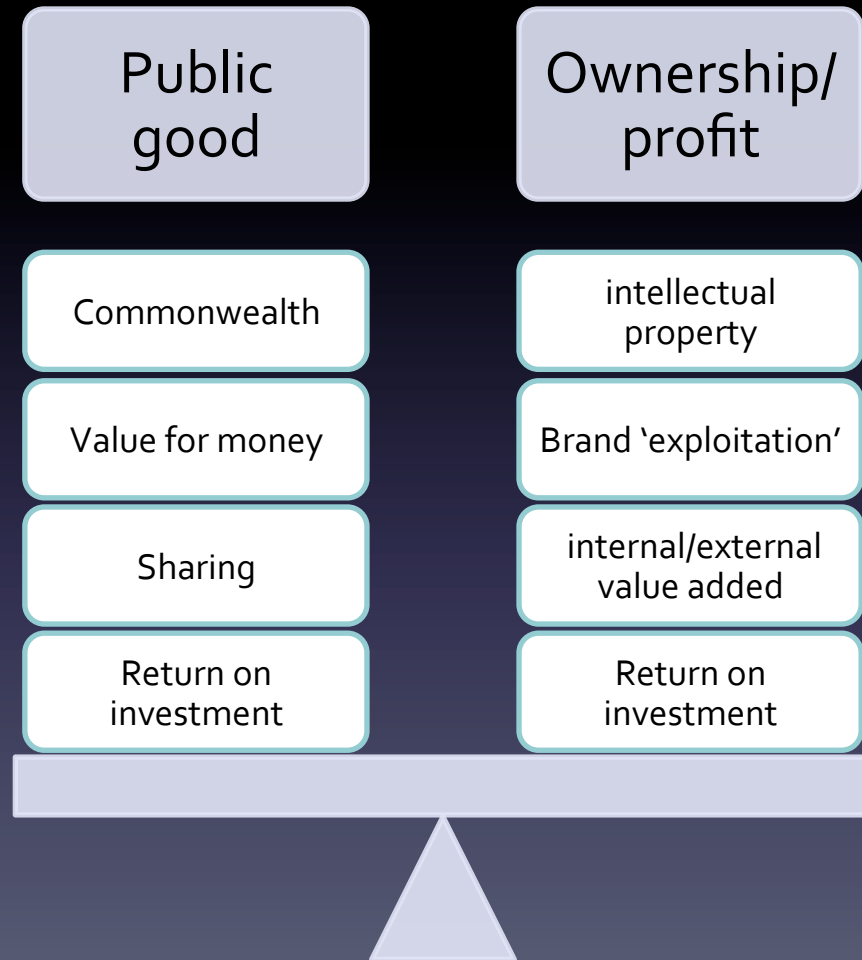
# Education Advisory Board 2010

- “Profile of the dashboards, key performance indicators, and business intelligence capabilities that are emerging as the new gold standard for university decision support as a growing number of institutions are investing in data and analytics as critical change-management tools”.

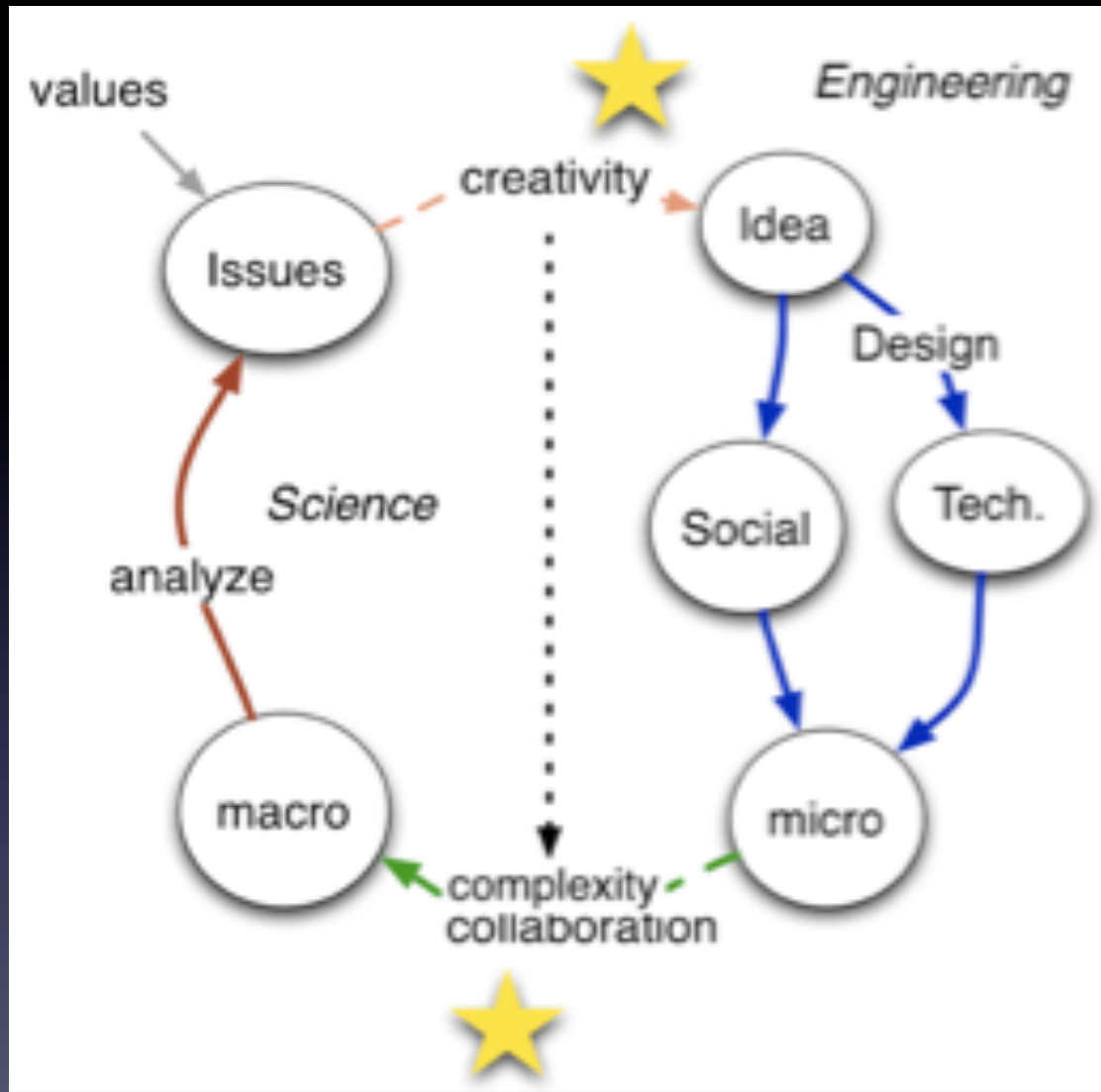
[Developing a Data-Driven University](#)

