Assessment Careers

Report on Tools to Support Assessment Careers

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Institute of Education, London
JISC Assessment and Feedback Strand A Project

Project website: www.ioe.ac.uk/assessmentcareers
JISC Design Studio: jiscdesignstudio.pbworks.com/w/page/50671006/Assessment%20C
Project blog: assessmentcareers.jiscinvolve.org
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1. Introduction
The Assessment Careers project worked towards a longitudinally integrated assessment framework to capture benefits gained from linking up assessed work including feedback to that work.
This report presents tools that facilitate the linking of assessment items in order to give students and tutors a comprehensive overview of a student’s assessment and assessment feedback.
The report sets out with specification that outlines the basic needs of the Assessment Careers framework, followed by a description of tools we identified as potential solutions for the particular organisational context at the Institute of Education, University of London (IOE), and ending with our adopted plan including an initial evaluation of our solution.

2. Specification
The Project Plan (Hughes & Oliver 2011) provided a set of objectives focusing on an Assessment Career framework that encourages learners to act on feedback in the longer term. The feedback process is seen as a crucial aspect, and the core innovation of the project is to facilitate a feed forward loop across a study programme, which is linking both formative and summative assessment across modules in an attempt to articulate the learning pathway of a student and to create a coherent report of a learner’s development, instead keeping assessment feedback separated by module.
The role of technology to support the above goals can be seen in two areas:

1. Assessment and feedback management:
   Tutors currently only can access assessment and feedback that they are directly responsible for. Access to a learner’s previous submissions and, more importantly in this context, to previous feedback, would provide tutors with a more holistic overview of a learner’s development.

2. Assessment and feedback quality:
   Technology might be able to provide an incentive to improve assessment design through inspiration, which can come from options to incorporate dialogue into the feedback, or from options to support the drafting of feedback.

The original project plan did not include technological development, so any new technological implementation needed to be realised within existing support arrangements as much as possible.
The success of any adoption of technology and new practice depends on an institution’s ability to implement these on a larger scale. The recent JISC report on the “Assessment and Feedback Landscape” (Ferrell 2012) identifies this as a general area of concern. Therefore, the institutional context cannot be separated from any investigation into new assessment and feedback practices, especially when supported through technology.
The Assessment Careers Project Baseline Report (Hughes et al. 2012) examined the institutional context and identified a number of factors that describe assessment practices at the IOE:

- a shift away from a predominant concern with the technicalities of assessment towards assessment for learning;
- essays are used extensively, though a variety of other assessment methods exist;
- the quality and timing of feedback varies, as do the interpretations of assessment criteria and standards;
- a range of feedback pro-forma exist;
- email is used extensively for feedback as opposed to relevant VLE functions;
- feedback is an area that receives relatively low satisfaction, although based on high overall student satisfaction levels;
- staff have different views on feedback, from feedback as justification of a grade to feedback as a developmental instrument;
- senior staff members are keen to overcome inconsistencies in assessment practice, an issue also highlighted by external examiners;
- while a rich array of formative assessment practice exists, the IOE has difficulties scaling up innovations.

The specification for tools to support assessment and feedback based on an Assessment Careers framework at the IOE was translated into the parameters below:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment and Feedback Management</strong></td>
<td></td>
</tr>
<tr>
<td>Electronic assignment submission and feedback</td>
<td>• Ease of use important due to workload concerns</td>
</tr>
</tbody>
</table>
| Tutor access to all assessment submissions and feedback of a learner within a programme | • Formative and summative  
• Exact permission requirements unclear |
| Student access to all of their assessment submissions and feedback within a programme | • Formative and summative |
| **Assessment and Feedback Quality**                      |                                                         |
| Must accept essay submissions                           | • Ideally with plagiarism check e.g. Turnitin integration |
| Custom feedback forms                                   | • Potential for standardisation                         |
| Non-text submissions / essay alternatives                | • Explorative feature at this point                     |
| Commenting, dialogue and/or sharing options              |                                                         |
### Technical

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should not require much custom development</td>
</tr>
<tr>
<td>Integration with VLE and other IOE systems</td>
</tr>
<tr>
<td>Should accommodate existing business processes</td>
</tr>
<tr>
<td>Training requirements should be as low as possible</td>
</tr>
</tbody>
</table>

Based on the above specification, several tools and technological developments were identified and briefly examined for their potential to enhance assessment and feedback at the IOE.

