

A photograph of two young men in a dimly lit room. The man on the left is wearing glasses and a black t-shirt with headphones around his neck, looking down at a tablet. The man on the right is wearing a red and grey plaid shirt and looking at the same tablet. The background is dark and out of focus.

Harnessing data, changing lives

Catherine Grout, Jisc



- 1. Mental health “crisis” in context**
- 2. New areas of analytics**
- 3. What we have learnt/what’s new**

Mental health “crisis” – backdrop

Greater awareness of the issue (mental health and well being)

2015 NUS Survey: 78% reported issues, 33% suicidal thoughts*

Particular concern about children and young people

2017 HEPI and HEA survey : declining student well being

Tech and especially social media may be a (newer) factor

High percentage of students who commit suicide are not previously known to support services

IPPR : 94% increased demand for counselling services



What's going on?



What's going on?

Ask a university doctor...

Dominique Thompson - key factors

- Perfectionism
- Competitiveness
- Target Driven
- American Dream (meritocracy)
- Parent over-involvement
- 24/7 society (unrealistic expectations)
- Loneliness
- Certainty v Uncertainty
- Social Media
- => combining to impact mental health

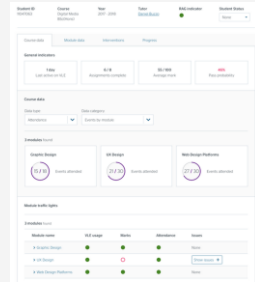
“The evidence is clear that, at the age when most students attend university, they are at high risk of developing mental health difficulties, which in the context of transition to new environments, social network upheaval, increased academic, financial and career pressures, could make them more likely to struggle”

4. Analytics approaches and how do they link?

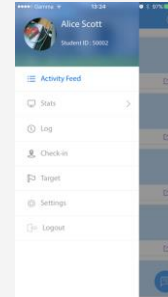
Jisc learning analytics service



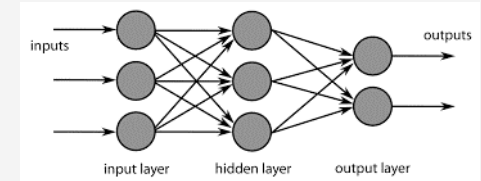
**Ethics &
data security**



Data explorer



Study goal app



**Learning analytics
predictor**

<https://www.jisc.ac.uk/learning-analytics>

Harnessing data to support student success

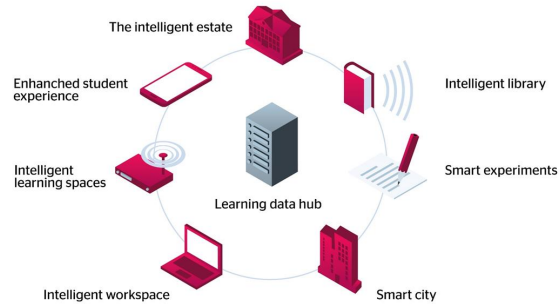


The power of data and analytics is harnessed to ensure that *every student in the UK can have access to a high quality and meaningful higher education experience* that equips them for the challenges of life irrespective of background and means.

What are the problems?

- Students dropping out
- Students failing to make their grades
- Problems more acute for lower income and ethnic minority students and for female students
- Rise in numbers of students reporting mental health issues

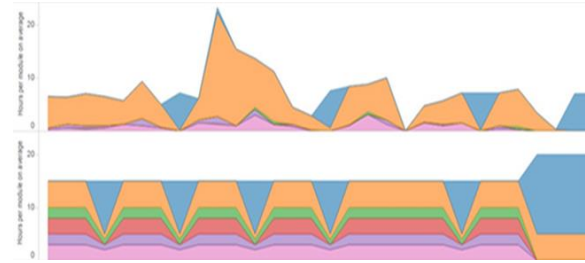
Beyond learning analytics – Digital Futures



