# NTU student dashboard:
Learning analytics to improve retention

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Student Transition

- Previous studies
  - HERE Project (2008-11)
  - Welcome Week surveys/ student transition surveys (2005 – present)

- Student expect HE to be largely similar
  - Academic writing, feedback
  - Relationships with tutors
  - Expect support from tutors regarding deadlines

- Encounter a profoundly different landscape
  - Most acculturate & cope
  - Many flounder & struggle to understand how HE is different & how they are supposed to act differently
    - ¼ - 1/3 of NTU students have considered leaving at some point during the first year
    - Belonging essential – peers, tutors and within subject of context

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Legend:
- In Work
- In Education/Training
- Retired
- Unemployed
- Other
- People, places, organizations, etc mentioned by survey respondents

Connections per person

Dustman Ego Network
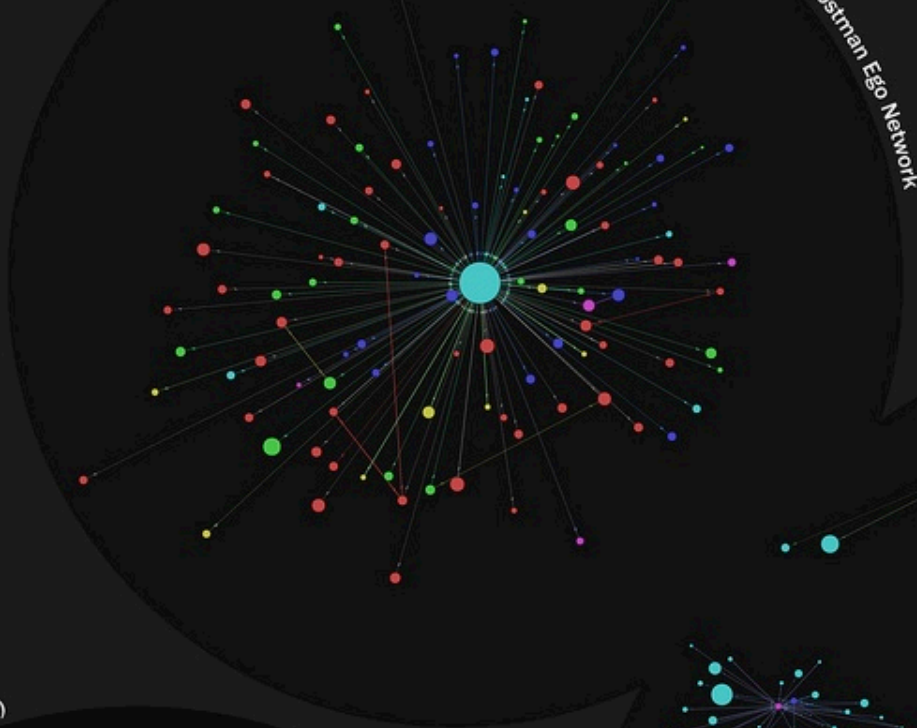
New Cross Gate Ego Network Samples

"Lucy's" ego network (retired)

Local cafes

Dustman   Local Councillor

Unemployed

Other

Retired

Big data/ learning analytics: are they the answer to student retention?

Learning analytics

- "Analytics" is a term used in business & science to refer to computational support for capturing digital data to help inform decision making … this extends to designing infrastructures to exploit rapid feedback, to inform more timely interventions, whose impact can in turn be monitored. Learning analytics appropriates this concept for education …

- (UNESCO policy briefing on Learning Analytics, 2012)

- Huge interest in the sector

- If we can more accurately identify those students who fail to make the transition into HE/ fail to engage, surely we intervene and prevent early withdrawal

Why I think loads of Universities are going to lose their shirts over big data

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We already know who our 'at risk' students are