### 3. Context

#### 3.1. Related JISC Assessment and Feedback Programme Projects

The JISC Assessment and Feedback Programme ([www.jisc.ac.uk/assessmentandfeedback](http://www.jisc.ac.uk/assessmentandfeedback)) is a major initiative to foster large-scale changes in UK Higher Education institutions and runs from 2011 until 2014. While the focus of projects within this programme is diverse, there is the occasional overlap with the goals of the Assessment Careers project. The most obvious links are listed below.

**3.1.1. FASTECH**

The FASTECH project ([www.fastech.ac.uk](http://www.fastech.ac.uk)) shares the view that assessment needs to be looked at from a programme perspective. The project provides a categorisation of technologies for assessment, which helped identify potential assessment technologies for this report. FASTECH is building case studies on how technologies that are already available at an institution can enhance assessment and feedback quality.

**3.1.2. interACT**

The interACT project ([blog.dundee.ac.uk/interact](http://blog.dundee.ac.uk/interact)) focuses on a feed-forward assessment process, driven by a combination of a form-based cover sheet that asks students for a self-evaluation at the time of submission, and a wiki for student reflections on the assessment feedback. With similar technology to that available at the IOE, interACT provides important insights:

- The cover sheet approach seemed to work well. This is a key aspect in the Assessment Careers project and therefore encouraging.
- The reflective wiki had only engagement rates of 20%-65% (Ajjawi 2012). User engagement with generic tools such as a wiki has been one of the major concerns in the Assessment Careers project, and the interACT project seem to confirm the difficulties around using wikis as a key technology to engage the widest possible user base reliably.
3.1.3. Assessment Diaries
The Assessment Diaries project (assessdiariesgrademark.wordpress.com) attempts to address feedback management via a custom VLE-integrated development and feedback quality through the use of GradeMark, which is also available at the IOE. The feedback management tool compiles a list of assessments dates for module and handles date notifications for students and tutors. Users can and must personalise this list, so the system does not automatically generate a list of relevant assessment per student, which is one of the demands from the Assessment Careers project. Once created, however, it is possible for tutors to get a complete overview of a student’s assessment and feedback.

3.1.4. Online Coursework Management
The Online Coursework Management (OCM) system evaluated in the OCME project (as.exeter.ac.uk/support/educationenhancementprojects/current_projects/ocme) represents an ambitious development that can be integrated with Moodle. Turnitin and the student record system SITS, all technologies also used by the IOE. OCM manages assignments online and can adjust to a number of different practices. It does not address any longitudinal reporting, but would support the Assessment Career’s cover/feedback sheet approach. Its Moodle-based plugin approach means that implementation can be straightforward if made available more widely.

3.1.5. Making Assessment Count
The Making Assessment Count (MAC) project (sites.google.com/a/staff.westminster.ac.uk/mace/home) formalised an approach for students to reflect and act upon feedback, where technology turns the feedback process into a reflective conversation. It addresses some of the Assessment Careers project needs, but is built very much around a personal tutor process, which would require some adjustment to fit IOE practice.

3.2. Approaches to adopting technology for assessment and feedback
The adoption and implementation of any new technology or process is rarely effortless and depends on an institution’s ability to support the change. The JISC Assessment and Feedback Programme displays a range of ways how institutions go about adopting a more technology-supported assessment and feedback process. Prominent pathways are listed below. It should be noted that these all assume a proper specification or needs assessment beyond an explorative stage.

3.2.1. Focus on the assessment and feedback process
Institutions have a range of technologies available, though these technologies might not yet be used most effectively. Institutions focusing on the assessment and feedback process go for a deeper adoption of technologies already available to them, either by engaging with previously unused functionality, or by repurposing existing technology.
Repurposing existing technology might become problematic where technology is not necessarily used in the way it was designed for. In these cases, processes have to work around shortcomings of the tool, which in practice often leads to a higher level
of manual intervention. Thus, processes must be robust, and users must adhere to the protocol, because the technology might not validate user input.

