

# Learning analytics and student engagement: thinking through the ethical issues raised

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RAISE SIG

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Haruki Murakami

## Librarians in uproar after borrowing record of Haruki Murakami is leaked

Books the celebrated Japanese author borrowed from a library in Kobe when he was a schoolboy have been revealed by a newspaper



Haruki Murakami's borrowing record from his local library has been leaked sparking concerns over privacy.

Photograph: Murdo Macleod for the Guardian

- "Disclosing the records of what books were read by a user, without the individual's consent, violates the person's privacy" said an association (Japan Librarian Association) report'
- 'It is not clear, however, if the then student at Kobe High School read Belle de Jour, Kessel's 1928 novel...'

# Overview

- Analytics
- MOOC learners' interviews
- Analytics and engagement
- Ethics, consent and relationships in HE

# What is meant by 'analytics'?

- Dr Bart Rienties, OU:
- "Learning analytics involves the measurement, collection, analysis and reporting of "big data" related to learners and their contexts, with the intention of providing actionable intelligence that supports teaching and learning.
- At the OU, there is increased recognition that "smart and pedagogically-informed" learning analytics are urgently needed to solve the student-retention problem"
- [www.open.ac.uk/iet/main/research-innovation/learning-analytics](http://www.open.ac.uk/iet/main/research-innovation/learning-analytics)

So are we using analytics *\*only\** to  
analyse big data?  
Or to intervene in any direct way to  
promote individuals' 'progress' or  
'retention'?

How do you use analytics in  
your practice?

# JISC 2015 'Code of Practice for Learning Analytics'

# Introduction

Learning analytics uses data about students and their activities to help institutions understand and improve educational processes, and provide better support to learners.

It should be for the benefit of students, whether assisting them individually or using aggregated and anonymised data to help other students or to improve the educational experience more generally. It is distinct from assessment, and should be used for formative rather than summative purposes.





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### Stewardship of data

The effective use of learning analytics will initially involve the deployment of new systems, and changes to institutional policies and processes. New data may be collected on individuals and their learning activities. Analytics will be performed on this data, and interventions may take place as a result. This presents opportunities for positive engagements and impacts on learning, as well as misunderstandings, misuse of data and adverse impacts on students.

Complete transparency and clear institutional policies are essential

Complete transparency and clear institutional policies are therefore essential regarding the purposes of learning analytics, the data collected, the processes involved, and how they will be used to enhance the educational experience.

This code of practice aims to set out the responsibilities of educational institutions to ensure that learning analytics is carried out responsibly, appropriately and effectively, addressing the key legal, ethical and logistical issues which are likely to arise.

Educational institutions in the UK already have information management practices and procedures in place and have extensive experience of handling sensitive and personal data in accordance with the Data Protection Act (DPA) 1998.

## Minimising adverse impacts



Institutions recognise that analytics can never give a complete picture of an individual's learning and may sometimes ignore personal circumstances.

Institutions will take steps to ensure that trends, norms, categorisation or any labelling of students do not bias staff, student or institutional perceptions and behaviours towards them, reinforce discriminatory attitudes or increase social power differentials.

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Analytics systems and interventions will be carefully designed and regularly reviewed to ensure that:

- Students maintain appropriate levels of autonomy in decision making relating to their learning, using learning analytics where appropriate to help inform their decisions
- Opportunities for “gaming the system” or any benefit to the student from doing so are minimised
- Knowledge that their activity is being monitored does not lead to non-participation by students or other negative impacts on their academic progress or wellbeing

- Adverse impacts as a result of giving students and staff information about the students' performance or likelihood of success are minimised
- Staff have a working understanding of legal, ethical and unethical practice

How good is your understanding  
of the legal, ethical and  
unethical practice in use of  
analytics?

Are there any risks you might think of in relation to students you know?

# Analytics and student engagement



# Research with MOOC learners

- In our UKES survey of c1000 MOOC learners, a significant proportion rated themselves as having engaged with ideas, each other and real-world problems
- In our small interview-based follow up study, learners described finding resources not available through the MOOC platform - and very creatively! - and sharing links
- They often just 'clicked through' steps, others enjoyed 'lurking'...