EAB, Washington DC

# A view of current motivations?

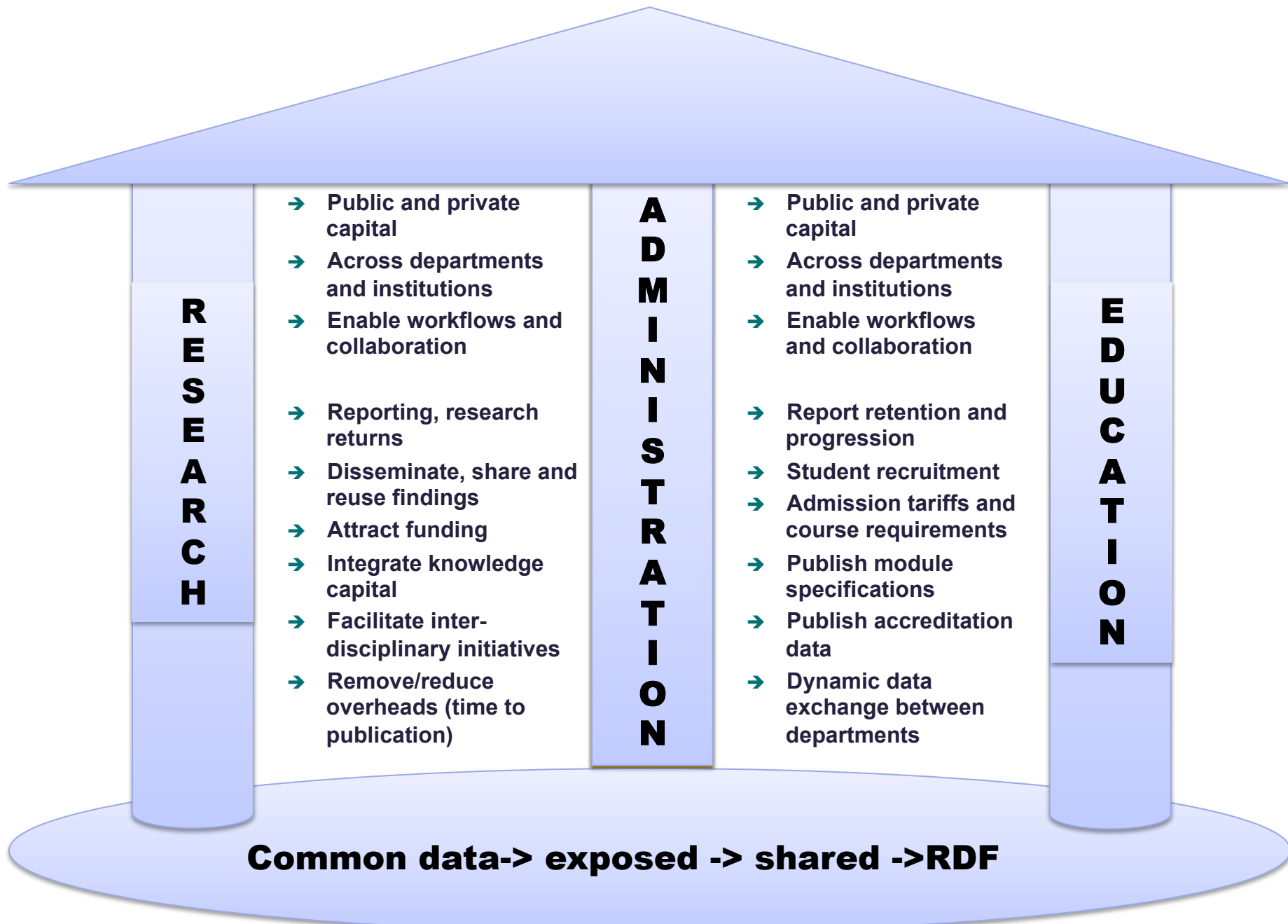




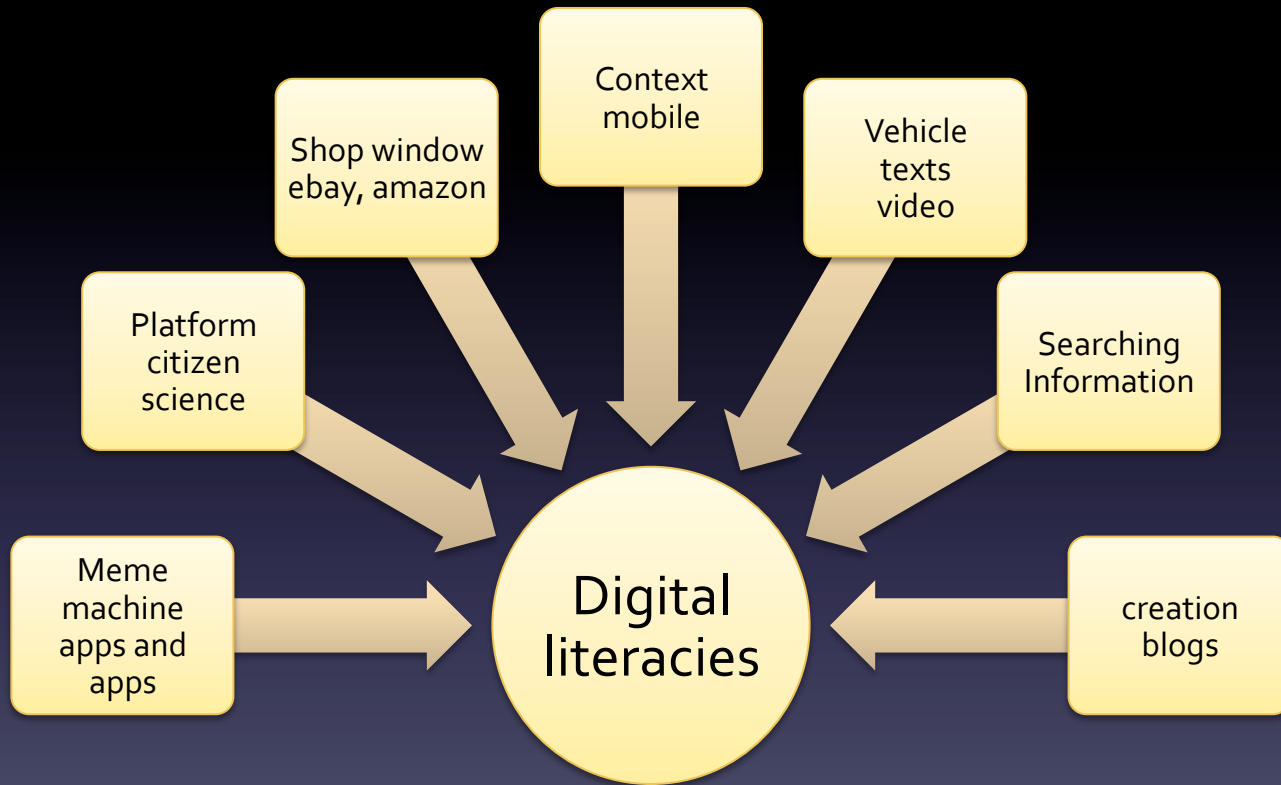


## The two magics

(Tim Berners Lee, 2006, 2007)



# Educational landscape



From rent a coder, to wikilogia, from flickr to Pinterest, itunesu to Tedx sharing, ownership, micro-charging, new models, Tripit meme machines borrow from business

# Making things work smoothly

## Apps & Tools

Open Data Map

What Week Is It?

Bus Information

iSolutions Workstations

Room Finder

Search

This site University

Home

5★ Data

Frequently Asked Questions

Apps & Tools

Open Data Map

What Week Is It?

Bus Information

iSolutions Workstations

Room Finder

Data Catalogue

Events

Catering

Places

Phonebook

UNIVERSITY OF  
Southampton

Open Data Service

Room 2/1035 - Lecture Room L

<http://id.southampton.ac.uk/room/2-1035> ← This is the URI



Located within: Building 2  
Capacity: 56 people

Recommended Entrances

Management entrance

Features

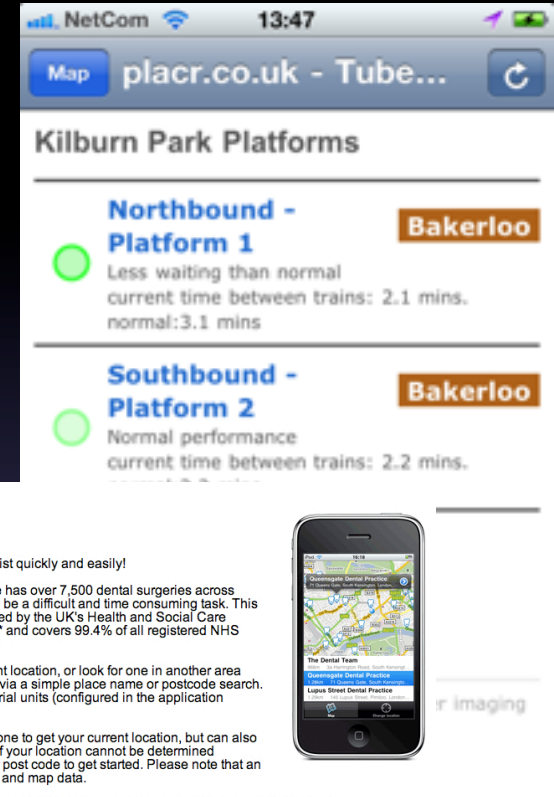
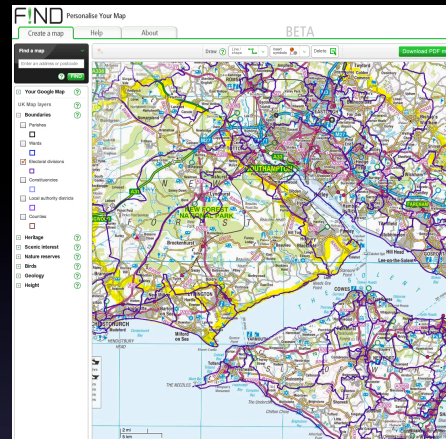
Bench PC  
DVD player  
Data/Video projection  
Fixed seats - flat