Examples: FASTECH, interACT

3.2.2. Adoption of an off-the-shelf solution
Ideally based on an assessment of identified needs, institutions would make a targeted purchase of an existing product to address those needs as much as possible. Compromises might be made based on prioritisation, with the aim to bring in an off-the-shelf solution.

Such a solution usually enhances the available functionality vastly and quickly, thus driving change more rapidly, though existing business processes might need to be adapted more in response to the tool instead of in response to identified areas of priority or concern.

Example: GradeMark component of Assessment Diaries

3.2.3. Needs-driven development
Institutions choosing the development route have not only identified, but specified how to address a given problem, which is then implemented by developing a specific solution. This can be the development of a new tool or improving the integration of existing tools on a technical level.

This solution has the potential to address an identified problem exactly without altering the business processes too much, unless this is required. There are however concerns about the long-term support of any custom solution.

Examples: Assessment Diaries, Online Coursework Management, Making Assessment Count

4. Tools to Support Assessment and Feedback at the IOE

4.1. Assignment Submission & Feedback Management

4.1.1. Moodle Assignment

| Name: | Moodle Assignment (four types) |
| Type: | Assessment management |
| Functionality: | Collect assignments, distribute assignments to tutors, return grades and/or feedback |
| Ease of use: | Staff: easy Student: easy |
| Implementation: | Available at IOE, new version in summer 2013 |
| ‘Career’ model: | Within course, not beyond |

Issues:
Further info: [http://docs.moodle.org/22/en/Assignment_module](http://docs.moodle.org/22/en/Assignment_module)

4.1.2. Plagiarism Check and on-screen marking

| Name: | Turnitin with GradeMark |
| Type: | Assessment management, Marking |
### 4.1.3. Marking Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Lightwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Offline assignment management</td>
</tr>
<tr>
<td>Functionality</td>
<td>Organise marking and feedback offline</td>
</tr>
<tr>
<td>Ease of use</td>
<td>Staff: easy</td>
</tr>
<tr>
<td>Implementation</td>
<td>Needs minor Moodle development</td>
</tr>
<tr>
<td>‘Career’ model</td>
<td>No</td>
</tr>
<tr>
<td>Issues</td>
<td>Must be installed on staff computers and on Moodle server</td>
</tr>
</tbody>
</table>

### 4.1.4. Longitudinal Monitoring

<table>
<thead>
<tr>
<th>Name</th>
<th>Configurable Reports plugin for Moodle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Reporting</td>
</tr>
<tr>
<td>Functionality</td>
<td>Displays all grades for one student, links to all submissions/feedback for one student,</td>
</tr>
<tr>
<td>Ease of use</td>
<td>Staff: medium</td>
</tr>
<tr>
<td>Implementation</td>
<td>Requires additional server and some custom development</td>
</tr>
<tr>
<td>‘Career’ model</td>
<td>Yes</td>
</tr>
<tr>
<td>Issues</td>
<td>Staff must access a different system to get to student reports. Currently unclear if this can be provided at the IOE.</td>
</tr>
<tr>
<td>Further info</td>
<td><a href="http://docs.moodle.org/22/en/Configurable_reports">http://docs.moodle.org/22/en/Configurable_reports</a></td>
</tr>
</tbody>
</table>

### 4.1.5. Exams Integration

<table>
<thead>
<tr>
<th>Name</th>
<th>Custom development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Integration with student information system</td>
</tr>
<tr>
<td>Functionality</td>
<td>Display of all summative (potentially formative) assessment items per student, attachment of private/shared notes per item.</td>
</tr>
<tr>
<td>Ease of use</td>
<td>Staff: unclear</td>
</tr>
<tr>
<td>Implementation</td>
<td>Requires budget</td>
</tr>
<tr>
<td>‘Career’ model</td>
<td>Yes</td>
</tr>
<tr>
<td>Issues</td>
<td>Custom development required</td>
</tr>
<tr>
<td>Further info</td>
<td>See <a href="http://www.submit.ac.uk">OCME project</a> for a successful implementation</td>
</tr>
</tbody>
</table>
4.2. E-Portfolio