UK-domiciled first degree undergraduate qualifiers obtaining a first or upper second class honours degree by academic year and ethnicity
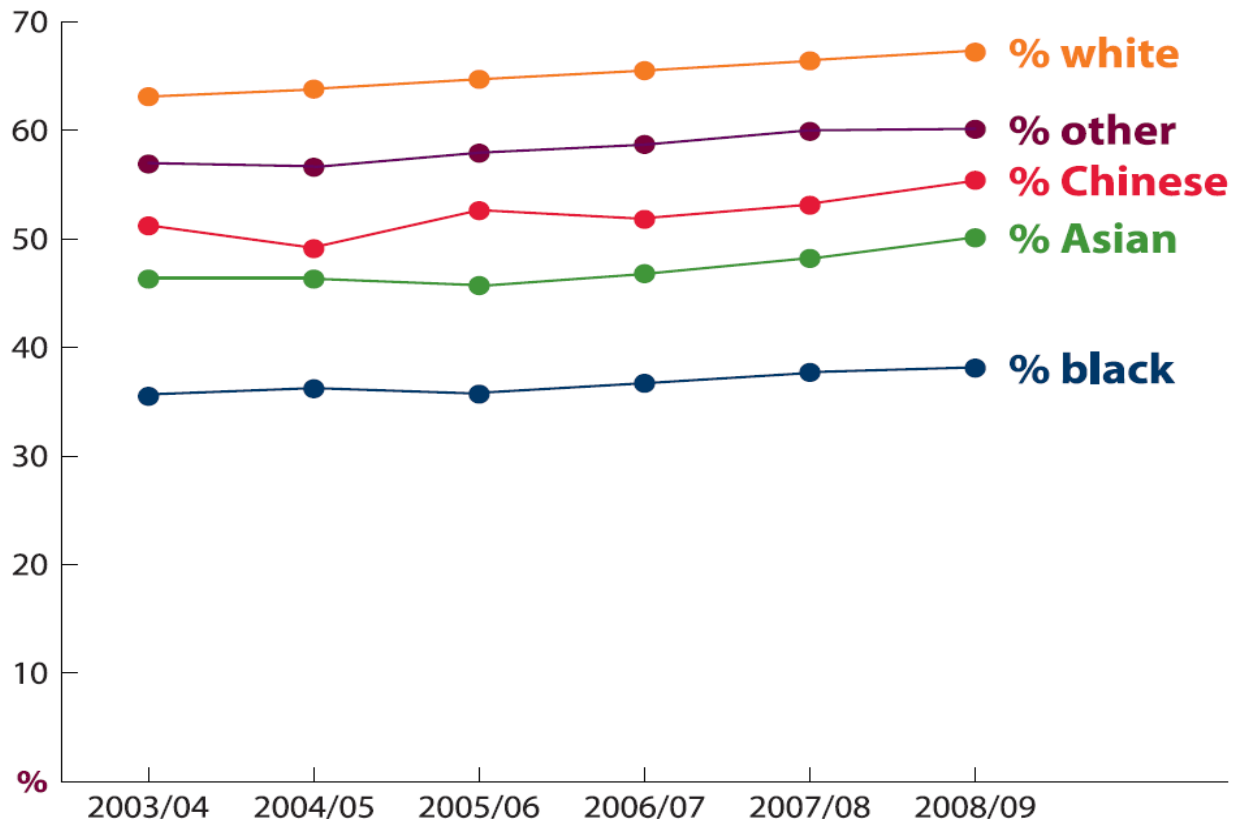
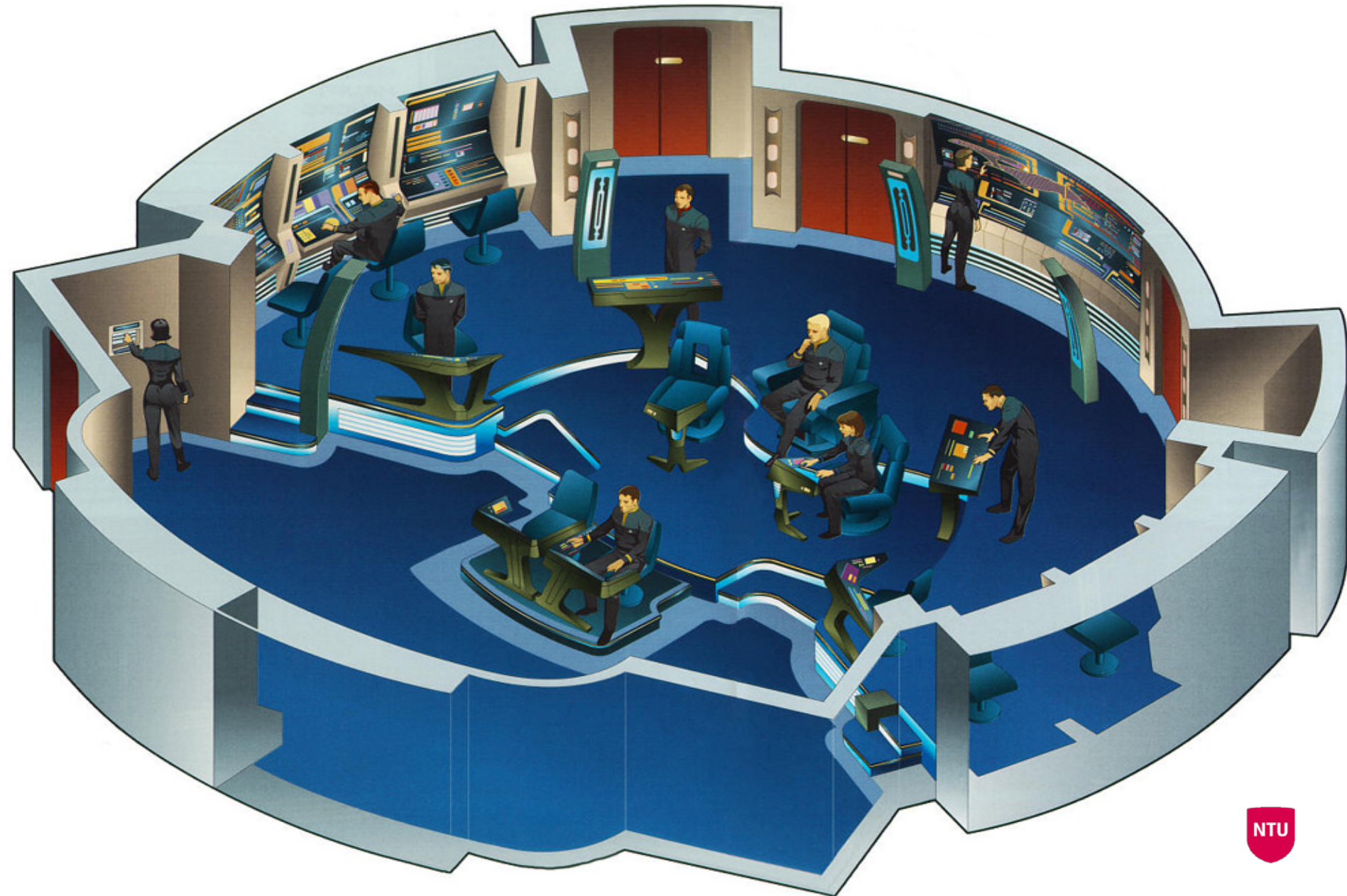Source: ECU publication 'Equality in higher education: Statistical report 2010.'

