<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>Arrival and coffee</td>
<td></td>
</tr>
<tr>
<td>10:00 - 10:15</td>
<td>About the group, arrangements for the day, introductions</td>
<td>Niall Sclater</td>
</tr>
<tr>
<td>10:15 - 10:30</td>
<td>Welcome to The Open University</td>
<td></td>
</tr>
<tr>
<td>10:30 - 11:30</td>
<td>Update on learning analytics developments at The Open University</td>
<td>Prof Bart Rientes</td>
</tr>
<tr>
<td>11:30 - 12:00</td>
<td>Brief updates on member research projects</td>
<td>Members</td>
</tr>
<tr>
<td>12:00 - 13:00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:00 - 14:25</td>
<td>Mental health and wellbeing analytics - update on latest developments and workshop</td>
<td>Tim Coughlan &amp; Kate Lister, OU, Catherine Grout, Jisc</td>
</tr>
<tr>
<td>14:25 - 14:40</td>
<td>Tea / coffee</td>
<td></td>
</tr>
<tr>
<td>14:40 - 16:00</td>
<td>Curriculum analytics - update on latest developments and workshop</td>
<td>Niall Sclater &amp; Paul Bailey, Jisc</td>
</tr>
<tr>
<td>16:00</td>
<td>Close</td>
<td></td>
</tr>
</tbody>
</table>
Curriculum
1. Embedding Learning Analytics into Programme Review and Curriculum Design – Dr Ed de Quincey, University of Keele
2. Visual analytics tool for student workload – Dr Dave Perkins, University of Bangor
3. Student engagement with assessment: Identifying the role of learning analytics – Dr Carmen Tomas, University of Nottingham & Prof Simon Walker, University of Greenwich

Institutional evaluation
1. Learning analytics evaluation exercise - Martin Lynch, University of South Wales
2. Impact & effectiveness of LA roll-out - Dr Christine Couper, University of Greenwich
3. How staff & students understand the LA presented to them – Dr Alex Masardo, University of Gloucestershire

Mental health & welfare
1. Linked Journeys: Linking learning analytics with study journey representations to understand patterns in students’ mental health – Dr Tim Coughlan, The Open University
As a **planner**
I want benchmarking metrics about courses/modules so I can judge if we are achieving good pass rates, student engagement, etc.

As **VC**
I want to know if the new implementations of learning technologies are leading to improvements i.e. Student satisfaction and pass rate/success/retention

As a **manager**
I want to see the metrics that are associated with more successful modules - i.e. Student satisfaction and pass rate/success/retention

As a **lecturer**
I want to find out what resources the students have looked at so I can compare with intended reading list

As a **course designer**
I want to be able to see the actual vs intended learning design/activity for a module and work with course team on improvements
Categorising analytics by intervention

1. Improve individual student performance
2. Improve teaching and learning quality
3. Improve support systems and process
4. Develop strategy
Emerging types of analytics in education

Educational analytics

- Learning
- Curriculum
- Welfare
- Intelligent campus
- Employability & apprenticeship
- Institutional
No aspect of the curriculum should be implemented unless there is a way of collecting data to evaluate its effectiveness.
## Curriculum object type: Lecture

<table>
<thead>
<tr>
<th>Descriptive data</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course:</strong> Mathematics 101</td>
<td>- Core/supplementary</td>
</tr>
<tr>
<td><strong>Lecture number:</strong> 03/10</td>
<td>- Compulsory/optional</td>
</tr>
<tr>
<td><strong>Learning objective:</strong> Understand polynomial representations</td>
<td>- Digital/physical</td>
</tr>
<tr>
<td><strong>Lecturer:</strong> Joe Simpson</td>
<td>- Scheduled/in own time</td>
</tr>
<tr>
<td><strong>Location:</strong> LT203</td>
<td>- Formative/summative</td>
</tr>
<tr>
<td></td>
<td>- Group/individual</td>
</tr>
<tr>
<td></td>
<td>- Assessment method</td>
</tr>
<tr>
<td></td>
<td>- % of final mark</td>
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<tr>
<td></td>
<td>- Prerequisite</td>
</tr>
<tr>
<td></td>
<td>- Adaptive release</td>
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</tbody>
</table>

### Instrument: Attendance monitoring system

<table>
<thead>
<tr>
<th>Measured data</th>
<th>Calculated data</th>
<th>Expected range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student ID; date/time</strong></td>
<td><strong>Number of students attending</strong></td>
<td><strong>40-90%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Percentage of enrolled students attending</strong></td>
<td></td>
</tr>
<tr>
<td>Curriculum object type: Lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument: Audience response system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student ID; question ID; response (correct/incorrect)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculated data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of attendees correctly responding to each question</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average score over all questions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected range</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-100%</td>
</tr>
<tr>
<td>70-90%</td>
</tr>
</tbody>
</table>
Lecture, including
  Presentation
  Individual activity (e.g. self-check)
  Group discussion
  Audience response
Physical textbook
Online textbook
Lab
Seminar/tutorial
Reading material
  Journal article
  LMS content page
Audio
Video
  Primary content
  Supplementary
  Interactive
  Lecture capture
Interactive
Online content (different ways to present it)
Self-declared data
Assessed activities
  Essay
  Exercise
  Artwork
  Code
  Project
  Presentation
  Exam
  Reflective journal
  Goal setting
  Forum
  Survey
Online meeting
Group meeting (without tutor)
Student feedback
Office hours
A curriculum object describes an aspect of the curriculum with the data and the analytics that can be used to enhance it.
Dashboard / visualisations

Data warehouse

Calculated data

CO

Instrument

Instrument

Analytics

Storage

Calculation

Curriculum specification

Instrumentation
What analytics questions interest your institution?

What courses/modules are of particular interest?
Specific subjects or groups of interest and why?
Activity: What data measures do you have to answer each question?

What measures do you have (or need) to answer these questions? E.g. attendance, online activity, student feedback, etc.

What frequency? (daily, weekly, monthly, …)
What is the current frequency vs required?
Activity: What interventions can you make?

For each question:

What do you hope it would tell you?

What can you do about it?
**Timetable...**

**Phase 1: Feasibility**
- May - June: Sign-up to pilot
- July: Extract Data (2 courses/20 modules)
- Aug: Share visualisations
- Sept: Prioritise and scope

**Phase 2: Pilot implementation**
- Sept 2019 – July 2020

**Options...**

Pilot: 4-6 institutions
1. Sign agreement
2. F2f meeting – agree questions
3. Extract data and analyse
4. Share outcomes

**Community:**
1. Join community
2. Get feedback on outcomes
3. Input to scoping pilot
4. Option to be early adopter of pilot implementation
Contact
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Niall Sclater, Consultant
niall.sclater@jisc.ac.uk

jisc.ac.uk