4.2.1. Wiki

<table>
<thead>
<tr>
<th>Name:</th>
<th>CampusPack Wiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td>Wiki</td>
</tr>
<tr>
<td>Functionality:</td>
<td>Student-created website, Provision of template</td>
</tr>
<tr>
<td>Ease of use:</td>
<td>Staff: medium</td>
</tr>
<tr>
<td></td>
<td>Student: medium</td>
</tr>
<tr>
<td>Implementation:</td>
<td>Available at IOE</td>
</tr>
<tr>
<td>‘Career’ model:</td>
<td>Yes, if trained properly</td>
</tr>
<tr>
<td>Issues:</td>
<td>Student-owned; student bears responsibility for sharing</td>
</tr>
<tr>
<td>Further info:</td>
<td><a href="http://www.learningobjects.com/campuspackfusion.jsp">http://www.learningobjects.com/campuspackfusion.jsp</a></td>
</tr>
</tbody>
</table>

4.2.2. PebblePad

<table>
<thead>
<tr>
<th>Name:</th>
<th>PebblePad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td>e-Portfolio</td>
</tr>
<tr>
<td>Functionality:</td>
<td>Artifact management, collect assignments, distribute assignments to tutors, return feedback</td>
</tr>
<tr>
<td>Ease of use:</td>
<td>Staff: hard</td>
</tr>
<tr>
<td></td>
<td>Student: medium</td>
</tr>
<tr>
<td>Implementation:</td>
<td>Not available at IOE</td>
</tr>
<tr>
<td>‘Career’ model:</td>
<td>Supported</td>
</tr>
<tr>
<td>Issues:</td>
<td>Needs significant training and planning at institutional level</td>
</tr>
<tr>
<td>Further info:</td>
<td><a href="http://www.pebblepad.co.uk/">http://www.pebblepad.co.uk/</a></td>
</tr>
</tbody>
</table>

5. The Institutional Context

In an ideal situation, business processes and technological adoptions should go hand in hand and feed off each other, and be within the support capabilities the institution.

With the longitudinal reporting, the Assessment Careers project identified an issue that currently is not implemented in any off-the-shelf technology. A range of tools can be appropriated, but would require a sometimes significant change in the business processes, either impacting on workload for staff or for students.

Yet the information required for longitudinal assessment and feedback reporting often already resides in digital format.

This section looks at organisational factors around the use of technology at the IOE, which had an impact on the selection of our solution.

5.1. Custom Development

The scenario that would fit the needs of implementing assessment careers on an institutional level best is the combination of using existing electronic submission and feedback functions (4.1.1, 4.1.2) in combination with either improved reporting (4.1.4) or a proper integration with the student information system (4.1.5).
The feasibility of custom developments was improving rapidly during the lifespan of the Assessment Careers project due to local developments at the Bloomsbury Colleges:

**5.1.1. VLE Reports**
The Bloomsbury Colleges investigated the setup of a utility VLE server for conducting resource-intensive database queries. The utility server would be updated with data from the live server in regular intervals. The availability of such a server would enable the IOE to implement the Configurable Reports (4.1.4) or similar solution. In combination with a comparatively low amount of custom development, longitudinal assessment and feedback monitoring could be achieved with almost seamless VLE integration, although the longitudinal reports might display up to 24 hour old data.

We finally identified the Reporting Framework, a development by our supplier the University of London Computing Centre (ULCC), instead of the Configurable Reports as the most desirable option and developed an outline of the reporting requirements for the Assessment Careers project. However, delays in the development of the framework resulted in a postponement of its implementation until the academic year 2013/14.

By that time, ULCC were close to a general release of a light version of the Reporting Framework as a simple plugin on the VLE production server instead of requiring an additional utility VLE server. This development was welcome, in particular as the plugin was scheduled for an open release to the wider Moodle community.

**5.1.2. Student Information System Integration**
The Exams Unit of IOE's registry showed an interest in integrating with the VLE, to be able to display data held in the central registration database within the VLE. This would require custom development (4.1.5), and because of considerable overlap with requirements for an assessment career solution, a combination of these two initiatives would capture synergies.

The Student Information Systems Integration project was put on hold due to resourcing issues.

**5.2. Change of assessment and feedback processes**
A number of existing tools available at the IOE could potentially help improve online assessment and feedback, though without meeting all goals of the Assessment Careers project. A more frequent use of these tools can be promoted through staff development and policy changes.

