

Jisc Learning Analytics in Further Education and Skills Workshop in partnership with the Greater Manchester Chamber of Commerce

Report containing the outputs from the workshop held on 16 May to explore analytics requirements with colleges and providers in Greater Manchester.

Activity 1: User Stories – what are the Analytics Questions we most want to be able to answer and Activity 2: Identifying data sources required to implement each of the groups of user stories

User stories were group into the following categories.

A - Improve individual student performance - user stories from (e.g. staff, employers, parents, learners) that generate interventions aimed directly at learners - but to look at different user types e.g. apprentices tec.

B - Improve teaching and learning quality - user stories that generate interventions aimed at teaching staff to improve quality across groups of students

C - Improve college support systems and process - user stories that generate interventions aimed at support staff and the process around support staff and students. Acknowledge resource restraints of colleges, limited support staff (in IT and LT) etc.

D - Develop college strategy - user stories that inform the strategic priorities and interventions required to improve the performance of the college

A - Improve individual student performance

	Keywords	User Stories	Data Sets
H	Destination	As a learner I want to identify “next step” options including careers or education so that I can make the right decision for me	NCS – pathways LMI UKCES Reports Career case studies – UCAS Trade bodies Institutes Non-qualification requirements Personal network
H	Parent	A8 - As a parent/employer/stakeholder I want to see how my son/daughter/employee is doing in college so that I	Parent Porta in Pro-monitor Attendance data

		can be assured they are progressing, attending and achieving.	Progress vs target grades Predictive capacity
H	Achieve Target	A6 As a learner I want to know what my current progress is and what I need to do to achieve so that I can achieve my aspirational grades and more	Value proposition of self-investment Experience Outcome
M	Retention	A1-4 As a course leader, manager, curriculum director, etc. I want to be able to identify students who are at risk of failing to complete their course so that I can provide timely interventions to help students who might dropout	
M	Employer	A9 As an employer (with a work experience student) I want to track attendance/effort so that I can feed into their portfolio or CV	
M	Check progress	As a learner I want to have a visual guide to my performance to see my attainment and engagement activity and compare with my course requirements so that I can verify that I am on track	

B - Improve teaching and learning quality

	Keywords	User Stories	Data Sets
H	Plan learning	B2-As a English and Maths tutor I want to be able to see students BKSBS scores, GCSE Prior attainment so I can plan learning and ensure students are progressing towards achieving a grade C+ this year	Learner data Learning data VLE data– course content measure VLE activity data
H	Rich learning	As a teaching manager I want to see at a glance how much rich learning content exists and us used by my courses so that I can ensure the learning experience of my learners is enhanced	Mark book data Assessment schedule Mark books assessment results

M Learning Quality	As a curriculum manager I want to compare achievements across facilities, courses etc. so that I can identify best practices and apply to all	Registers and attendance data
M Course Management	B6 As a Curriculum Director I want to be able to identify the number of learners not achieving to the agreed date so that I can direct the course team to intervene to address any problems	
M Improve teaching	B5 As a department manager I want to be able to monitor students across a range of courses and be able to see who is showing signs of becoming “off track” so I can then monitor interventions from my teaching staff.	
L At Risk Groups	B3 – As a curriculum manager I want to be able to identify the number of learners who has punctuality issues (filtered by gender, learning difficulty) of not achieving their enrolled courses so I can intervene to address any problems.	
L Attendance	As a course leader I want to be able to easily see my students’ in year progress and patterns of attendance and behaviour so that I can make early interventions if required.	
L At Risk Groups	B4 – As a curriculum manager I want to be able to identify all at risk learners, the targets they had been set/reviewed and the progress they were making so I can intervene to address any problems	
L Manage assessment	B7 – As a teaching manager I want to see at a glance how much assessment has occurred on my courses so that I can ensure assessment is taking place on schedule	
L	As a learner I want to have a voice to feedback on teaching and learning quality so that improvements can be made and linked to other metrics.	