“The people who will  
do cool stuff with  
your data...  
will not be you”



# Look to the 'wild'



## UK Dentists



**Find your nearest NHS dentist quickly and easily!**

The National Health Service has over 7,500 dental surgeries across England but finding one can be a difficult and time consuming task. This app is based on data provided by the UK's Health and Social Care Information Centre (HSCIC)\* and covers 99.4% of all registered NHS dental surgeries in England.

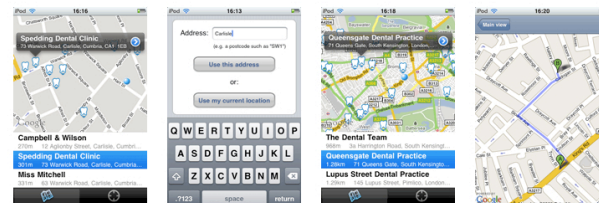
Search for an NHS dentist around your current location, or look for one in another area (where you may be moving to, or for a friend) via a simple place name or postcode search. Distances can be displayed in metric or imperial units (configured in the application preferences).

UK Dentists uses the built in GPS on the iPhone to get your current location, but can also locate an iPod Touch in built-up WiFi areas. If your location cannot be determined automatically then you can always enter your post code to get started. Please note that an internet connection is required to get location and map data.