**5.2.1. Electronic Submission**
Electronic submission (4.1.1, 4.1.2) plays a key role in the digital management of assessment data and is a requirement for the Student Information System Integration project (5.1.2). Before 2013, hardcopy assignment submissions were the norm at the IOE. In July 2013, the IOE Teaching Committee approved a policy update of the Student Entitlement to On-Line support, which mandates electronic submission for all modules, based on the VLE's default submission functionality.

Online feedback is currently not a part of the requirement. The electronic management of assignment data represents a significant culture shift for the IOE with
a number of concerns voiced by academic and administrative staff, therefore we opted for a step-by-step adoption approach. Online feedback will be required for 2014/15, pending approval from the Teaching Committee.

5.2.2. Online Marking
While online marking (4.1.2) was explored in one of the pilot projects, it was not adopted as a policy yet. Turnitin, which is generally available at the IOE via the VLE, was identified as the most obvious platform for online marking. However, there are currently concerns about the stability during key submission times, about the incompatibility of its grading system with the IOE student information system, and the screen-based nature of online marking overall with associated support resource requirements.

Turnitin was therefore only recommended as an optional tool for educating students about good academic writing during the formative stages of the assessment process.

5.2.3. Manual Assessment Records
The general availability of a user-friendly wiki (4.2.1) was identified as a potential solution for a student-managed assessment career portfolio. At an institution-wide level, however, the impact on staff and student development would have been significant, and the success of this solution would always depend on the levels of engagement by both of these stakeholder groups.

As this solution would never be technically compatible with the Student Information Systems Integration project (5.1.2), it was rejected.

5.2.4. Cover Sheet Improvements
Pilot projects explored the potential of remodelled assignment cover sheets to improve feedback quality and introduce a feed forward component. Recent and future planned upgrades of the VLE’s standard assignment submission function (4.1.1) are accommodating this approach well. We therefore expect to intensify the use of the full functionality of this component, with a plan to fully replace a dedicated cover sheet once the component can capture all submission data of the improved cover sheet directly.

5.3. Adoption of an off-the-shelf solution
There are products that address the Assessment Career model needs somewhat, most notably e-portfolio tools (4.2.2) for longitudinal reporting or marking management (4.1.3) for improving feedback and feed-forward. The adoption of these tools, however, would require a major change of processes, a high amount of training, and a dedicated commitment to a new way of handling assessment and feedback electronically.

Furthermore, it was unclear whether the identified tools would address the full diversity of assessment at the IOE, or only parts of the current practice. While the identified tools would certainly have brought benefits, they mainly addressed needs that have not yet been identified at the IOE. This was therefore the least desirable solution.
6. Student Assignment Report

The Student Assignment Report is a specific report generated by ULCC's Reporting Framework. It runs on the light version of the framework, a simple Moodle plugin that is scheduled for an open release in autumn 2014.

6.1. Report Specification

The Student Assignment Report was developed in collaboration with ULCC according to the specification detailed in appendix 9.1. ULCC developed the report and made it available through their light report plugin for Moodle.

6.2. Report Implementation

The report was developed and implemented in April/May 2014 and released to selected pilot users. The number of pilot users has grown to 45 by August 2014 in advance of a wider release in the academic year 2014/15.

Figure 1 shows a screenshot of a Student Assignment Report result screen.

![Student Assignment Report - Results for Student "John Doe"](image)

6.3. Pilot Evaluation

The technical development process underwent user acceptance testing and similar procedures involving only the core team and leading to a final sign-off. The general aims of the wider pilot evaluation was to find out information about the following:
What does the Student Assignment Report offer?
Does the report generate concerns or problems?

These questions are of a highly qualitative nature, which in the context of this project is very appropriate as we still need a better understanding of current feedback practices, how feedback practices can be shaped or influenced, and how staff and students react to changes.

An overview of our original evaluation plan is available in appendix 9.2.

