Thinking about data?

Andrew Cormack, chief regulatory adviser, Jisc (@Janet_LegReg)

#digifest20
Thinking of...

Silkworms

Surveillance capitalism

New oil

Product

Data “Subject”
Thinking, should be…

1 + 7 = 3
Thinking about data benefits

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#digifest20
What kinds of benefits?

From Aion et al (2012) Intelligent campus (iCampus) impact study

- **Learning**: applications that ‘directly affect the student’s ability to learn and succeed’
- **Health**: providing ‘proactive, preventive healthcare services’
- **Social**: applications that ‘facilitate internal and external collaboration’
- **Management**: managing campus infrastructure and conducting day-to-day operations
- **Environment**: ensuring ‘efficient use of natural resources ... protect[ing] the environment’
- **Governance**: to provide ‘institutional accountability to stakeholders and help enhance its reputation’
Good place to start…

77% agree…

Use my data

anonymously

to help others

I would be fine with my grade data and course interaction being anonymously used to predict students' performance in future, e.g. if they succeed or drop out

Strongly Agree: 24%
Agree: 53%
Neither Agree or Disagree: 12%
Disagree: 8%
Strongly Disagree: 3%

© HEPI (2019) Students or Data Subjects?
How to identify benefits?

Maximising benefits and transparency

Consult

• Students/staff may have (even) better ideas
• If they don’t like yours…
• Low likelihood of benefit
• High risk of unintended consequences

Communicate

• Transparency builds trust & confidence
• Easy to be more open than people expect!
Eg hackathons!

Take part in our Education 2030 hackathon

As part of our edtech launchpad programme, we're looking for student teams from universities and colleges across the UK to join us in our hackathon at Digifest 2020.

The aim of the hackathon is for student teams to design, develop and build "something" that would benefit students.

What we're looking for

We are looking for some creative students to spend two days at Digifest 2020 in March working to develop ideas, build and test tools that can enhance the student experience.
How to protect benefits

Minimising risks/demonstrating accountability

**Design**
- Assess/mitigate risks to individuals
  - Those who participate…
  - And those who don’t
  - XXX-by-design

**Operate**
- Frequent temperature checks
  - Rapid response

**Review**
- Expected benefits?
  - Unexpected side-effects?
  - How to do better?
Warning signs…

Respond quickly to...

Change of behaviour

- Avoidance of collection
- Obfuscation of data

Less disclosure

- To tutors (short term)
- Than HESA (long term)

Switch to external services
Jisc support

Learning analytics code of practice
Wellbeing/mental health code of practice
Intelligent campus DPIA
Learning analytics

Using existing data about learning to improve learning

Governance

Transparency

Code of practice for learning analytics

Setting out the responsibilities of educational institutions to ensure that learning analytics is carried out responsibly, appropriately and effectively.

Introduction

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

Learning analytics should be used for the benefit of students. This might be to assist them individually or through using aggregated and anonymised data to help other students. Learning analytics might also be used to improve the educational experience more generally. It is distinct from assessment, and should be used for formative rather than summative purposes.
Wellbeing analytics [draft for consultation]

Using existing data about many things to improve wellbeing

Purpose compatibility

Accountability

Impacts

DRAFT Mental Health and Wellbeing Analytics Code of Practice

Draft 0-59 4th February 2020

Comments welcome to Andrew.Cormack@jisc.ac.uk

Summary

Whereas learning analytics uses data to inform decisions – from individual to curriculum level – on how to support students’ learning, data may also be used to inform decisions on how to support their mental health and wellbeing. Possible applications cover a very wide range: from screen-break reminders to alerts when a student appears to be at risk of suicide. Clearly such uses of data can involve both significant benefits and high risks. This Code of Practice suggests how universities and colleges can ensure that their use of data to support wellbeing does not create risks for students or staff, taking responsibility and demonstrating accountability for their actions in selecting, developing, implementing, operating and reviewing data-informed wellbeing processes. As the headings in the Code indicate, this will involve working with groups and individuals across the institution: Stewardship; Transparency; Responsibility; Validity; Positive Interventions; Privacy; and Access need to be developed with students, staff, data owners and IT services, student support services, data protection officers and university governance. Universities UK refers to this as a “whole-university approach”, Student Minds’ Mental Health Charter calls it a “cohesive ethos”. To support these discussions, this Code also includes practical tools – for data protection impact assessments and purpose compatibility assessment for data sources – that should help to ensure the institution’s activities are, and can be shown to be, both safe for individuals and compliant with the law.
Intelligent campus [draft for consultation]

Using existing and new data to improve campus environment

Which Purposes?
Which Data?
Ethics

Intelligent Campus: Data Protection Impact Assessment
Draft 9/12/19

What’s the Challenge?

Different ‘Intelligent Campus’ systems could offer a wide range of benefits, from direct assistance to students (e.g. navigation apps) to economic and governance benefits to universities and third parties. To do this a wide range of data sources and processing may be considered, from room temperature to face recognition and relationship mapping. Clearly some of these data sources are more intrusive than others.

Since data are often gathered from campus infrastructures (both physical and digital) that staff, students and visitors need to use for their education and research purposes, their support for this data gathering and use is essential. If campus occupants perceive intelligent campus applications as threatening or just creepy, they are likely to change their behaviour in ways that harm both the intelligent campus application and the infrastructures’ main purposes to support teaching and research. For example if they feel they are being ‘tracked’ students may swap access cards or passwords; staff may use mobile phone data rather than the campus Wi-Fi network.

At an early stage of the design of any intelligent campus application, the following questions need to be considered:

a) If the proposed use of sensors/data likely to be perceived as intrusive?
b) What safeguards can be applied to demonstrate safety and benefit?
c) Is the application likely to be acceptable to campus users?

Privacy Impact Assessments (PIAs) are a tool designed to answer these and similar questions. These were advisory, rather than a requirement, under the European Data Protection Directive, but have now been formalised (as “Data Protection Impact Assessments” (DPIAs), with regulators using the terms interchangeably) under the General Data Protection Regulation (GDPR). The GDPR requires a full DPIA for some types of high-risk
Common themes

Thinking about…

“Should we do this?” not “Can we do it”

How does it look/feel?
Big Brother isn’t good

Part of the Team, not Part of the Product
Feedback, please…

- Intelligent campus
- [https://ji.sc/2vrYosO](https://ji.sc/2vrYosO) Wellbeing and mental health
- [https://ji.sc/3cvdfmH](https://ji.sc/3cvdfmH)
Thank you

Andrew Cormack
Chief regulatory adviser
Andrew.Cormack@jisc.ac.uk

Lumen House, Library Avenue, Didcot OX11 0SG
T 01235 822200

customerservices@jisc.ac.uk
jisc.ac.uk
References

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  • jisc.ac.uk/guides/code-of-practice-for-learning-analytics
  • https://community.jisc.ac.uk/blogs/regulatory-developments/tags/Learning-Analytics

• Draft wellbeing and mental health code of practice (open for consultation)
  • https://ji.sc/3cvdfmH
  • https://community.jisc.ac.uk/blogs/regulatory-developments/tags/wellbeing

• Draft intelligent campus code of practice (open for consultation)
  • https://ji.sc/2vrYosO
  • https://community.jisc.ac.uk/blogs/regulatory-developments/tags/Intelligent-Campus