\* Data reproduced under the terms of the Office of Public Sector Information (OPSI) Click-Use Licence.

### Application Screenshots

[Click on any of the images to see a larger version](#)



**Buy on iTunes**

the educational contexts will emerge  
the issues are ones of scale

# Students as producers and learners

GREATERLONDONAUTHORITY

london.gov.uk

london datastore

Search Datastore

RSS feeds

**Datastore**

Datasets A-Z

Categories

Keywords

Organisations

Search Datasets

Request Dataset

Popular Suggestions

Latest Suggestions

API Beta

Blog

Inspirational Uses

Useful Links

Digital Advisory Board

About

FAQs

**A first step towards freeing London's data**

Visualization by I/O World using London Transport data

**Welcome to the London Datastore**

The London Datastore has been created by the Greater London Authority (GLA) as an innovation towards freeing London's data. We want citizens to be able access the data that the GLA and other public sector organisations hold, and to use that data however they see fit – free of charge. The GLA is committed to influencing and cajoling other public sector organisations into releasing their data here too.

Releasing data though is just half the battle. Raw data often doesn't tell you anything until it has been presented in a meaningful way. We want to encourage the masses of technical talent that we have in London to transform rows of text and numbers into apps, websites or mobile products which people can actually find useful.

Join the conversation via [Google](#), [Twitter](#) or [email](#) and give us your thoughts and feedback - we want to make this site work for you!

**Latest Datasets**

**Popular Datasets**

**Place of Residence by Place of Work, Region**

**NOVEMBER 2010** | Employment and Skills

Number of people in work by place of residence and work (main job). This matrix displays travel to work patterns.

Average: ☆☆☆☆

**Workless Households, Borough**

**NOVEMBER 2010** | Employment and Skills

Tables show numbers and proportions of households that are

DC.gov Service Request Center Area Residents Business & Non-Profit Visitors

**Data Catalog**

For years the District of Columbia has provided public access to city operational data through the Internet. Now the District provides citizens with the access to 453 datasets from multiple agencies, a catalyst ensuring agencies operate as more responsive, better performing organizations. Use the data catalog below to subscribe to a live data feed in Atom format and access data in XML, Text/CSV, KML or ESRI Shapefile formats. Please note that by accessing the data catalog and feeds, you agree to our [Terms of Use](#). Please read before accessing the data. All data visualizations on maps should be considered approximate. The visualizations provided by this application include only records that can be mapped. If you have any questions or comments about the DC Data Catalog, please contact us at [citywdc.gov](#). Visit [DC FOIA page](#) for information on FOIA requests.

**Create Your Own Visualizations using DC datasets**

Free websites such as [Swivel](#) and [Many Eyes](#) allow users to create and share a variety of data visualizations. Below are the links to some interactive graphs and charts created based on DC datasets. You can create your own visualization using already uploaded datasets or slice and dice data the way no one did before. Please email us at [citywdc.gov](#) if you want your visualization to be featured on this page.

**Popular Downloads**

- CJIS Juvenile Arrests and Charges 2009
- CJIS Juvenile Arrests and Charges 2008
- Crime Incidents (ASAP) 2010
- Crime Incidents (ASAP) 2009
- Crime Incidents (ASAP) 2008
- Crime Incidents (ASAP) 2007
- Crime Incidents (ASAP) 2006
- Purchase Orders 2010
- Purchase Orders 2009
- Purchase Orders 2008
- Purchase Orders 2004-2007
- Public Space Permits 2008
- Public Space Permits 2004-2007
- ITSA Current Awarded Engagements
- Purchase Card Transactions
- ITSA Current Open Requirements
- 311 Service Requests

**Custom Downloads**

- 311 Service Requests
- Building Permits
- CJIS Juvenile Arrests and Charges
- Completed Construction Projects 2010
- Crime Incidents (ASAP)
- Current Construction Projects
- Public Space Permits
- Registered Property
- Registered Vacant Property

**Live Data Feeds**

- 311 Service Requests
- CJIS Juvenile Arrests and Charges
- Completed Construction Projects 2010
- Crime Incidents (ASAP)
- Current Construction Projects
- ITSA Current Awarded Engagements
- ITSA Current Open Requirements
- Public Space Permits
- Purchase Orders
- Registered Property
- Registered Vacant Property

Get updates in other formats...

**See it on Google Maps**

- 311 Service Requests
- Building Permits
- CJIS active in ITSA Program
- Completed Construction Projects 2007
- Completed Construction Projects 2008
- Completed Construction Projects 2009
- Completed Construction Projects 2010
- Crime Incidents (ASAP)
- Current Construction Projects
- DCPS Computer Deployment
- Housing Code Enforcement
- ITSA Current Awarded Engagements
- Public Space Permits

**Browse Catalog**

Please note that data feeds contain the latest update from the source database (which might include records from several days ago)

Displaying All categories Enter a keyword to search Search

**Category: All categories**

Source	Metadata	XML	Text/CSV	Atom (GeoRSS support)	KML/ESRI Shapefile	Maps	Download
OCTO	District Payments To All Vendors, By CBE Status, FY10, Q1		08/04/2010				
	Provides information regarding payments made to vendors in FY10, Q1 for goods or services provided to the District.						
OCTO	District Payments To All Vendors, By CBE Status, FY10, Q2		08/04/2010				
	Provides information regarding payments made to vendors in FY10, Q2 for goods or services provided to the District.						
OCTO	District Payments To All Vendors, By CBE Status, FY10, Q3		07/30/2010				
	Provides information regarding payments made to vendors in FY10, Q3 for goods or services provided to the District.						
OCTO	District Payments To All Vendors, By CBE Status, FY10, Q4		10/06/2010				

**RegardsCitoyens.org**

Diffusion et Partage de l'Information Politique

Le blog Qui sommes nous ? Revue de presse Nous aider Nous contacter

**État des lieux de l'OpenData en France**

Lundi 1 Janvier 2010

Cet état de l'art a été initialement publié en anglais sur le site de l'Open Knowledge Foundation, le 20 janvier 2010. L'OKFN est une organisation anglaise en pointe sur l'OpenData. Elle est notamment à l'origine du projet [WhereDoesMyMoneyGo.org](#), de l'OpenDefinition pour des standards de données ouvertes et du registre de données participatif [CKAN](#). Ce registre, en cours de traduction dans plusieurs pays européens, est repris par le gouvernement anglais pour l'architecture de son projet [data.gov.uk](#).