6.3.1. Data Collection
The late release of the Student Assignment Report in combination with technical and administrative issues meant that staff could not use the report in a real teaching context, so we adjusted our evaluation plan:

- Involve Doctor in Education (EdD) tutors and supervisors. The EdD programme has a portfolio component, which precedes the stage when supervisors take over a core role in the student's progress. They are therefore ideal beneficiaries of the Student Assignment Report. Additionally, all supervisors are involved in the teaching of other programmes, such as Masters, undergraduate and PGCE provision.
- Let staff experiment with the report individually. The decoupling from real teaching might represent an artificial application scenario, so the experienced gained might not fully reflect an actual teaching situation. However, we found that staff were inspired and started thinking beyond what we envisioned.
- Run demos of the report. When staff were unable to work with the report directly, we ran a guided live demonstration of the tool and asked predictive questions to assess their view of the potential of the report.

The following data collection activities were run:

- 5 individual tutor interviews with EdD supervisors.
- 1 EdD focus group with 7 academics, 2 administrators and 1 student rep.
- 2 EdD group interviews, each with 9 students at the end of their first year.

6.3.2. Evaluation Results
Overall, the response to the Student Assignment Report was universally positive. Staff identified a number of potential uses, but also raised concerns and identified administrative and technical issues. The evaluation uncovered wider institutional issues that might hinder take up, although the report might also act as a driver to overcome these issues.

6.3.2.1. Usefulness
Supervisors and tutors unanimously agreed having access to a report that compiles all feedback in one place is very useful. Students agreed that tutors, lecturers and supervisors could benefit from the whole picture for each student. The main benefit was seen in the area of feedback consistency, as wider access to colleagues' feedback would allow tutors to synchronise the amount of feedback and potentially also the type of feedback.
Unprompted, tutors identified useful factors beyond the main benefit:

- **Enrolment overview**
  The Student Assignment Report was the only option for tutors to see which modules a student had taken. Tutors referred to huge amounts of time being wasted trying to find out such basic information previously.

- **Grades overview**
  An overview of all grades for a student was regarded as useful for tracking progress and for identifying trajectories of achievement.

- **Due and submission dates**
  An overview of all due and submission dates would enable tutors to detect patterns of timing of submission, which is particularly relevant in relation to extension requests.

- **Reduction of email traffic**
  A staff member highlighted that, particularly in the context of annual reviews, assessment and feedback information is often exchanged by email with big attachments. The report can replace a large amount of email traffic and help manage this information more efficiently.

While we targeted staff of a particular programme, they all agreed that the report should be available across all programmes due to its simplicity and overall usefulness.

**Recommendations:**

Plan for an institution-wide release of the report.
Ask programme teams to work on feedback consistency.

### 6.3.2.2. Stakeholders

Tutors identified several stakeholder groups who would benefit from the Student Assignment Report:

- **Supervisors**
  Dissertation and thesis supervisors are often not involved in all stages of a student's coursework and might be unaware of their general progress and learning journey at the institution. The report would help supervisors gain a complete picture and identify issues raised in feedback from other colleagues.

- **Lead tutors and personal tutors**
  While assessment and feedback is only a part of the full picture of a student, the report represents a simple way of getting to all relevant information in this area, provided it has been recorded in the VLE.

- **New teaching team members**
  Staff new to a teaching team can get a quick overview of a student work and their style of writing, and the way feedback is given by the teaching team.

- **Peripherally involved tutors and lecturers**
  A modular, flexible programme structure often involves tutors and lecturers from outside of the programme, who would be able to find out about prior student enrolments and performance, in addition to what kind of feedback they received.

- **External examiners**
  Compilation of relevant information for external examiners would be much more effective by giving this group access to the report.
• Administrators
The report would be particularly helpful for tracing the history of students who interrupted their studies.

• Students
While some staff thought students might benefit from access to their own report, most students felt they had other means of individually storing their assignments, comments and grades.

**Recommendation:**
Propose to provide access to the report to all teaching staff, administrators and external examiners.

6.3.2.3. Administrative Concerns
A number of administrative concerns were raised:

• Grades
The Head of Academic Administration recommended to not populate the VLE’s grade field where there is duplication with the student record system, as these systems are currently not synchronised.

• Open versus restricted access
Some tutors preferred that access to the report should not be open to all staff by default, but only on a need to know basis, also referring to student concerns. Students, however, did not express any concern that the report impinged on their data protection rights and were supporting a general availability to teaching staff.

• Electronic feedback
While the IOE has an electronic submission policy in place, feedback is currently not necessarily stored in the VLE, which would be required to realise the potential of the report. Programme teams need to decide whether tutors and/or administrators would upload the feedback. The usefulness of the report might drive this development.

