

# What is the Intelligent Campus?



#### What is the intelligent campus?

- »There has been plenty of hype over artificial intelligence and the internet of things.
- We believe it may be time to put aside the cynicism that this kind of hype generates and look seriously at how we can take advantage of these emerging technologies to improve the student experience, teaching, learning, libraries, research and the management of our campuses.

# What are we doing?

#### Using data to make smarter use of your estate

- We're working on ways to improve the student experience by capturing and analysing the many kinds of data that can be collected across university and college campuses.
- »This research is developing alongside our effective learning analytics service.

25/10/2018 Intelligent Campus

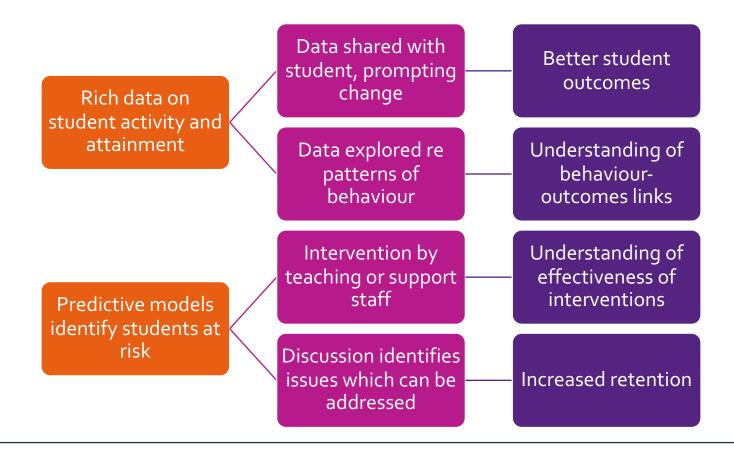
# What have we done?

# What is learning analytics?

"learning analytics is the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs"

SoLAR – Society for Learning Analytics Research

#### How it works



#### »Learning Analytics Service

In August 2018, Jisc launched their UK wide learning analytics service.

#### »Rationale

Organisations wanted help to get started and have access to standard tools and technologies to monitor and intervene

#### » Priorities identified

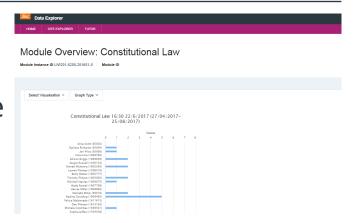
- Code of Practice on legal and ethical issues
- Develop a core learning analytics service with app for students
- > Provide a network to share knowledge and experience



#### **Learning analytics**

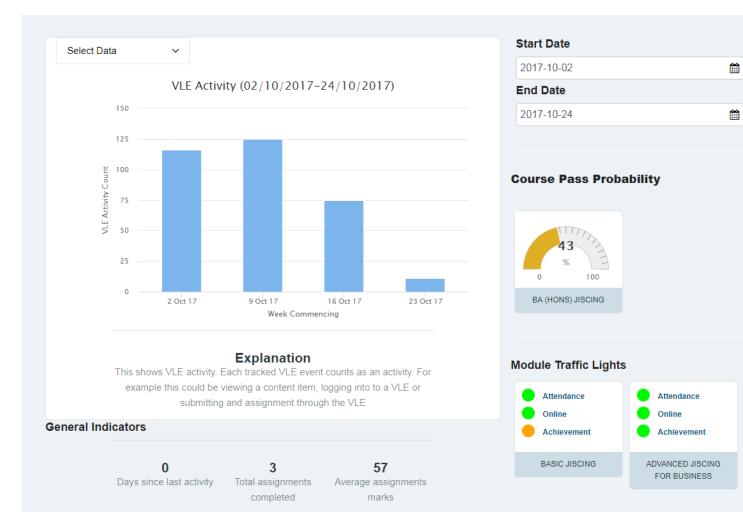
#### »Data Explorer Release 2.0

- View data in learning records warehouse
- > Site Overview overview of all data
- My Students and My Modules
- > RAG Status and predictive models







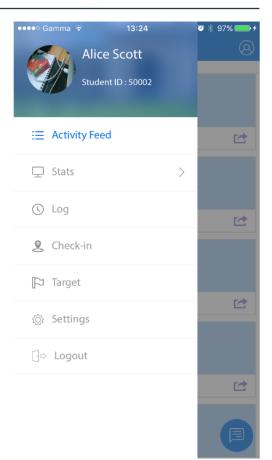




#### Learning analytics

#### »Study Goal

- Social learning app with gamification
- Setting targets and logging self-declared activity (fitbit model)
- View activity and attainment data
- Student Attendance Check-in



# The intelligent campus project

- »At the core of the learning analytics service is the **Learning Data Hub** where academic and engagement data is collected, stored and processed.
- We'll extend the Learning Data Hub to enable data to be gathered in from physical places (movement trackers, heat and CO2 sensors, for example) and from systems that record and monitor space and equipment usage, timetabling and other activities.

- »By analysing when and how rooms are **used** organisations will be able to make **smarter**, **more effective** use of learning spaces and other facilities across campus and to **improve** curriculum design and delivery.
- »Making timely interventions to ensure that the best available spaces are being used for each session will enable students to learn more effectively and ensure that the organisation is running efficiently – but this is only the start.

# What does it look like?



#### The intelligent campus

#### Presentation and action



The intelligent estate



Enhanced student experience



Intelligent learning spaces



Intelligent workspace



Smart city



Smart experiments



Intelligent library

#### Data storage and analysis



Learning analytics processor



Learning data hub



Data aggregator

#### Data collection



Student records



Estate data



Mapping



**UDD Transformation Toolkit** 

Tracking



Attendance



Library



VLE









Utilisation



Energy

## Presentation and action

The intelligent estate



# Enhanced student experience



# Intelligent learning spaces





#### The intelligent campus

# **Smart city**





#### The intelligent campus

# Intelligent library





The intelligent library

# Why?





### Issues



# **Ethics**

## Consent



#### The intelligent campus

### **GDPR**

# **Technical**



# Validity

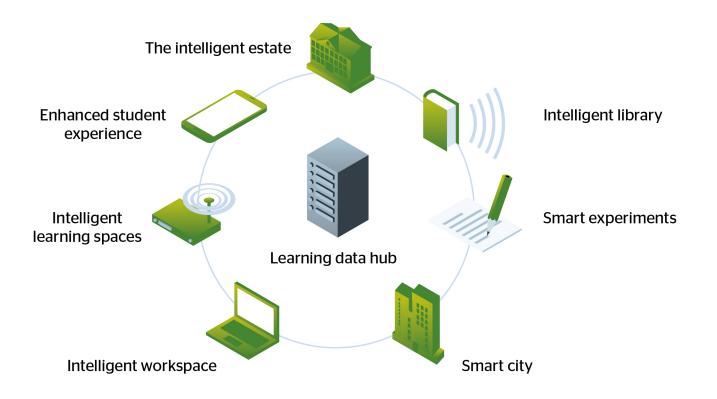
# Do we want to?

# Should we?





#### The intelligent campus



# Get involved

- »Go to the Intelligent Campus webpage
  - > https://jisc.ac.uk/rd/projects/intelligent-campus
- »Follow the Intelligent Campus blog
  - > https://intelligentcampus.jiscinvolve.org
- »Join the mailing lisy
  - > https://www.jiscmail.ac.uk/cgibin/webadmin?SUBED1=INTELLIGENTCAMPUS&A=1
- »Join the Twitter conversation: #intelligentcampus

# Any questions?