Intelligent campus



Employability & apprenticeship analytics

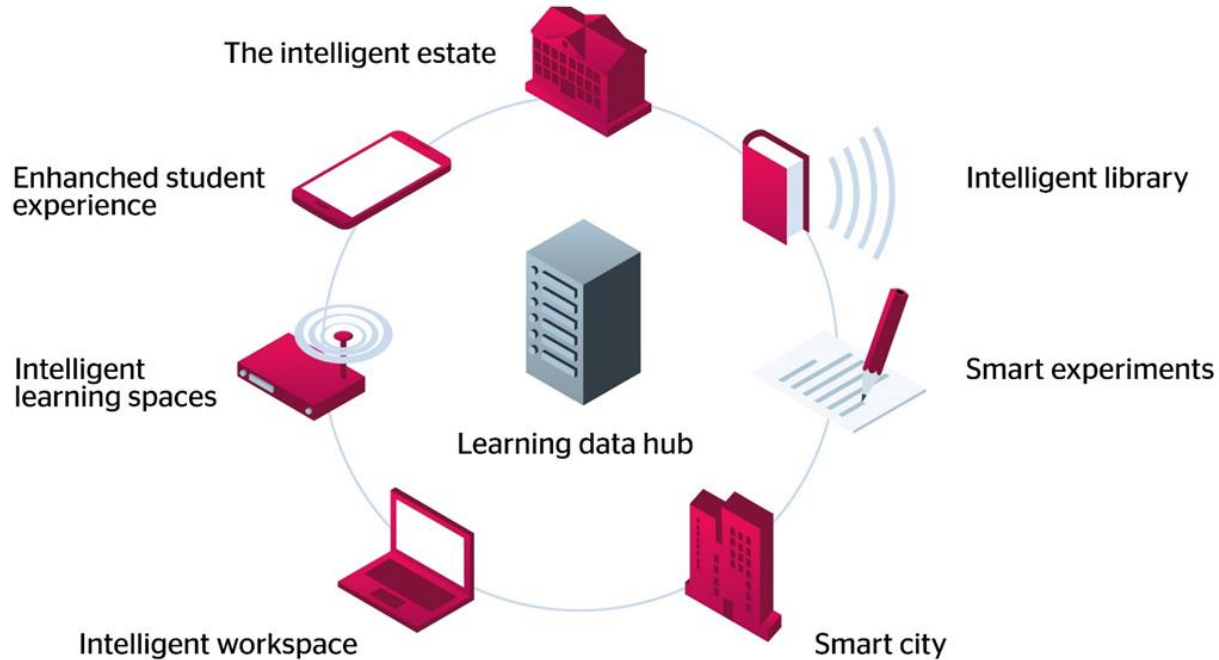


Curriculum analytics



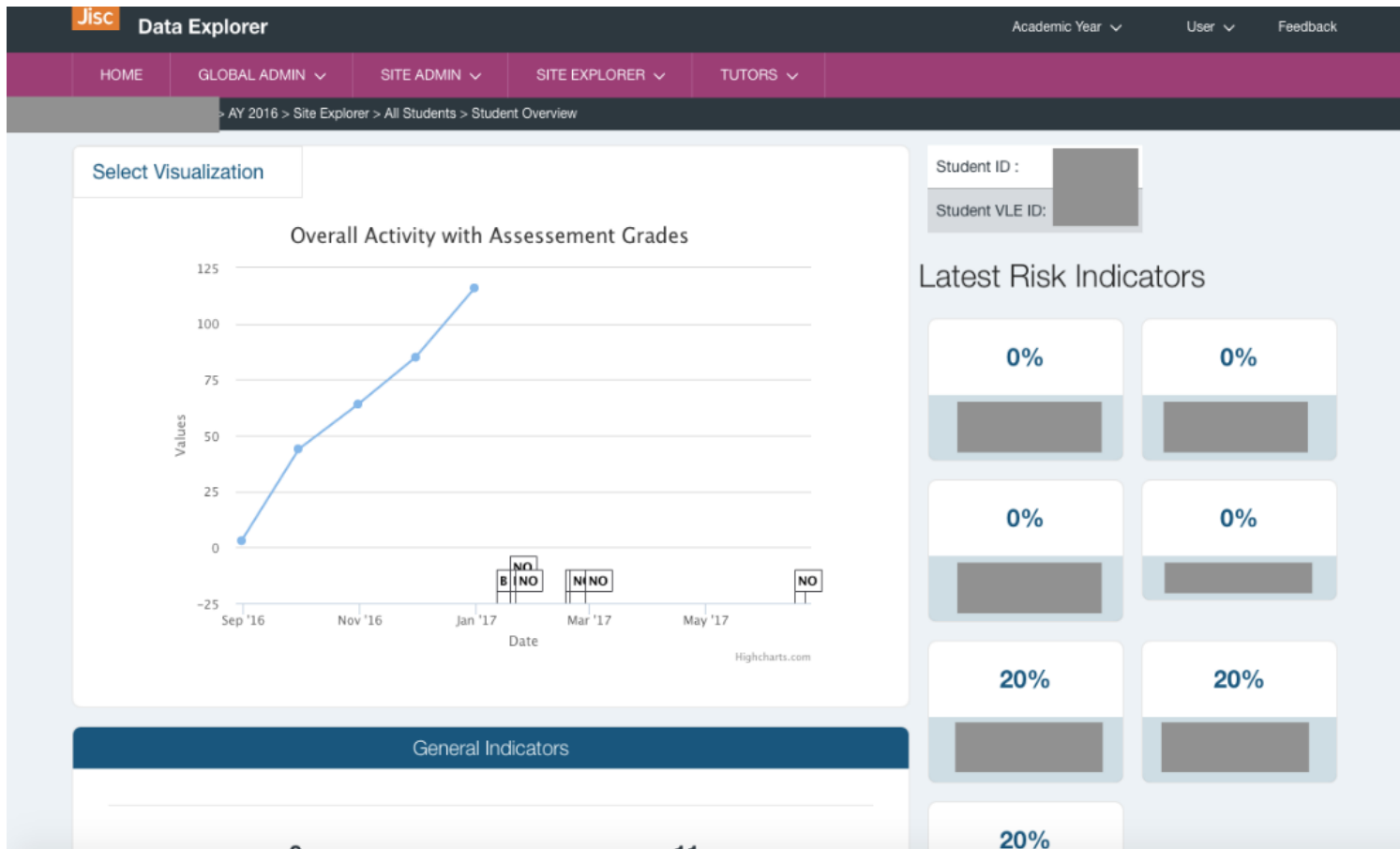
Wellbeing analytics

Intelligent campus



<https://www.jisc.ac.uk/rd/projects/intelligent-campus>

Curriculum quick win: reducing assignment clustering



From learning analytics to well being analytics...

Learning analytics is about analysing student data to make improvements and improve student outcomes...

- Learning and wellbeing are linked
- Indicators of engagement used for learning analytics could also indicate wellbeing issues
- Early warning signs of drop-out are often the same as those of mental distress
- Can flag students who disengage from their studies or show other changes in study behaviour