• Access to module information
While access to all assignments and feedback was well received, tutors highlighted that they would occasionally need more general information about colleagues’ modules, such as the module handbook, to understand a module’s context, including its assessment and feedback strategy. A tutor should have the permission to retrieve such information independently from the VLE.

**Recommendations:**
Propose to upload and distribute all feedback via the VLE.
Investigate viewer access to all programmes, courses and modules on the VLE for all staff members.

6.3.2.4. Technical Issues
While the report is stable, some issues with the user interface were raised:

• Long course and student lists
While staff only have access to students that are enrolled in the course they
teach, tutors still found the course and student lists in the report’s user interface too long.

- Access to the report
  Tutors highlighted the need for a more contextual location to access the report. Current access is via a block on a Moodle course page; access via the gradebook or a student’s profile would be preferable. Also, it currently takes one unnecessary extra click to get from a report dashboard with only one option to the actual report.

- Inconsistency between assignment types
  The way the links to Turnitin assignments and feedback works is different to the Moodle-internal assignment and therefore confusing. This, however, is due to the operating principles of the plugin.

- Missing search
  While it is possible to select a student by starting to type their name in a drop-down menu, there is currently no proper search function.

**Recommendation:**
Investigate user interface improvements.

### 6.3.2.5. Institutional issues
As an electronic, VLE-integrated tool, the report can only work with information stored in the VLE. Therefore, a policy must be in place to manage assignments and feedback electronically by default. The IOE is currently on the way of fully implementing such a policy.

Tutors, however, also raised a slight concern that the ease of access to assignment and feedback information might result in an extreme accountability culture.

**Recommendation:**
Consult Teaching Committee on wider issues.

### 6.3.3. Summary of Recommendations
I. Plan for an institution-wide release of the report.
II. Ask programme teams to work on feedback consistency.
III. Propose to provide access to the report to all teaching staff, administrators and external examiners.
IV. Propose to upload and distribute all feedback via the VLE.
    Investigate viewer access to all programmes, courses and modules on the VLE for all staff members.
V. Investigate user interface improvements.
VI. Consult Teaching Committee on wider issues.

### 7. Conclusion
The Assessment Careers project explored processes to enhance the quality of assessment feedback by linking modularised assessments longitudinally and facilitating students' understanding of assessment criteria in a postgraduate context.

Based on a review of existing technologies, of related projects, and of the institutional context, we identified tools to support these processes in the future.
Some of these tools, such as redesigned assignment cover sheets, can be implemented and integrated instantly in the assignment submission process. This will help standardise the new practices, improve user-friendliness and enable future analysis of feed forward information, to provide tutors with more information about a student’s learning journey.

To fully capture the benefits of the trialled Assessment Careers framework, we have implemented a technological innovation in collaboration with our technological partner ULCC in the form of a new Student Assignment Report that integrates with ULCC’s VLE reporting framework, which is available as a Moodle plugin. We piloted the report in summer 2014 in the context of the EdD programme and evaluated its initial use through individual and group interviews involving tutors, supervisors, administrators and students.

The qualitative evaluation resulted in a number of findings that clearly established the usefulness of the innovation. It also uncovered a number of benefits, issues and concerns that have been translated into recommendations to be taken forward in the academic year 2014/15.

By enabling all tutors to view the complete assessment career of a student, we aim to improve feedback consistency and, in combination with the other project outputs, to refine the assessment and feedback approach across the institution.

The Student Assignment Report appears to be a worthwhile innovation with considerable scope to deliver additional benefits in the field of learner analytics.

8. References

Ajjawi, R. (2012). Breaking through the Transmission Culture in e-Assessment and Feedback; Monologue to Dialogue, slides from the presentation at the JISC E-Assessment Online Conference, 5 December.
Available from URL: [http://www.slideshare.net/r_ajjawi/ajjawi-online-eassessment-conference-final](http://www.slideshare.net/r_ajjawi/ajjawi-online-eassessment-conference-final) [Accessed 05 Jan 2013].


9. Appendix

9.1. VLE reporting requirements for Assessment Careers

Provided all assignment and feedback is stored in the VLE, it is theoretically possible to build an assessment career report of any student based on the data held in the VLE. Such a function currently does not exist within the VLE used at the IOE (Moodle).