- "the first video - I was hooked"
- "I tended to skip talking head videos"
- "reading sinks in more"
- Quizzes "were a little naff"
- "I've really enjoyed the discussions, with people overseas"
- "students found bootleg copies of (articles) and posted them anyway..so the things we were not allowed to post were found and linked which I thought was very nice"

- Much of their discussion was 'off platform' – using Facebook, google hangout, (less so) Twitter
- So did not show as digital footprint within MOOC forum

## Engaged learning in MOOCs: a study using the UK Engagement Survey



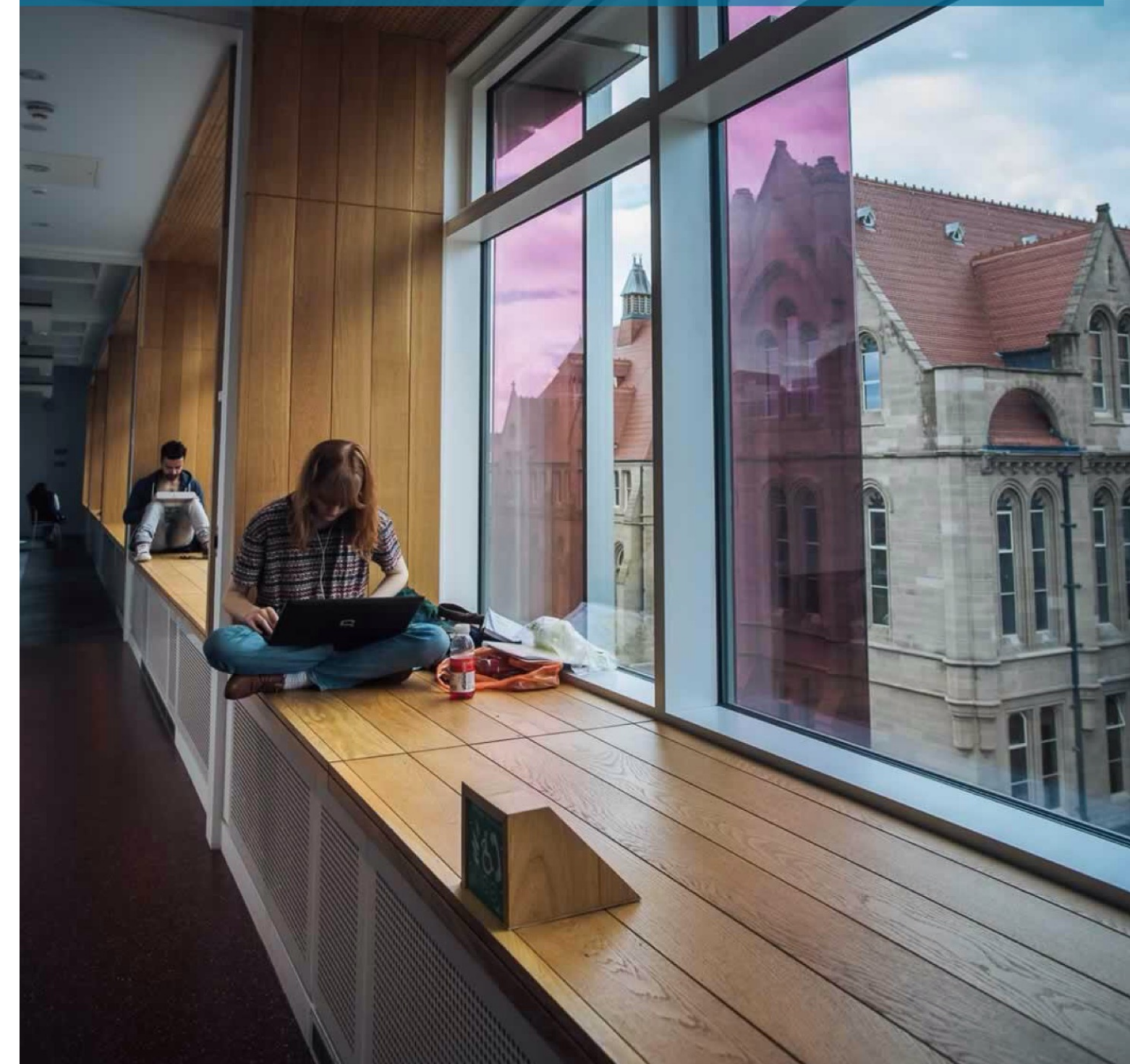
Julie Wintrup, Kelly Wakefield and Hugh Davis, University of Southampton