**La France traîne des pieds...**

Aucun doute possible : pour ce qui est d'ouvrir ses données, la France est largement en retard par rapport à de nombreux pays. Pourtant si fière de son modèle démocratique, la France a longtemps traîné des pieds pour rejoindre le mouvement de l'OpenData. Le premier [OpenDataCamp](#) organisé à Paris en décembre dernier illustre bien que les choses peuvent changer.

Alors que les États-Unis et le Royaume-Uni ont énormément avancé au cours des deux dernières années en dévoilant leurs projets [data.gov](#) et [data.gov.uk](#), la France et la plupart des pays d'Europe méditerranéenne restent très conservateurs en matière de données publiques. Rattraper le retard demandera un peu plus que du saupoudrage politique. Les institutions ont besoin d'un changement radical dans leur approche de production et de dissémination des données officielles. C'est pourquoi un engagement important de la part des citoyens est nécessaire, afin de mettre en évidence l'importance des attentes, mais également pour soutenir et conseiller les projets existants et en gestation.

Quelques projets très intéressants — et généralement peu connus — ont déjà ouvert la voie. Les [Archives HAL](#) recensent et proposent librement les publications scientifiques de la recherche, tandis que l'IREEP donne accès aux données concernant la pollution. Mais ce ne sont que quelques fragments de l'immense quantité de données publiques existantes : dans leur grande majorité, les documents et bases de données officiels restent inaccessibles au grand public. Il peut même s'avérer très difficile pour un citoyen de demander l'accès à des documents spécifiques. Bien que la [CADA](#) ait été créée en 1978 pour documenter et faciliter les procédures de

**Nos initiatives**

- [NOS DÉPUTÉS.FR](#) Observatoire citoyen de l'activité parlementaire
- [Simplifions la loi 2.0](#)
- Etude sur le redécoupage électoral

**Nous télécharger**

- Explications
- Les logiciels
- Les données

**Nous suivre**

- Flux RSS
- Courriel
- identi.co
- Twitter
- Facebook

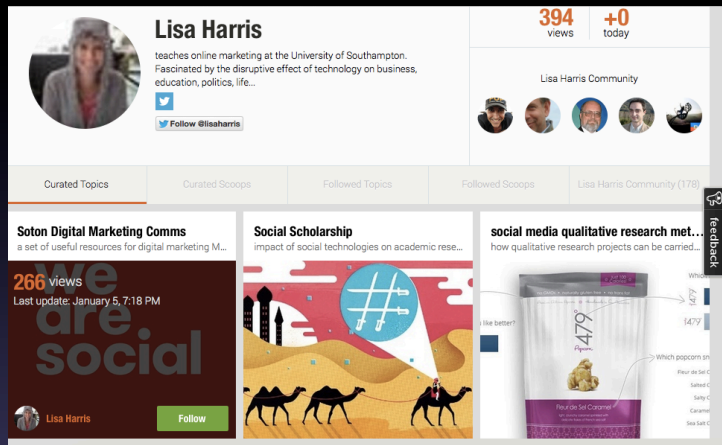
Big Data



Students might contribute to collecting assembling open data e.g. vocabularies geographic data, plant census, open mapping, disease and health markers opportunities for authentic activities, situated learning, reward, contribution

# Working in the open

## Individually



The screenshot shows the profile of Lisa Harris on the Scoop.it platform. Her profile includes a circular profile picture, her name, and a bio stating she teaches online marketing at the University of Southampton and is fascinated by the disruptive effect of technology on business, education, politics, and life. It also shows 394 views and +0 today. Below the profile, there are tabs for Curated Topics, Curated Scoops, Followed Topics, Followed Scoops, and Lisa Harris Community (176). Three curated topics are visible: 'Soton Digital Marketing Comms' (266 views, last update January 5, 7:18 PM), 'Social Scholarship' (impact of social technologies on academic research), and 'social media qualitative research met...' (how qualitative research projects can be carried out).

## International collaborators

- Alternative online open and connected framework (OOC)
- building global learning communities
  - using mobile social media