Focus will be on the cool technology

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Not real world people & interventions

Finally, it will be built for senior managers

NTU Student Dashboard

NTU student dashboard
## (developed by Solutionpath)

- Draws data from multiple sources
  - Library, registers, VLE

- Loads it into an individual student dashboard
  - Information about a live student in one location
  - Makes comparisons between students in that year on that cohort

- Information for needs of personal tutor

- Alerts when there is a problem
  - No engagement for a fortnight & academic failure
  - Sends an email to their tutor

- Space to build up notes about student engagement
  - Grades, feedback, extra-curricular activities, support from other services

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Pilot year (2013-14)

- Focus on tutors
  - 1 tutor to 8-12 students in tutorial groups
  - Interest in supporting tutors to guide students
  - Particularly in the first year

- Partner with Solutionpath
  - Powered by IDOL 10

- Four first year courses, 40 tutors, over 500 students

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Student ID		**Prog Year**	1
Gender	M	**Tutor Name**	Paula Stacey
Entry Age	19	**Enrolment Status**	Fully enrolled
Disability	No disability	**Repeating**	Not Repeating
Engagement Rating	high	**NTU Email**	@ntu.ac.uk
UCAS Tariff	0	**Home Email**	d@yahoo.co.uk
Course	BSc(H) Psychology FT	**Mobile**	
Study Mode	Full-Time		

