STREAMLINING THE END-TO-END ASSESSMENT PROCESS WITH MOODLE
SARAH COTTON & ROGER EMERY
STRATEGIC PROBLEM

- 40,000 spreadsheets to collect assessment results
- Duplication of effort
- Increased potential for error
- No standard end to end process for assessment marking
- Poor data quality - especially assessment dates
- High security and data protection risk
- Inconsistent student experience across multiple systems
DATA FLOW

• Academic Unit = Quercus Module Instance = Moodle Course
• Moodle Course for every Unit Instance – no 'roll-over'
Export grades to Quercus

Academic
- Start
- Set marking workflow to released
- Prevent wrong grade scale and points from being used
- Release grades to students
- Lock grades
- Check for grades released on last access date and check log text for queued grades

M2L Interface
- Email students (standard Moodle process)
- Grade conversion plugin for setting grades for students

M2L Task
- Convert grades to new scale and log for future reference
- Create entry in M2L log if not exists and add converted grade

Quercus
- Add grades to Quercus
- Add response to M2L log if successful
PLUGINS

Scheduled task - Create assessments

Daily XML export from Quercus to Moodle
• Module instance
• Assessment name
• ID Number
• Weighting
• Due date
• Sitting
• Academic year

Assignments created only if due date exists in Quercus
Cut off date and grade by date calculated from due date
Assignment defaults are used
Assignment due dates are shown to students
MOODLE CORE MODIFICATIONS

Locked fields:
- Assignment name
- Dates
- ID number

2 Grade scale available - alphanumeric and 1-100
‘Released’ marking workflow option only available for unit leaders
Lock grades when grades are released
Prevent pagination of grading table
Student ID displayed instead of participant number for blind marking

Assignment tool renamed ‘Formative assignment’
PLUGINS

Feedback types

Double marking - Allows first and second markers to input grades alongside the final, agreed grade

Sample - Indicates work to be check by moderators or external examiners.

Academic misconduct - Allows a flag to be set
## Design Visualisation (AAP405)

### Moderators

No moderators are currently assigned to this unit.

<table>
<thead>
<tr>
<th>First name</th>
<th>Surname</th>
<th>ID number</th>
<th>Portfolio 1 (50%) First mark</th>
<th>Portfolio 1 (50%) Second mark</th>
<th>Portfolio 1 (50%) Final grade</th>
<th>Portfolio 1 (50%) Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roger</td>
<td>Moore</td>
<td>14620766</td>
<td>C2</td>
<td>C2</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Sean</td>
<td>Connery</td>
<td>14620774</td>
<td>A3</td>
<td>A2</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

[Print this report]
PLUGINS

Scheduled task - Export grades

Converts alphanumeric grades back to equivalent percentage
Adds details to log table
Picks up new grades locked since the last cron, plus entries in log table not processed due to integration failure
Updates log table with response

<table>
<thead>
<tr>
<th>id</th>
<th>assign</th>
<th>sitting</th>
<th>course</th>
<th>course_module</th>
<th>grader</th>
<th>student</th>
<th>converted_grade</th>
<th>response</th>
<th>parent_request_id</th>
<th>request_id</th>
<th>processed</th>
<th>payload_error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1047</td>
<td>20575</td>
<td>8840</td>
<td>30554</td>
<td>933727</td>
<td>26765</td>
<td>52459</td>
<td>0</td>
<td>0</td>
<td>44a8c0cc-b7f0-4646-bb6c-76f51b7b5c92</td>
<td>76f51b7b-7335-4028-8319-253038727958</td>
<td>SUCCESS</td>
<td></td>
</tr>
<tr>
<td>1046</td>
<td>20575</td>
<td>8840</td>
<td>30554</td>
<td>933727</td>
<td>26765</td>
<td>27250</td>
<td>0</td>
<td>0</td>
<td>44a8c0cc-b7f0-4646-bb6c-76f51b7b5c92</td>
<td>a0bff57-3b42-43c9-b29d-0f7d843f7c16</td>
<td>NOT REQUIRED</td>
<td>Student 70503789 mark not required for second sitting.</td>
</tr>
<tr>
<td>1046</td>
<td>20536</td>
<td>8801</td>
<td>28128</td>
<td>933688</td>
<td>26765</td>
<td>31020</td>
<td>52</td>
<td>0</td>
<td>aab22b24-b1d1-4c2c-84ad-9742730-8e99-48f1b54</td>
<td>97f52730-8e99-48f1b54</td>
<td>FAILED</td>
<td>Failed to validate course details against Live Link for student</td>
</tr>
</tbody>
</table>
PLUGINS

Scheduled task - Update dates

Applies date changes made in Quercus
All dates updated similar to the ‘Upload courses’ update functionality
Functionality in separate tasks in case of error
WHAT HAS BEEN ACHIEVED?

Flushed out and improved bad data at university level
Improved other data supported university projects
End to end marking process has been streamlined including moderation
Positive feedback from assessment office - huge reduction in admin
Students get advanced notice of assessment in calendar
Engagement Monitoring
Bunching of hand in dates
Identified practice that differs from the business system
IT /SLTI workload planning
Four processes deleted
Project team won ‘Continuous Improvement’ award @ Solent Staff Awards
EFFICIENCY

Time saving: 20 minutes for each of 1868 assessments a year

622.7 hours saved

Reduction in Appeals:
2016/7 Student Appeals for Missing Marks 122
2017/18 Student Appeals for Missing Marks 72

41\% \text{ Reduction in Appeals}

equating to efficiency gain of

91.5 hours saving
WHAT NEXT?

Issues:
Turnitin and default feedback plugins not enabled
Prevent Turnitin updating and overriding Moodle grades

Coming soon:
Barcode submissions ([https://moodle.org/plugins/local_barcode](https://moodle.org/plugins/local_barcode))
Grade mark exempt flag - set and lock correct grade scale for each assignment

Wishlist:
Support for non-standard courses
Quick marking for sample and double marking columns in grading table
Allow grade scale conversion to be configured via admin settings
RESOURCES

Code:
https://github.com/ltu-solent/moodle-local_quercus_tasks

Staff help pages:
https://learn.solent.ac.uk/editing-assignments
https://learn.solent.ac.uk/releasing-grades