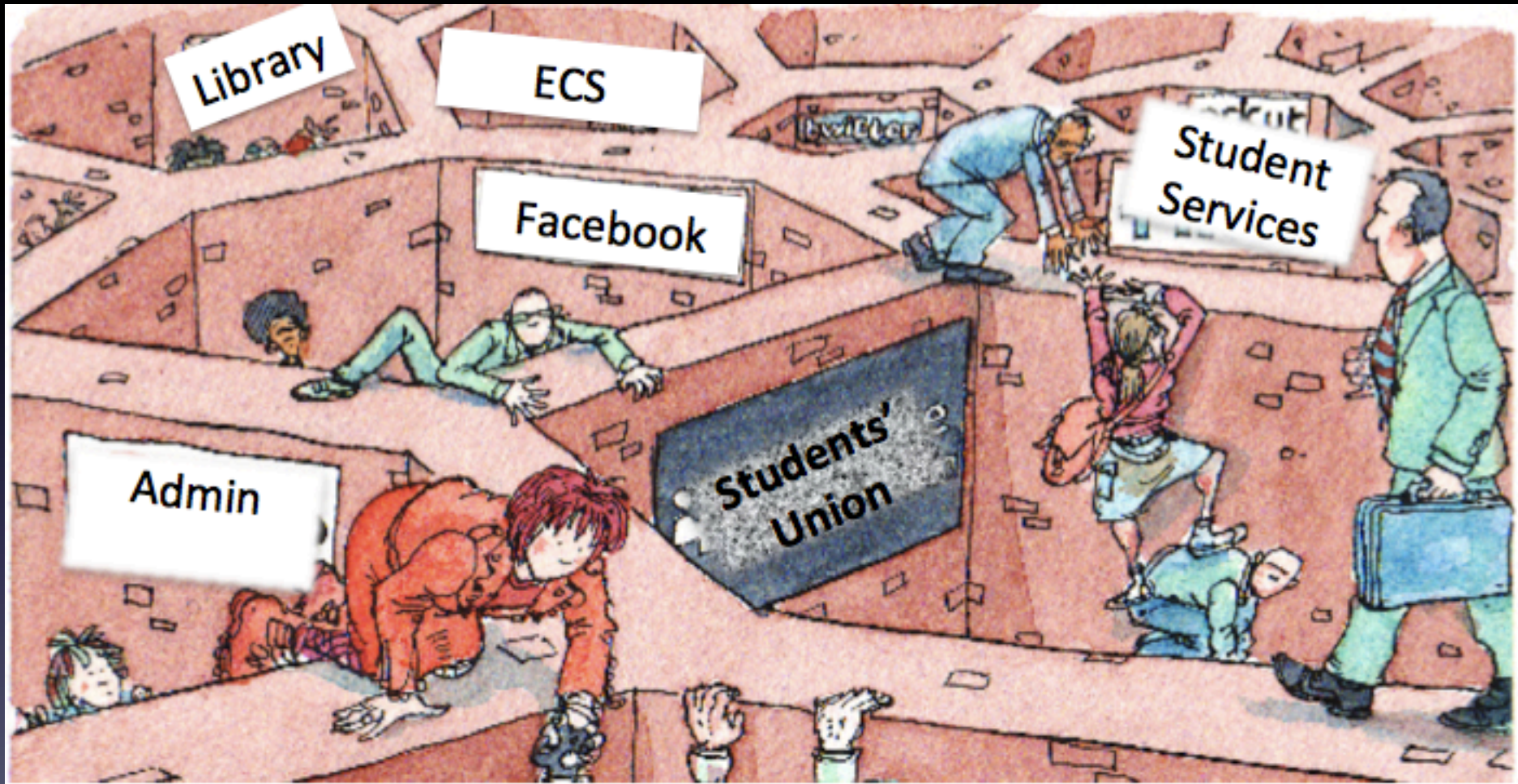
## And in groups



The screenshot shows the 'CT231 Student Showcase' page, curated by Catherine Cronin. The page features two main sections: 'Digital Media Projects' and 'Motoring into the Future'. The 'Digital Media Projects' section, scooped by Catherine Cronin, mentions that over seventy students recently completed the year-long CT231 module in Professional Skills and developed a resource for an audience beyond. It includes a quote from Catherine Cronin's insight: '...a complete list of Digital Media Projects completed by CT231 students in Spring 2014, including blogs, videos, audio podcasts, and more.' The 'Motoring into the Future' section, also scooped by Catherine Cronin, features a photo of vintage cars and is by Anthony Jackson.



# We want to climb over the walls...



With apologies....

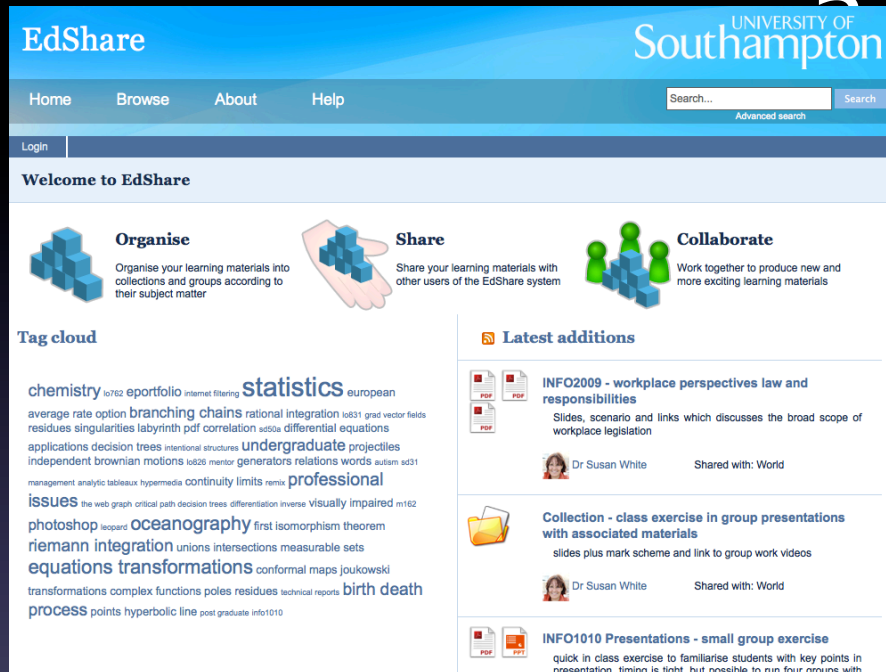
Adapted from image used by tbl, originally from the economist I think