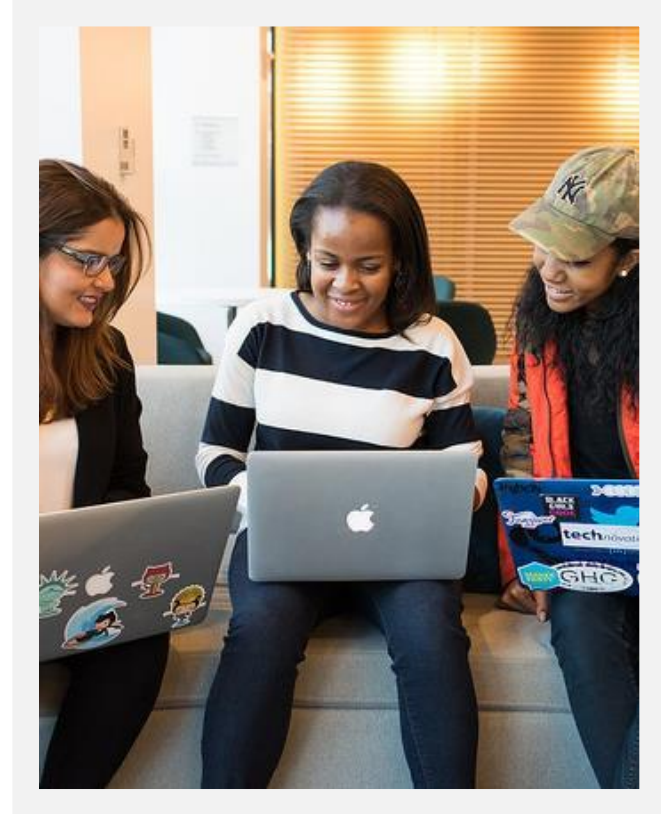
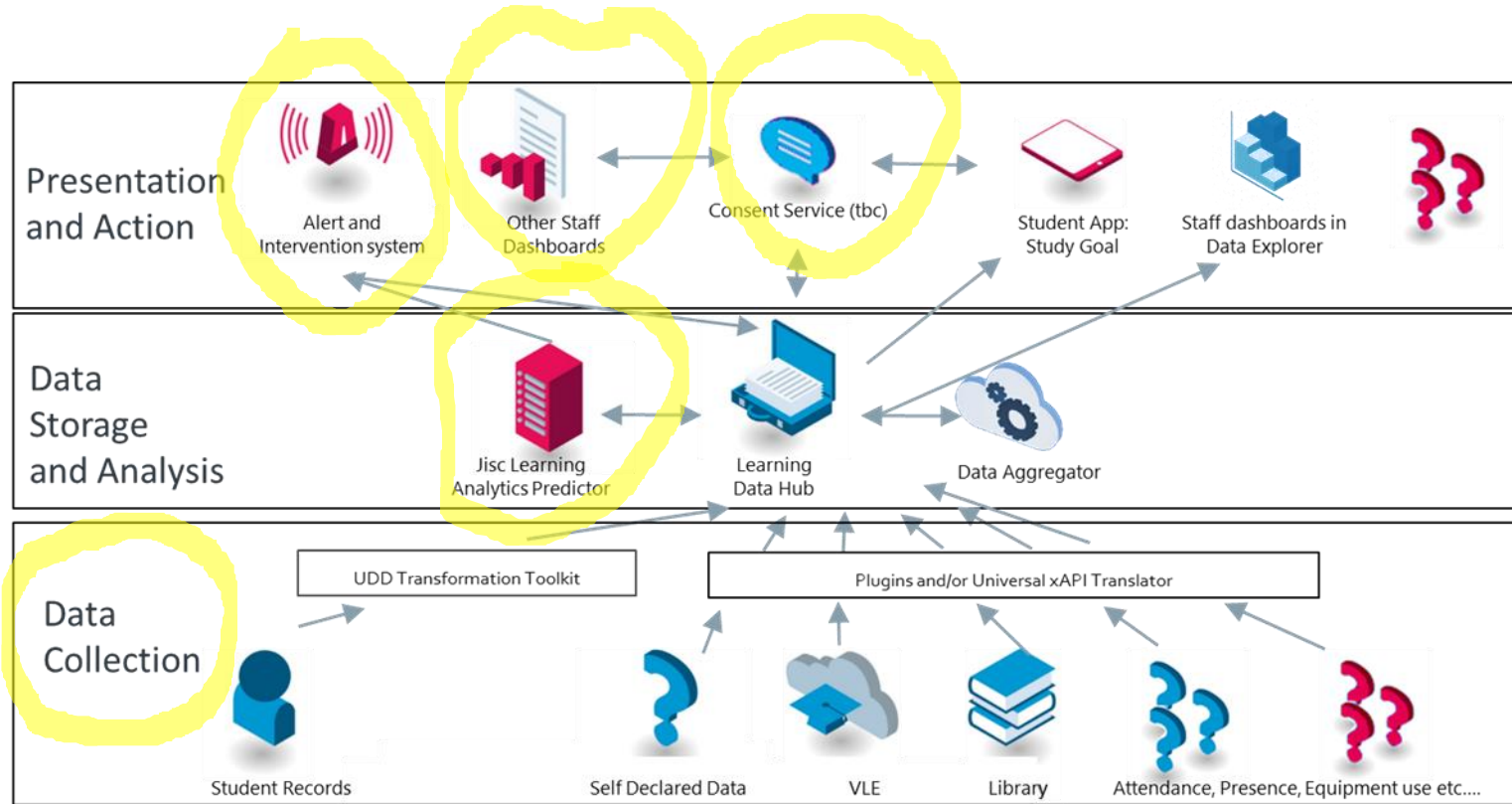
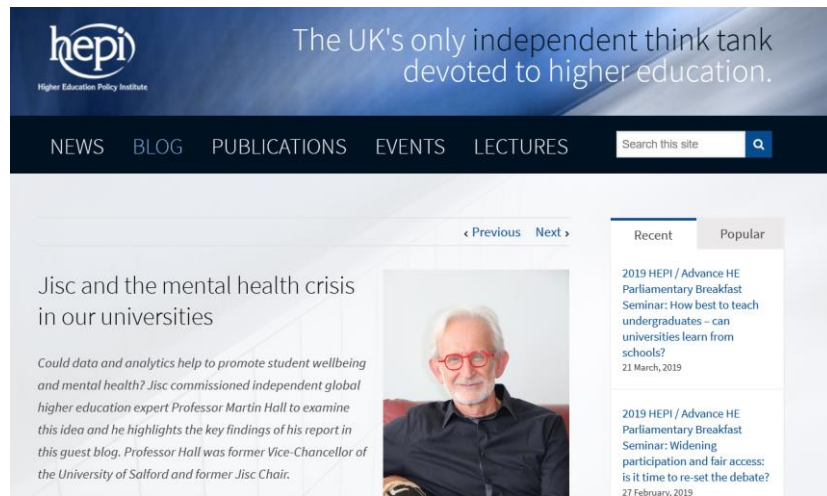