Individual Engagement Rating

Legend: Course Average, Engagement Rating
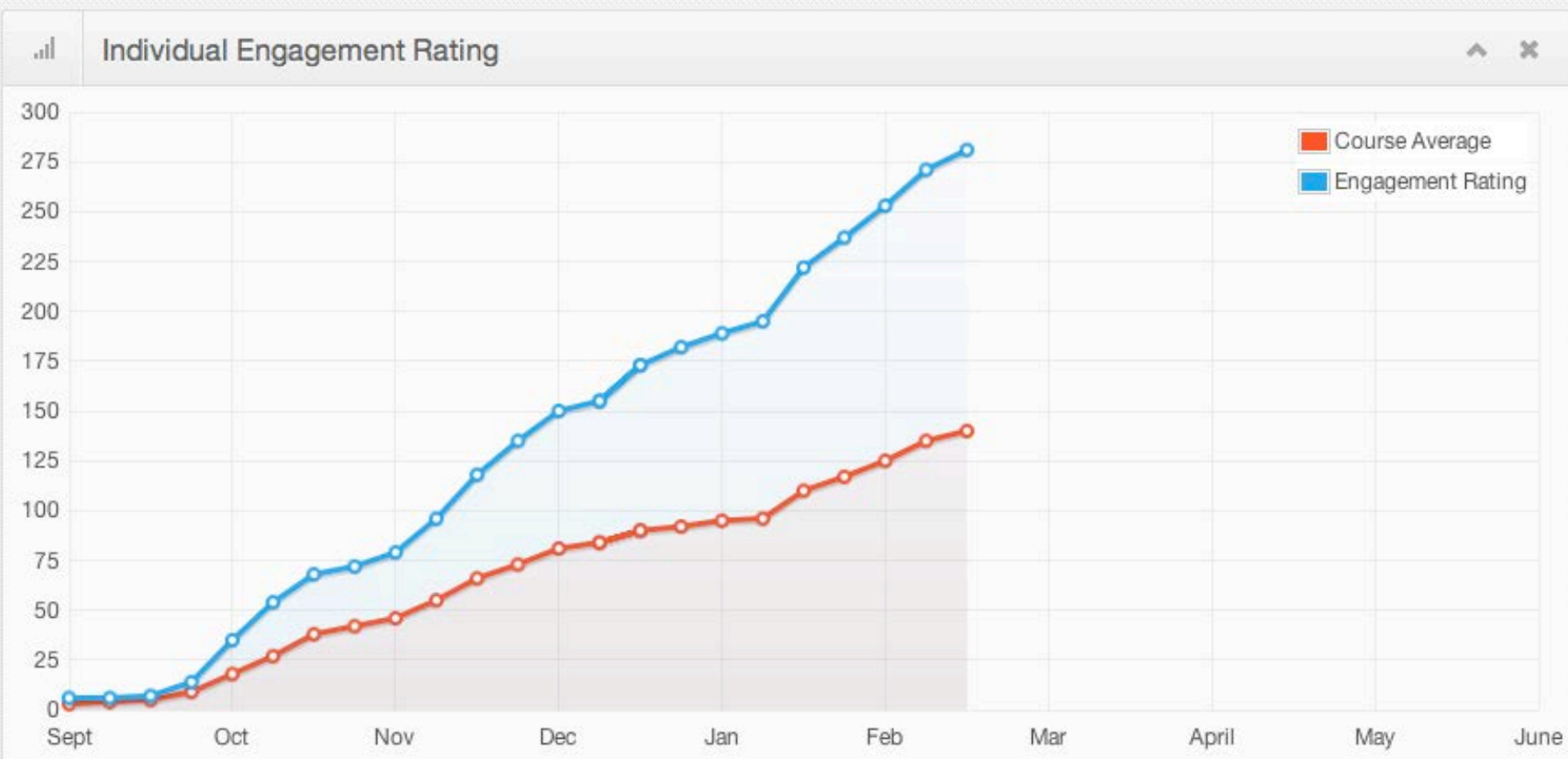
Engagement based on student behaviour

| ☰ | Tutorials Attendance History | ˄ |

| ☰ | NOW Resource Usage | ˄ |

| ☰ | NOW Dropbox Submissions | |

| ☰ | Library Loans | |

| ☰ | Campus Swipes | ˄ |

| ☰ | Academic History | ˄ |

Module	Level	Module Leader	Module Type	Grade Desc	Grade
Research Methods 1	Undergraduate Level 1 Module	G Young	Teaching	Not Known	
Research Methods 1	Undergraduate Level 1 Module	G Young	Coursework	Not Known	
Psychological Research in Context	Undergraduate Level 1 Module	TBC	Teaching	Not Known	
Psychological Research in Context	Undergraduate Level 1 Module	TBC	Oral Presentation	Not Known	
Psychological Research in Context	Undergraduate Level 1 Module	TBC	Essay	Not Known	
Psychological Research in Context	Undergraduate Level 1 Module	TBC	Essay	Not Known	