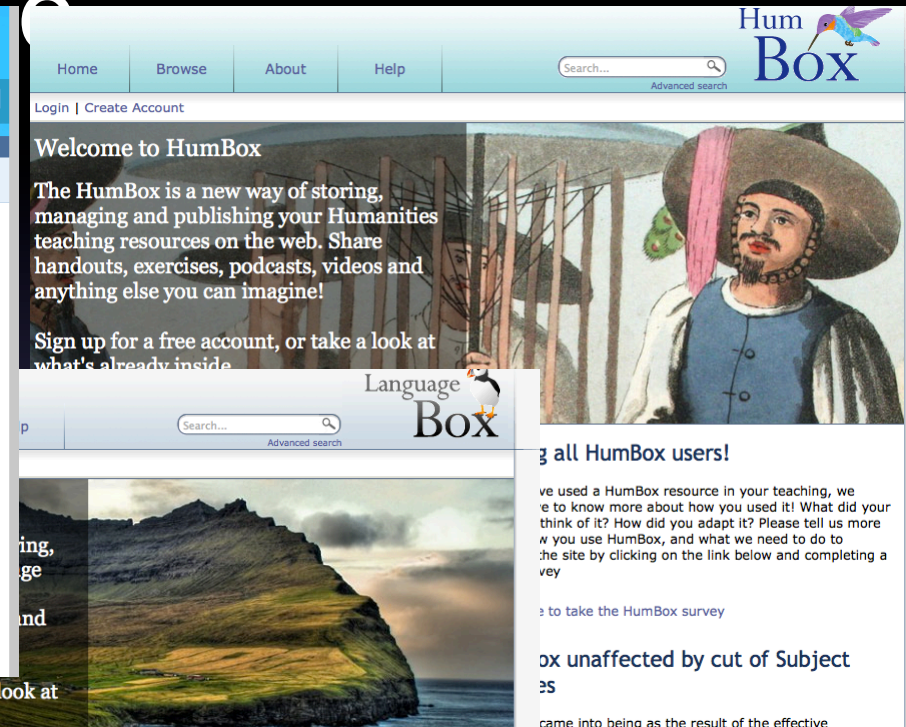
# Backbone concepts

- Reworking Shotton's concept of semantic publication into the educational context
  - semantic publication
    - to include anything that enhances the meaning of a published information
    - facilitates its automated discovery
    - enables its linking to semantically related information
    - provides access to associated data in actionable form
    - facilitates the integration of associated data
- We are talking situated learning

# EdShare – Repositories meet Web



The EdShare interface from the University of Southampton features a blue header with navigation links: Home, Browse, About, and Help. A search bar is located in the top right. Below the header, a 'Welcome to EdShare' message is followed by three main sections: 'Organise' (with a blue cube icon), 'Share' (with a hand icon), and 'Collaborate' (with a green cube icon). A 'Tag cloud' section lists various academic topics such as chemistry, statistics, and physics. The 'Latest additions' section displays two items: 'INFO2009 - workplace perspectives law and responsibilities' and 'Collection - class exercise in group presentations with associated materials', both by Dr Susan White.



The HumBox interface has a light blue header with navigation links: Home, Browse, About, and Help. A search bar is in the top right. Below the header, a 'Welcome to HumBox' message is followed by a large image of a man in a hat. The 'Latest additions' section displays two items: 'INFO2009 - workplace perspectives law and responsibilities' and 'Collection - class exercise in group presentations with associated materials', both by Dr Susan White. The 'Recently uploaded resources' section displays two items: 'UNSPECIFIED' and 'Bengali fill in the blanks with names', both added on 20 Nov 2010. The 'Languagebox Activities' section includes a link to 'LanguageBox unaffected by HEA cut of subject centres'.

Learn from the success and methods of collections in the wild

# Crowd sourced open data map

- Mashup of crowd sourced data plus official data
- Crowd sourced contributions
- Useful and visible
- Interrogate the data points interactively
- Flip the process with treasure hunts



# OERs, OCW and MOOCs

open educational resources  
massively open online courses

The screenshot shows the OER Commons search results for 'maths'. The page includes a search bar, a sidebar for refining search results, and a list of search results. The sidebar filters show 93 results for 'Mathematics and Statistics' at the 'Primary' grade level. The search results list includes 'Mental Maths - Quiz', 'Mr. Martini's Classroom Math Worksheets', 'Third Grade Mental Math', and 'Third Grade Math Routines'.

**OER COMMONS**  
OPEN EDUCATIONAL RESOURCES

Home → Search Results

Search:  Use Advanced Search

Search Results: maths

Displaying 1 - 20 of 93 results | 20 results per page | Sort by: Relevance

**Refine Your Search**

- Subject Area: 5  
☒ Arts  
☒ Business  
☒ Humanities  
☒ Mathematics and Statistics: 87  
☒ Science and Technology: 10  
☒ Social Sciences: 8
- Grade Level: 93  
☒ Primary: 21  
☒ Secondary: 4  
☒ Post-secondary
- Material Type
- Media Format
- Conditions of Use
- Content Source: 18  
☒ Open Author Resources  
☒ Content Provider Resources: 75

**Search Results:**

- Mental Maths - Quiz**  
(Complete Item Description)  
Subject: Mathematics and Statistics  
Grade Level: Primary  
Collection: Scoolnet
- Mr. Martini's Classroom Math Worksheets**  
(Complete Item Description)  
Subject: Mathematics and Statistics  
Grade Level: Primary  
Collection: Individual Authors
- Third Grade Mental Math**  
(Complete Item Description)  
Subject: Mathematics and Statistics  
Grade Level: Primary  
Collection: Teaching Channel
- Third Grade Math Routines**  
(Complete Item Description)  
Subject: Mathematics and Statistics  
Grade Level: Primary  
Collection: Teaching Channel

The screenshot shows the Virtual Schooling MOOC website. The header is green with a potted plant icon and the text 'Virtual Schooling MOOC'. The main content area is white with a green sidebar. The sidebar includes a 'Getting Started' section with links like 'What is OpenCourseWare?', 'Become a Member', 'See Current Members', 'Visit OCW Websites', 'Find Courses', 'Get Involved', and 'Contact Us'. The main content area has a 'Research into the Teaching of K-12 Online Learning' section by Kathryn Kennedy, Georgia Southern University. Below this is a 'Welcome to Part 1 of V...' section. The website also features a 'Newsletters' section with a 'CLICK HERE TO SUBSCRIBE' button, an 'Announcements' section, and a 'Join Now' button.

**Virtual Schooling MOOC**

teaching

**Research into the Teaching of K-12 Online Learning**  
[Kathryn Kennedy](#), Georgia Southern University

Welcome to Part 1 of V... 3 of the [Virtual School 2012 MOOC](#)! The information compiled here is centered around research on an... over the past few sec... MOOC, K-12 online learning continues to have a lasting impact on the current education landscap... Columbia have online... for K-12 students (Watson, Murin, Vashaw, Gemin, & Rapp, 2011). Some states pass... learning course befr... et al., 2011). The growth in online learning and policies that govern it warrant... (Archambault, 201... [National Education](#)... preparation/training and evaluation of online teachers. A cr... standards, the [Quality Matters Standards \(2011](#)... practice (Yamashiro & Zucker, 1999). In ad... ston, 2008; Kearsley & Blomeye... Brennan, 2003).