C - Improve college support systems and process

	Keywords	User Stories	Data Sets
H	C8 Retention	As a senior manager I want to identify how students are progressing across the organisation so that I can deploy and develop support mechanisms to eliminate early drop outs	Achievements Submissions Baseline impact Accredited or non-accredited Attendance/punctuality Success rates
M	C9 Attendance	As a Teaching and Learning Manager I want to be able to identify the number of courses where attendance is below the college set target so that I can devise appropriate CPD training/ initiatives to address any attendance problems.	Attendance records College targets
M	C10 Careers Advice	As a manager I want to be able to identify the impact of a student's learning on their progression and destinations course vs job career so I can improve careers advice and guidance e.g. students who study X went on to be Y	Destinations data Outcome based success measures
M	C3 Punctuality	As a Teaching and Learning Manager I want to be able to identify the number of courses where punctuality is an issue so that I can devise an appropriate CPD training to address any punctuality issues.	Attendance data
M	C7 Systems use	As a course leader I want to see student engagement and results on a variety of digital and physical systems so that I can provide more opportunities for high impact systems	Systems usage data
M	C6 Student services	As a director of student services I want to see issues, disciplinary etc. that are flagged up to me as alerts so I can direct my team to intervene and prevent further issues arising	Student information and VLE
M	C2 Use of VLE	As a Head of Digital Learning I want to compare the end of year success grades with the VLE activities/loss of students so that I can measure impact of online learning in achievement	VLE data Grades Retention
M	C4 Learner Support	As a data analyst I want to develop an integrated system which captures data from (pre-)GCSE through to post success	External SIMS data

M	C5 Digital systems use	As a digital learning specialist I want to understand students' behaviour on digital systems so I can respond to unusual behaviour and predict outcomes under changing circumstances	VLE and other systems usage data
L	C1 At risk list	As a safeguarding officer I want to be able to create a bespoke list of students so I can monitor their progress closely. Ideally I would like email updates when their progress drops so I can intervene. Being able to export a report to share with stakeholders on an individual	

D - Develop college strategy

	Keywords	User Stories	Data Sets
H	Demand	As a principal I want to understand employer demand so that I can better plan curriculum matching and planning supply and demand over the longer term	LEP Data Chamber of Commerce New economy Job Centre Job websites ONS
H	Finance and Quality	As governor I want to know we are on track financially and with OFSTED so that we can survive	
M	Interventions	D5 As a progression adviser I want to identify trends so I can show how positive interventions for at risk students work to reduce the possibility of NEET	
M	Learner Progress	D2 As a curriculum manager I want to be able to track learners progress in terms of the enrolment/admissions process to gauge an interest in numbers	

		so I can make decision around utilisation of people and resources	
M	Teaching Quality	As a head of school I want to see patterns across multiple class groups so that I can see the impact of teachers and quality of teaching practice	
M	Destinations	D3 As an employability leader I want to see a view of learners e-profiles to illustrate their journey from entry to destination so I can tap into this profile at a later date to be able to measure success	HMRC - Employment details and Salary Details of learners DNP – status Public records – Heatt Details Learner – Learner details Heatt NHS Records Education Records Census data
L	Benchmarking	D1 As an MIS Developer I want to be able to draw together data sources with internal college targets alongside national data so that I can compare our students’ progress against national benchmarks	Tools already exist in (some) colleges
L	Apprentices	D4 As a vice principal I want to know the progress of every apprentice in the college on each aspect of their framework so that I can evaluate the effectiveness of the provision	Tools already exist in (some) colleges
L	Benchmarking	D7 As a digital learning specialist I want national benchmarking so I can more accurately predict outcomes for small demographics i.e. ENCP and Safeguarding	
L	Vocational	D6 As a vice principal evaluating different vocational areas I want to know whether students on motor vehicle courses are achieving comparable results with other vocational students so that I can make a judgement about the quality of provision	Tools already exist in (some) colleges

Activity 3: Opportunities and Challenges

The next activity considered what might be involved in the implementation of some of the user stories. The outputs are identified below.

Solutions and Opportunities

- One day source for VLE, awarding body and exams boards
- Better information, advice and guidance for colleges and providers from better data before engagement
- Data sharing
- Benchmarking for learners and staff/Correlation of different metrics
- Motivating students
- Providing better inspection data

Essential features

- Easy to use and implement
- Flexibility of use
- Single sign on and integration of products/data
- Links to existing aggregated data sets
- Alerts and interactive dashboards for attendance, retention and attainment (progression)
- Incentive learner to keep providing up to date information vs data now being collated centrally.

Technical Challenges

- Combing on-premises and off-premises data
- Timeliness of data
- Accuracy of data
- A common data frameworks e.g. ILR Spec
- Nationally agreed definitions
- Linking together different management information systems
- National identifiers
- Data integration between courses
- Governance of data
- Changing contact details of learners
- Data retention costs
- Data matching
- Data security

Cultural Challenges

- Value of data
- CPD for (all) staff
- Data sharing and competition

- Reluctance of government to recognise and work with an independent data broker (but role for Jisc/AoC?)
- Education and public perception
- Articulating the benefits
- Ethics

A reflection on the workshop and next steps are available from the Jisc learning analytics blog

<http://analytics.jiscinvolve.org/>