## Liberating learning: experiences of MOOCs



Julie Wintrup, Kelly Wakefield, Debra Morris and Hugh Davis



# What might analytics reveal about 'engagement'?

- We compared our interviewees' words with their iSurvey responses - they were broadly in line with the other survey respondents
- Had our interviewees been students in higher education, their 'participation' (with resources and as measured by UKES) would seem to indicate a high degree of disengagement
- Yet they offered rich and nuanced accounts of social and individual learning, of personal change, of creativity, of connectedness, generosity and testing of new ideas

What ethical issues arise for  
you?

Approaches that involve  
students

University of Southampton Login.

Username Password

eFolio uses Cookies and Google Analytics

[Forgotten your username or password?](#)

## Latest eFolio News

**October 4th, 2017**

### Syllabus issue fixed

eFolio modules include code that automatically pulled details of the syllabus and displayed it on the Syllabus tab. The problem was that the code linked to Syllabus Editor, which has been replaced by Curriculum Manager, and that meant that users would be viewing out-of-date details that did not apply to this year's modules. Speedy work [...]

**October 3rd, 2017**

### Staff access to eFolio modules/tutee information

Staff listed as instructors for a module in Banner should be able to access the corresponding modules in eFolio. Please be aware that modules have been taking longer than usual to appear in eFolio, so you may need to wait a number of days after the Banner record has been updated. Update: This issue should now [...]

**March 1st, 2017**

### VLE award winners announced

The winners of the 2017 VLE Awards have been chosen and details of the winning courses can be found here. Thank you to all who put forward courses and contributed comments; the standard of feedback given has been excellent.

## What is eFolio?

Find out how you can use eFolio in your learning and teaching below.

[For Staff](#)

[For Students](#)



### Tutor Dashboard

View your tutee module enrolments and grades. Book appraisal and make confidential tutor notes