**OPEN COURSEWARE CONSORTIUM**

**ABOUT US** **COURSES** **COMMUNITY** **MEMBERS**

**Getting Started**

- What is OpenCourseWare?
- Become a Member
- See Current Members
- Visit OCW Websites
- Find Courses
- Get Involved
- Contact Us

**Newsletters**  
[CLICK HERE TO SUBSCRIBE](#)

**open study**  
EARN A CERTIFICATE BY STUDYING WITH YOUR PEERS

The OpenCourseWare Consortium is a collaboration of higher education institutions and associated organizations from around the world creating a broad and deep body of open educational content using a shared model.

**Announcements**  
Community College OCW Fall Webinars  
Now on YouTube

**In the News**  
Thu 10 Jan 2013 # A revolution in digital learning  
South China Morning Post


**Join Now**

**Sponsors**

**Earn a Certificate by Studying with your Peers**  
OpenCourseWare Consortium, 20Million Minds Foundation and Excelsior College to offer certification and college credit for online courses in partnership with OpenStudy  
[Read more ...](#)



# Learning by example

[Why does this look different?](#)[News](#)[Blog](#)[Events](#)[Publications](#)[About](#)[Contact](#)

[Digital content](#)[Network & IT services](#)[Advice](#)[Research & development](#)

[Home](#) > [Publications](#) > [A guide to open educational resources](#)

## A guide to open educational resources

### Contents:

- [What are open educational resources?](#)
- [Open educational resources – the story so far](#)
- [Finding and sharing open educational resources](#)
- [Open licensing](#)
- [Approaches to releasing, using, reusing and repurposing open educational resources](#)
- [The rationale for adopting open educational resources](#)
- [Practical guidance: Manage, Find, Use and Reuse, Release, Share, License](#)
- [Benefits case studies: Teacher, Learner, Institution, Communities](#)

### What are open educational resources?

Open educational resources (OER) are learning and teaching materials, freely available and reusable. Examples include full courses, course modules, lectures, games, teaching materials, and the form of text, images, audio, video and may even be interactive.

Teachers, learners and the general public can access and make use of open educational resources from their location or affiliation with any particular institution. Open educational resources are available to education providers and through public services like [iTunes U](#), [SlideShare](#), [YouTube](#) and [Jorum](#).


Individuals and organisations can create and share their own open educational resources. Once released, the resources can be used by a learner, reused by a teacher, remixed with other resources or repurposed to create new educational materials. While it is not essential to embrace all aspects – release, use, reuse and repurposing – involvement with one aspect tends to lead naturally to another.

## JISC

### The Open Agenda at the University of Salford

Case study October 2011

The University of Salford is at the heart of a network of research and innovation that extends from international partnerships to local engagement. As such, the university aims to create economic and social value through innovative ways of working together. A key element to this is openness.



#### Digital Futures

In this case study, I show how the decision to launch an Open Access repository – now increasingly common place in universities in Britain and

an early stage of what was to become a comprehensive restructuring of administrative and professional services, including establishing the library and all its functions as a division in its own right. It was also at a time

In consequence, the formal launch of the University of Salford's Open Access repository, which publishes performance indicators to the public domain

#### Strategic Themes

[e-Learning](#)

# Challenges for the working group

## Specify a research agenda

- What are the meaty questions?
- Can you find synergies?
  - Within your institution
  - Across like institutions
  - Within your existing research frameworks

## Build communities of practice

- across open data practitioners
  - Identify good practice
  - Identify the art of the possible

Does institutional action/research offer an alternative route to funding/support?

# Last words from Universities UK

- What is open data and why should we be interested?
  - Can you be the person to do that in your sphere of influence?
- How is the potential of open data translated into practice?
  - Not only know the examples but research and publish data
- Where are the problems and how can they be avoided?
  - We can gather the data and remember...
    - There is space for more than just quantitative analysis
- Where is good practice already happening in higher education?
  - We can look beyond research and education but
    - big data and learning analytics are likely to headline grabbers

# Thank You 😊

Questions?

Questions?

Discussions?



# References

Berners-Lee, T. The Process of Designing Things in a Very Large Space: Kenote Presentation WWW2007, Banff, Alberta, Canada, 2007 <http://www.w3.org/2007/Talks/0509-www-keynote-tbl/>

Berners-Lee, T., Hall, W., Hendler, J., Shadbolt, N., & Weitzner, D. J. (2006). Creating a Science of the Web. *Science*, 313(5788), 769–771. Retrieved from DOI: 10.1126/science.1126902

Carr, L., Pope, C., & Halford, S. (2010). Could the Web be a Temporary Glitch ? In *WebSci10: Extending the Frontiers of Society On-Line*, Raleigh, US, 26 - 27 Apr 2010 (pp. 1–6). Raleigh, NC: US: Web Science Trust.

Halford, S., Pope, C., & Carr, L. (2010). A manifesto for Web Science? In *WebSci10: Extending the Frontiers of Society On-Line*. Raleigh, NC: US.: Web Science Trust. Retrieved from <http://journal.webscience.org/297/>

Hall, M. (2011). *The Open Agenda at the University of Salford* (p. 8). Bristol.

Miller, P. (2010). *Linked Data Horizon Scan*. (pp. 41). Joint Information Systems Committee , Bristol.

Shotton, D., Portwin, K., Klyne, G., & Miles, A. (2009). Adventures in semantic publishing: exemplar semantic enhancements of a research article. *PLoS Computational Biology*, 5(4), e1000361. doi:10.1371/journal.pcbi.1000361

Tiropanis, T., Davis, H., Millard, D., Weal, M., White, S., & Wills, G. (2009). *JISC - SemTech Project Report*. Knowledge Creation Diffusion Utilization (pp. 28). Joint Information Systems Committee, Bristol.

Tiropanis, T., Davis, H., Millard, D., & Weal, M. (2009). *Semantic Technologies for Learning and Teaching in the Web 2.0 Era*. *IEEE Society Online*, 24 (November/December), 49–53.

Web Science Centre for Doctoral Training, University of Southampton <http://dtc.webscience.ecs.soton.ac.uk>