Photo CC-by wocintechchat.com

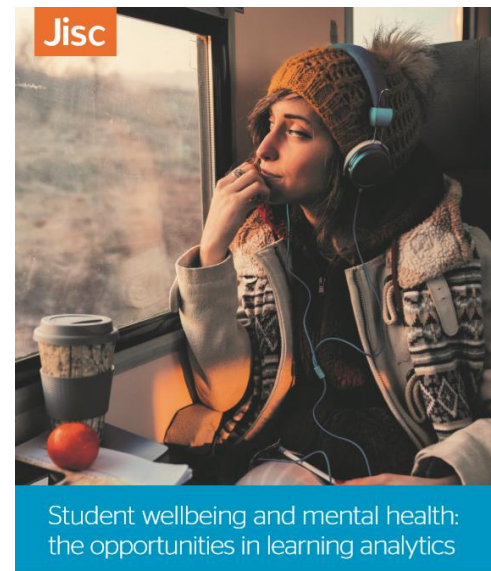
Holistic approach may have benefits



Making the case



<https://www.hepi.ac.uk/2018/07/17/jisc-mental-health-crisis-universities/>



July 2018


Martin Hall
Artefact Transformation and Facilitation Services

<http://repository.jisc.ac.uk/6916/1/student-wellbeing-and-mental-health-the-opportunities-in-learning-analytics.pdf>

Suicide safer universities dashboard

DETERMINANT & RISK PROFILE/CORRELATION
(Inspired by 'Suicide Safer Universities - A Guide' and based on Ben's story)

NAME	Ben	
SEX	Male	
YEAR	1st	
TRANSITION YEAR?	<input checked="" type="checkbox"/>	
PRE-EXISTING HEALTH ISSUES?	<input type="checkbox"/>	
CLEARING (NOT FIRM/INSURANCE CHOICE)	<input checked="" type="checkbox"/>	
STRUGGLING ACADEMICALLY?*	<input checked="" type="checkbox"/>	
HEALTH CONCERNS REPORTED?*	<input checked="" type="checkbox"/>	



Ben's Snowdrops (Age 8)