The University of London Computing Centre (ULCC) has developed a Reporting Framework for Moodle, a technological innovation based around a daily synchronised utility VLE server that can run resource-intensive queries without impacting on the load of the live server. The reports would be, however, administered from within the live VLE environment.

A light version of the Reporting Framework in the form of a simple Moodle plugin that runs on the production server was being made available in 2013/14 and is to be released to the wider Moodle community in autumn 2014.

The ideal reporting requirements for the Assessment Careers project are detailed below.

ULCC has implemented the requirements and integrated them as a Student Assignment Report in the light version of the reporting plugin. The IOE piloted the report between May and August 2014.

Report specification:
1. Teachers call an assessment career report for any selected student in a course (module) they teach.
   - The report can be reached from (options):
     o the participant list of a course,
     o a student’s profile page,
     o the course’s report option,
     o a dedicated Moodle block.
   - The report is only available for a specific role (default: Teacher, Course Leader).
   - The availability of this report can be activated/deactivated on a per-course basis, with a configurable system-wide default.

2. Moodle returns a list with all assessment activities for the selected student. This includes data from all courses the student is enrolled in.
• Assessment activities are:
  o Moodle’s internal assessment activity
  o Assessment plugins such as Turnitin
  o Other activities with a gradebook entry (optional)
  o If all three options above are implemented, a filter should be included to hide any assessment activity type(s)
• Each line contains the items below, unless an activity type or plugin cannot supply this information:
  o Course short name (hyperlinked to the course)
  o Assessment activity name (hyperlinked to the activity)
  o Identification of assessment activity type (optional)
  o Student grade
  o Link to the student’s submission (optional)
  o Link to the marker’s feedback
• Issues:
  o Teachers will see information from courses they are not enrolled in, irrespective of their own enrolment status.
  o ‘Link to the student’s submission’ and ‘Link to the marker feedback’ might need to override course context permissions, unless the reporting framework can directly deliver the requested information within the report results.
  o Under rare circumstances, a Teacher/Course Leader who is a student in another course might be able to get access to assessment information from classmates, which might not be appropriate. The report should then exclude assessment information from those courses where the Teacher/Course Leader has a Student role.

9.2. Student Assignment Report Evaluation Overview

9.2.1. People involved
• Module leaders and programme leaders
• Tutors who do marking
• Supervisors who mark portfolio work and/or are involved with students at a later stage in their programme
• Programme Administrators
• External Examiners
• Students

9.2.2. Research Questions
To understand the usefulness of the Student Assignment Report and its influence on feedback practice, we aim to collect data on the following topics:
  1) How is the Student Assignment Report used by different groups of staff on the programmes?
  2) Does it facilitate sharing of feedback practice? For example through easy access to feedback from colleagues.
  3) How does use of the tool enable longitudinal assessment (feed forward to future modules), student centric assessment and/or ipsative assessment?
4) How does knowing that others can access past feedback change current practice?
   What are the risks and benefits?
5) Does having easy access to grades influence feedback practice?
6) Does use of the tool influence the efficiency of feedback processes?

9.2.3. Data Collection
Data will be collected through individual and group interviews. To assess administrative and technical issues, quantitative and factual questions will be asked during the interview. The interviews can be administered in person or via email or online surveys. Interviews should be conducted after a period of use of the Student Assignment Report.

9.2.4. Interview Questions
1. How many times did you access the Student Assignment Report approximately this term/so far?
2. If you did not access it, why not?
3. If you did, what were you looking for when you accessed the report?
4. How did you use the information generated by the report?
5. Was there any additional information you would like in the report?
6. How was the report helpful/unhelpful?
7. Did you look at feedback written by colleagues?
8. If so, did viewing colleague’s feedback inform your practice? How?
9. Did you look at a student’s previous grades?
10. If so, how did this influence your practice?
11. Would knowing that others in your team could see your feedback influence the way you write feedback? If so, how?
12. Is there any way the reporting tool could be improved?
13. Will you use the reporting tool again?
14. If so, would that be for the same or a different purpose?

Please note, feedback is already potentially shared with external examiners and can be shared between first and second markers when agreeing a grade, but this is voluntary and may be done verbally.