☰ Regular Contact / Meeting Notes ⌃

☐ Set email reminder for next week　　[Save]

☰ Notes History ⌃

Note	Date
LB: ▓▓▓▓ has responded to my email to say that she spoke to someone at the beginning of term and will not be taking up her place at this time. I have made the course team aware	12/11/2013
LB: I have contacted the student re attendance on 6/11/13	08/11/2013

Co-Curricular Activities and Experience

Community Work	☐	Company Presentations	☐
Job	☐	Company Visits	☐
Summer School	☐	Study Tours	☐
Gap Year	☐	Mentoring of Others	☐
Mentoring	☐	Course Representative	☐
Language	☐	Role in Student Societies	☐
International Experience	☐	Entrepreneurial Work	☐

Events Participated In

Summary of Year

Mapping student withdrawal

Student withdrawal

- 29% of 1st year students with low engagement rating
  - Appear more at risk of early withdrawal/ failing to achieve potential
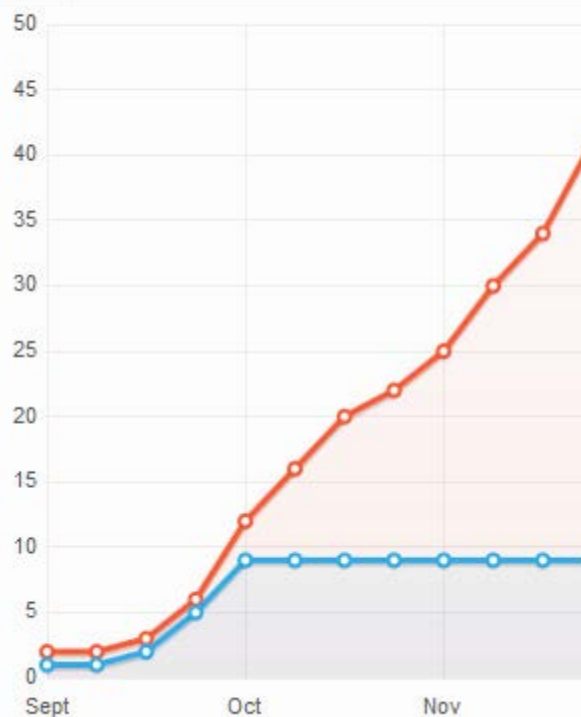
1st yr Arts & Humanities
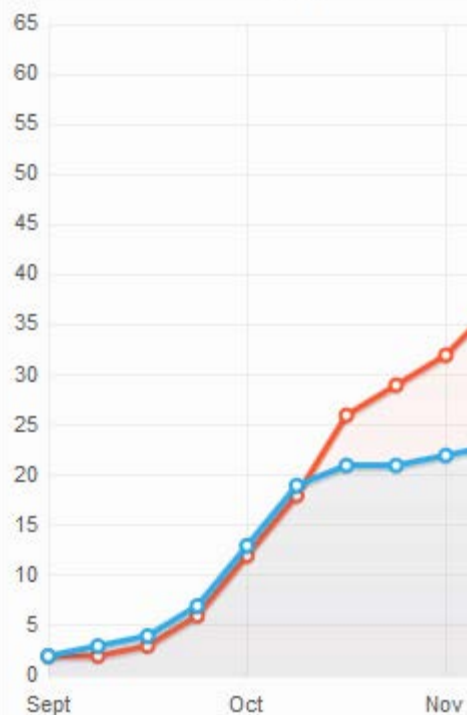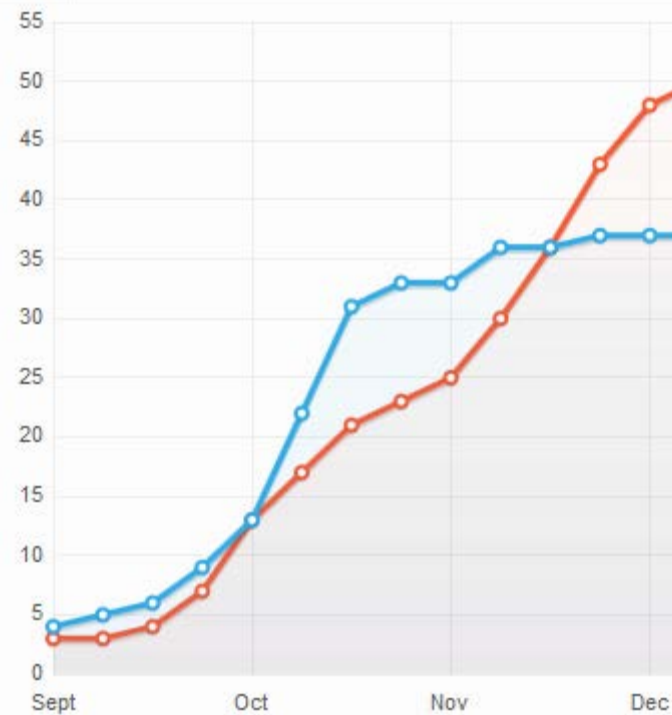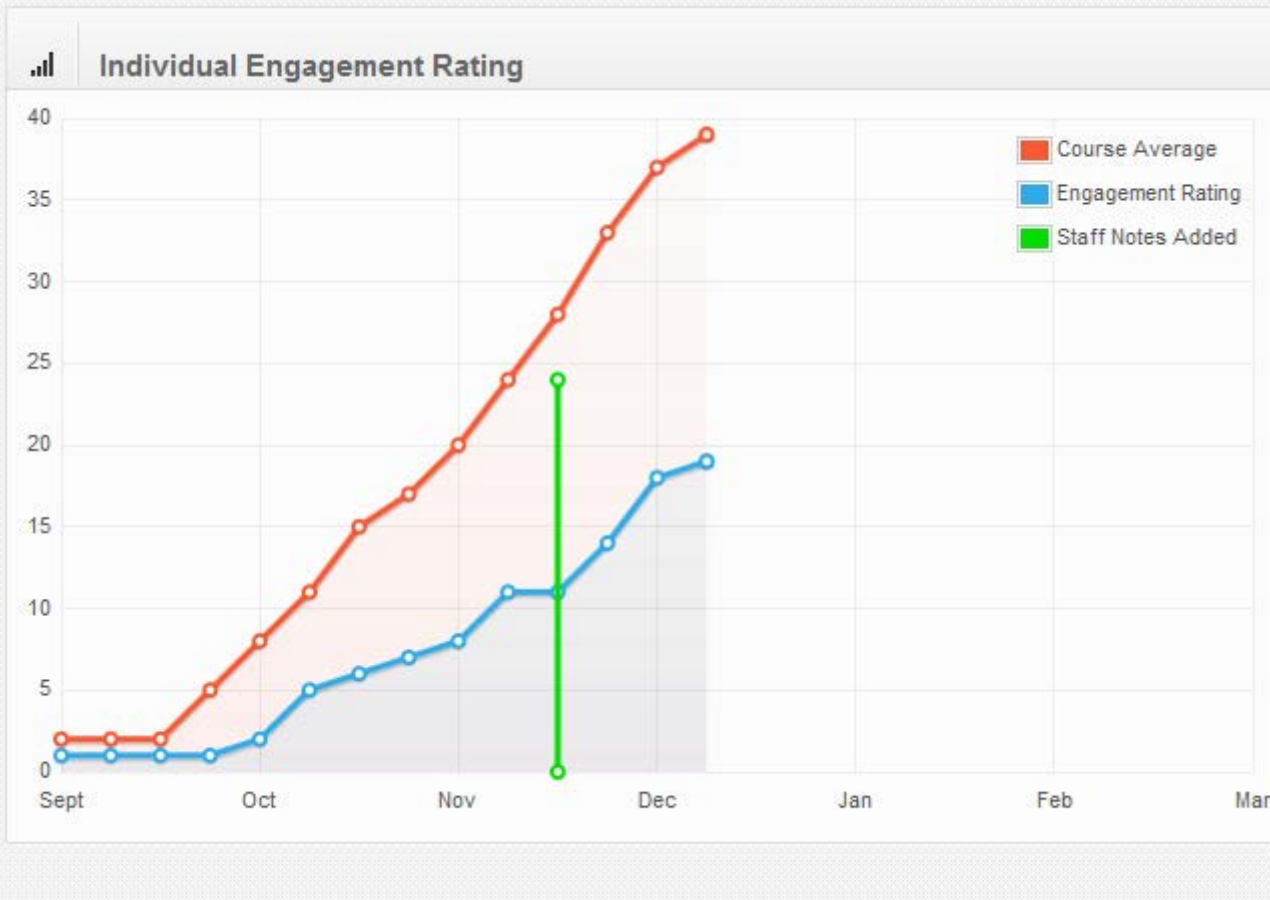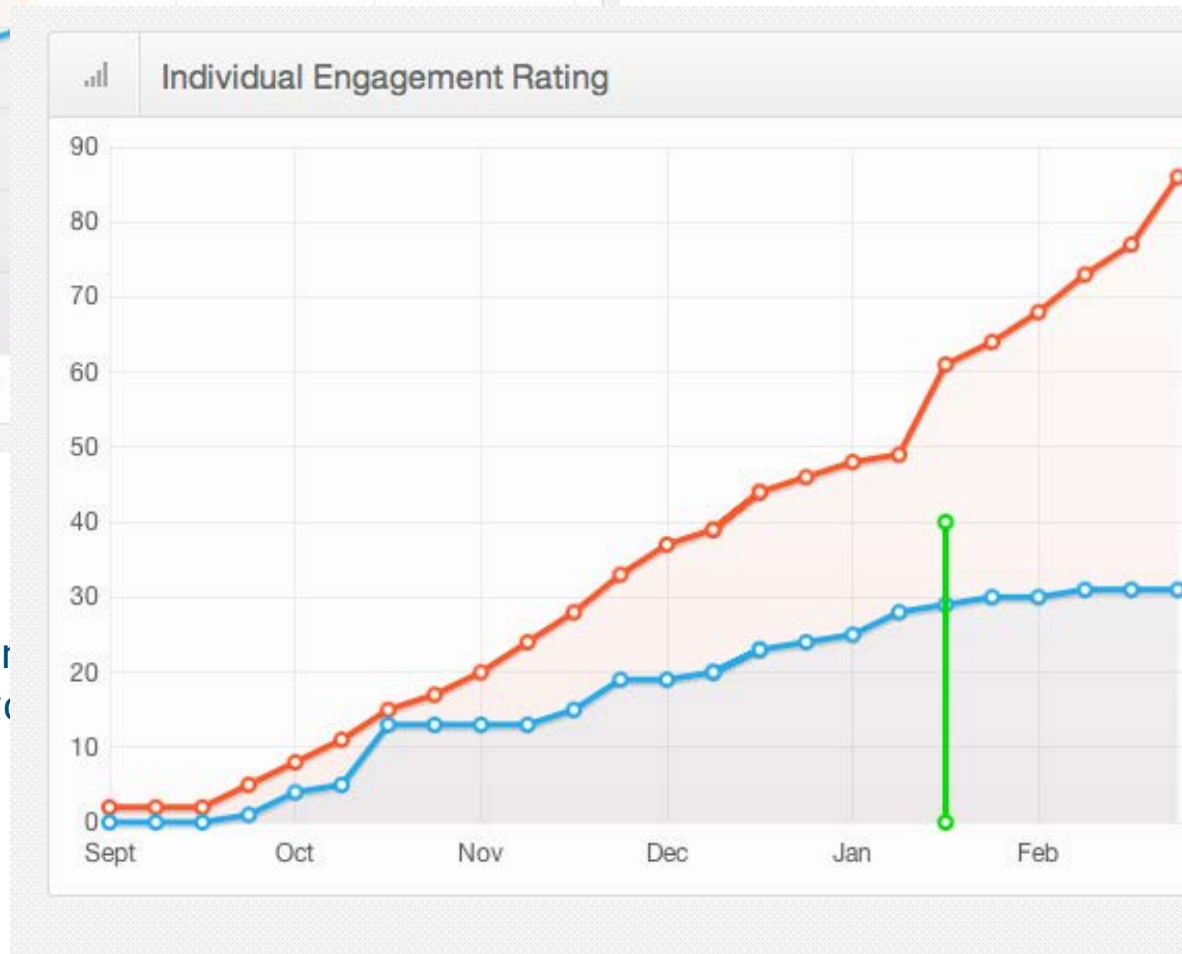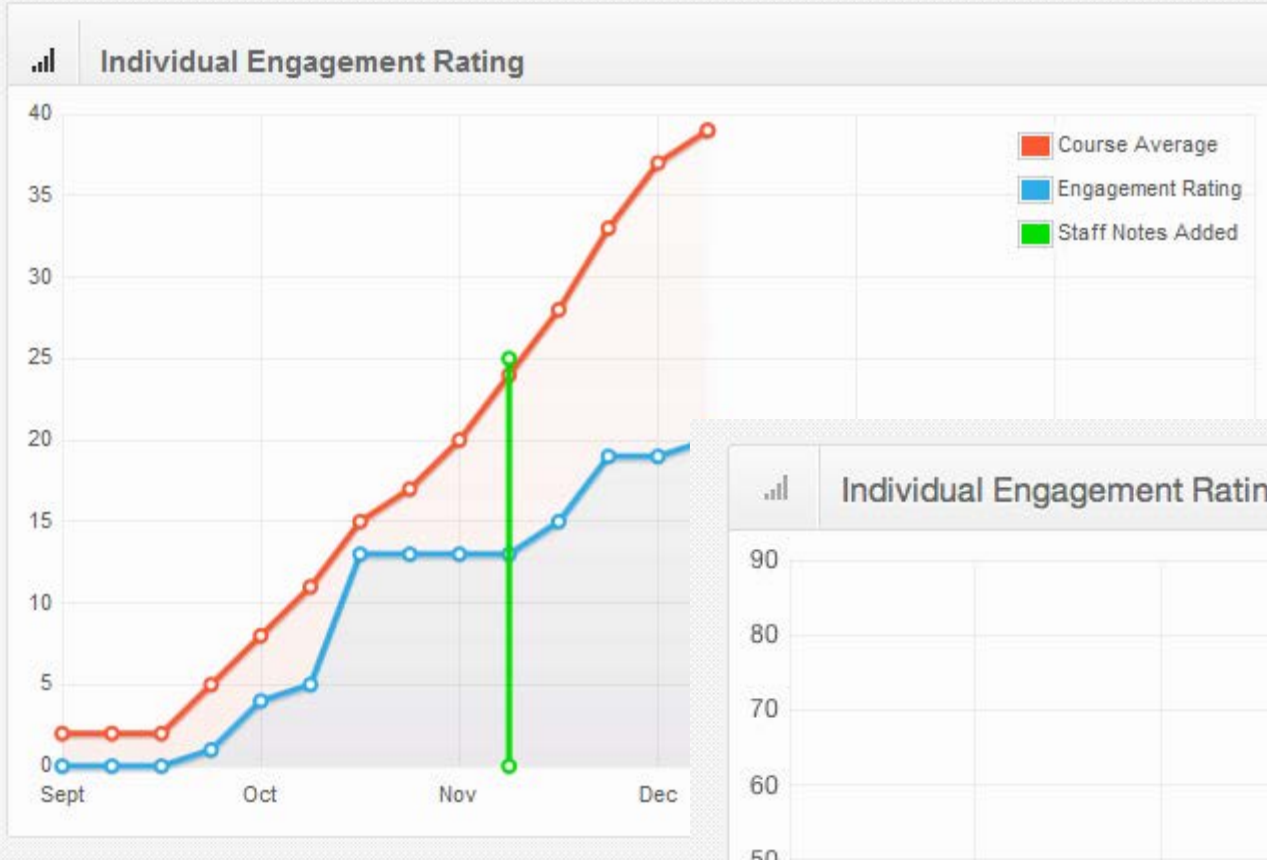
1st yr Social Sciences   1st yr Art & Design

Dashboard impact

Tutor Notes
18/11/13 Concerned about student attendance. Emailed student to request a
meeting : added on 20131120 for N0*****

Individual Engagement Rating

Course Average
Engagement Rating
Staff Notes Added

Tutor Notes
Arranged to see [student] as atte
his attendance, which related to t

Feedback & learning so far

Feedback

- Most respondents using dashboard once per week (fairly minimal impact on workload)

- 83% reported that it had positively changed how they interact with their tutorial groups

- All staff we have spoken to want this as a tool in the future

  – *"Useful to get a sense of the student's history. Useful to be prompted to send out an email to a disengaged student and useful to have a template for guidance on this."*

  – "Students report pleased that they were being taken care of as they were used to this from school"

Student feedback

- Very strong interest
  - Can see the benefits
  - Actually expected that we knew this already

- Very strong concerns
  - Spying
  - What happens if they appeal/ have a marginal decision against them?

Thank you for listening

Any questions?

Thank you for listening

- Do you have any questions?

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