### Module Websites

Use wordpress to create externally accessible module websites



### Skills & competencies

Track student progression



### External Examiners Interface

Upload examination material for external review



### Badges / Achievements

Group skills together to create unique achievements and gamify your teaching



### Personal Website

Create your own personal website in wordpress



### Registers

Track student attendance and create email alert rules



### Your Voice

Anonymous student feedback, anytime, anywhere



### Module text messages

Keep your students up to date with important information by text





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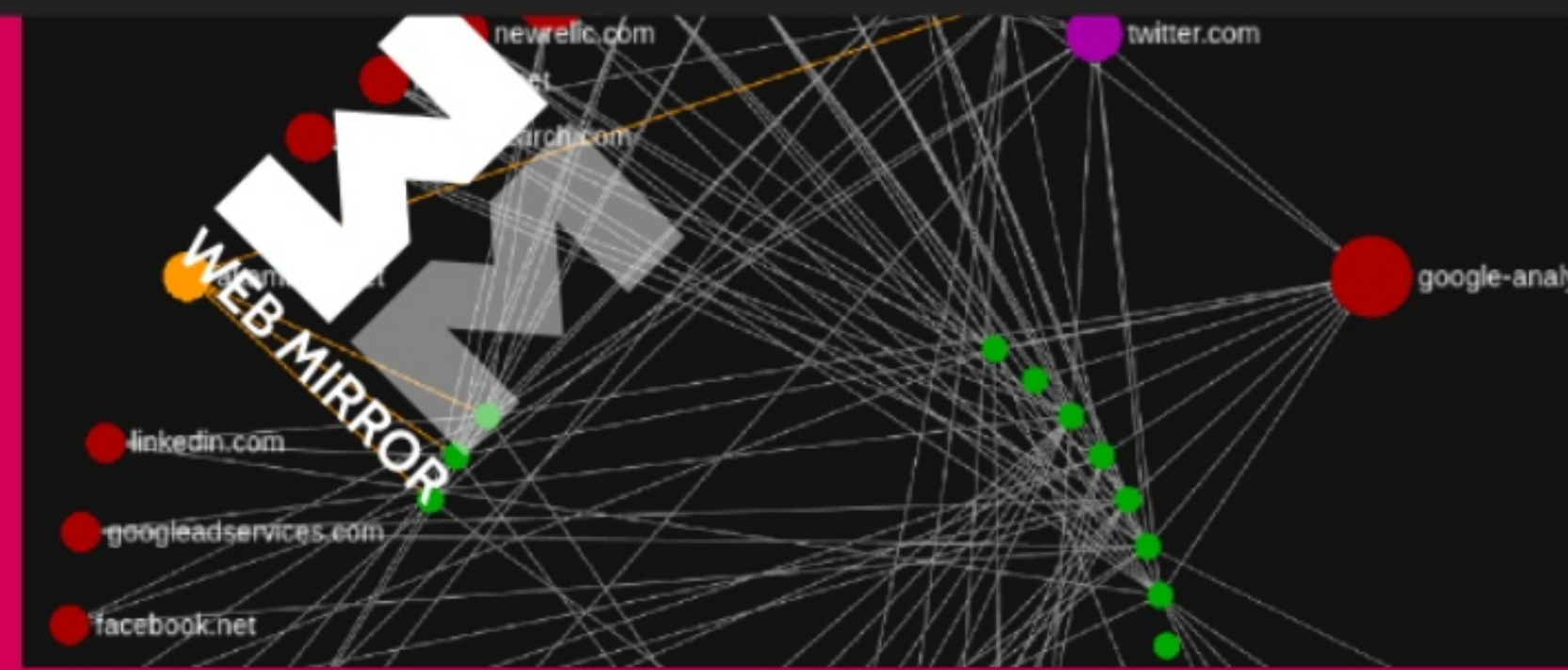
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## The Student Centred Portal Pilot Project

# <http://www.meaningfulconsent.org/>

- Despite being asked to "agree" constantly to terms of service, we do not currently have "meaningful consent." It is unclear whether having simple and meaningful consent mechanisms would change business fundamentally or enhance new kinds of economics around personal data sharing. Since consent is deemed necessary and part of a social contract for fairness, however, without meaningful consent, that social contract is effectively broken and the best intent of our laws undermined.
- Our research challenges to address this gap are interdisciplinary: meaningful consent has implications for transforming current digital economy data practices; change will require potentially new business models, and certainly new forms of interaction to highlight policy without over burdening citizens as we go about our business. We have set out a vision to achieve an understanding of meaningful consent through a combination of interdisciplinary expert and citizen activities to deliver useful policy, business and technology guidelines.



The Web Mirror is a public engagement project from the University of Southampton. We help members of the public to understand how companies track their web browsing, what that information can be used for, and how to opt out of it.

UNIVERSITY OF  
**Southampton**

As part of the *Meaningful Consent in the Digital Economy* project our goals are to understand, re-imagine and re-engineer personal data, privacy and consent.

You can visit us in person at one of our public events, try the mirror out online, or use this website to retrieve a previous reflection.

### **Try the Web Mirror online**

You can try the mirror out, right now, online! Upload browsing history from your Android smartphone or desktop web browser and find out who's tracking you.

Some questions

# Ethics, consent and relationships in HE

- Unexplored risks.. is 'learning analytics' concerned only with "big data" or with individual student profiles and behaviours?
- If potential exists to cross reference analytics data with all sorts of other data routinely gathered by the institution, will JISC's Code of Practice and Data Protection legislation offer adequate protection to students? Are SUs involved in this discussion?
- Is consent meaningful if it does not include consent to the multiple forms of monitoring or surveillance students are subject to - and the potential for triangulation?
- In what ways are educators (personal tutors, administrators, enabling teams) implicated in data collection and its uses? ...or in monitoring students' online behaviours?
- How might anonymised, aggregated data be subject to misuse in your practice?

In what ways might our use of analytics – willfully or as a byproduct – change or shape our education, and/or our behaviours?

Thank you

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