SUPPORT/WELLBEING & HEALTHCARE	ACADEMIC
Referred to Wellbeing?*	Tutor and student not met <input checked="" type="checkbox"/>
Missing healthcare appointments	Exam/assessments missed <input checked="" type="checkbox"/>
PARENT/SCHOOL REFERENCE	Coursework deadlines missed <input checked="" type="checkbox"/>
Learning difficulty/concern <input checked="" type="checkbox"/>	Quality of work poor/confused <input checked="" type="checkbox"/>
Recent bereavement/divorce <input checked="" type="checkbox"/>	Vacant/listless in study groups <input type="checkbox"/>
Health concerns <input checked="" type="checkbox"/>	Misses academic events <input type="checkbox"/>
HALLS OF RESIDENCE	FACULTY/ADMIN & IT
Hall struggle/fail to make contact <input checked="" type="checkbox"/>	Not registered/late registration <input checked="" type="checkbox"/>
Behaviour/appearance changes <input type="checkbox"/>	Fit-to-study/withdrawal process <input checked="" type="checkbox"/>
Involved in hall incidents <input type="checkbox"/>	Hall/tuition fees unpaid <input checked="" type="checkbox"/>
Misses canteen meals (if catered) <input type="checkbox"/>	Often submit work in early hours <input type="checkbox"/>
Official paper mail uncollected <input checked="" type="checkbox"/>	U-Card usage concerns <input type="checkbox"/>
Misses social events <input type="checkbox"/>	E-mail access concerns <input checked="" type="checkbox"/>
STUDENTS UNION/STUDENTS	YOUR IDEAS TO ID THE VULNERABLE:
Non-attendance at events <input type="checkbox"/>	_____
Concern over behaviour/incident <input type="checkbox"/>	_____
Non-engagement in clubs/soc's <input checked="" type="checkbox"/>	_____

☒ Known to the University
 ☒ Known to school/parents
 ☐ Not actioned / not known to supply

Ben's snowdrops – determinant and risk profile – James Murray

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University leadership

Student suicides: the bereaved father who says data could save lives

James Murray, whose son took his own life, wants universities to use patterns of data to identify struggling students

Supported by

HSBC UK

About this content

Rachel Hall

@RachelHall, PhD

Mon 8 Oct 2018 10:37 BST

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▲ James Murray is the father of Ben Murray, the Bristol University student who took his own life aged 18 in May, pictured at his home in Falmouth. Photograph: Adrian Sheratt

Guardian, 9 October 2018

<https://www.theguardian.com/education/2018/oct/08/student-suicides-the-bereaved-father-who-says-data-could-save-lives>

From concept to implementation

- **Bristol/Ben Use case shows:**
 - **Data** probably held in a **student record system**
 - **Data** almost certainly held **somewhere**
 - **Data** that requires some **interpretation**
 - **Information** that the **university** knows, but probably not as data
 - **Information** only **parents** or others know.

DETERMINANT & RISK PROFILE/CORRELATION

(Inspired by 'Suicide Safer Universities - A Guide' and based on Ben's story)

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Conversations with three universities

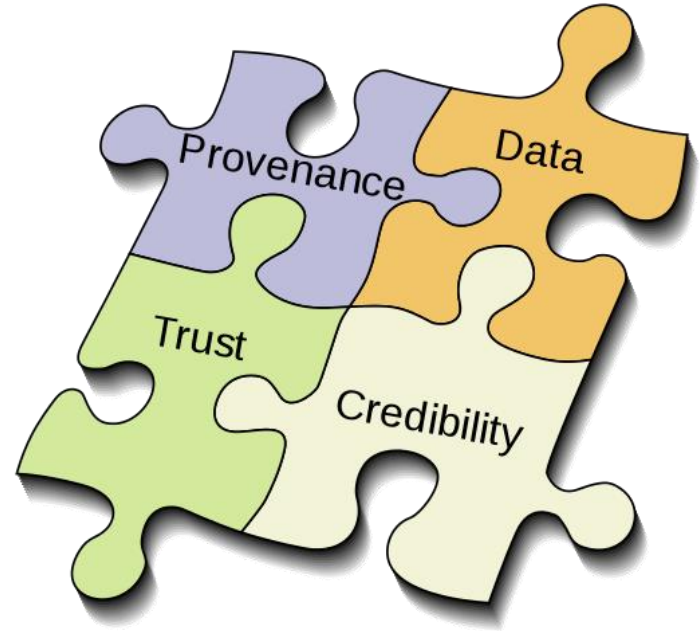
1. All three saw the potential of seeing richer data about students in one place
2. All saw student CRM type functionality as important
3. All were wary of the idea of using data driven prompts to identify students in crisis not known to them
4. All of them saw moving from data to process to people as key
5. Range of degrees of data informed approaches
6. Range of level of centralisation of services
7. No-one size fits all – three universities very different student populations

Potential Recommendations

1. Are you ready? - know your data and start discovering its potential
2. Start the conversation about data now
3. Build links between data, systems and people
4. Build up a richer picture of your students and their support needs
5. Enable information and data flows across your institution
6. Build in interoperability and open standards
7. Understand relevant legal and ethical frameworks
8. Start to work in a wider data landscape

Enabling data to play a role...

- More likely to succeed if:
- Clean data
- Confident about the legal and ethical side
- Having a workflow and process from data to people
- Interoperability - being prepared to unlock data from disparate systems
- Open data architectures and standards



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Author: <http://commons.wikimedia.org/wiki/User:Arbeck>

Data informed conversations

Its not about replacing human interaction with predictive models or AI

Some working assumptions

1. Big data can provide new insight (e.g. 500 million records)
2. National level datasets can provide new insight
3. Work done to develop Learning Analytics models might be transferable
4. Data dashboards can play a role in alert/triage



What else has been happening?

- Privacy and ethics at forefront of debate
- Striking a balance
- Taking an informed perspective
- High level group on Consent
- Role of ICO



LA code of practice **mental health and wellbeing annex**
<https://community.jisc.ac.uk/system/files/391/Wellbeing%20CoP%20v0-11.pdf>



https://commons.wikimedia.org/wiki/File:Port_and_lighthouse_overnight_storm_with_lightning_in_Port-la-Nouvelle.jpg

What else has been happening?

- New OFS projects kicking off
- <https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/innovation-partnership-and-data-can-help-improve-student-mental-health-in-new-14m-drive/>
- <https://www.officeforstudents.org.uk/advice-and-guidance/student-wellbeing-and-protection/improving-mental-health-outcomes/>

University of Derby

Education for mental health: enhancing student mental health through curriculum and pedagogy

This project will create an evaluated, national online toolkit for academics that provides evidence-informed guidance on creating and providing curriculum, pedagogy and assessments that facilitate better student mental health while improving educational outcomes

University of Northumbria at Newcastle

Mental health and analytics: a continuum approach to understanding and improving student mental health

This project aims to improve mental health and learning outcomes for all students, match students in need to appropriate health and wellbeing support, and reduce student suicide.

These will be achieved by the innovative integration of technology, advanced educational data analytics, student relationship management, and effective models of support.

What else has been happening?

The screenshot shows a web browser window with the address bar displaying the URL: <https://www.universitiesuk.ac.uk/events/Pages/Mental-Health-A-Whole-University-Approach.aspx>. The page features a large abstract graphic with red, blue, and black geometric shapes. Below the graphic, the title 'Mental health: A whole university approach' is displayed, followed by the date and time '11 Jul 2019, 09:30 - 17:00'. A map snippet shows the location 'Woburn House, Kings Cross, London WC1H 9HW'. On the right side, the Jisc logo is visible, along with a banner for 'LIFESAVERS MADE AT UNI'. Below the banner, the text '#madeatuni' is shown, followed by a description: 'The Nation's Lifesavers - the 100+ ways UK universities are keeping us safe and healthy'. A profile picture of Sanaa Busaidy-Hubert, Events Producer, is also visible.

<https://www.universitiesuk.ac.uk/events/Pages/Mental-Health-A-Whole-University-Approach.aspx>

HEFCE step change pilots
ending and reporting

What else is new ?

- Jisc is planning next set of actions (scaling up)– **two ideas have been explored**
<https://www.jisc.ac.uk/reports/horizons-report-emerging-technologies-and-the-mental-health-challenge>
- More work to understand potential of data informed approaches and analytics
- Would like to in more depth work with data at scale analysis
- Would like to do more work on supporting student wellbeing and resilience
- Will take a collaborative approach to this
- Elsewhere:
- Increased emphasis on working with the NHS (new group)

Thanks for listening...

Catherine Grout

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