

Supporting assessment and feedback practice with technology - ATLEF Funded Project

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Abstract

The University's new Teaching and Learning Enhancement Strategy identified the need to develop assessment principles which support student learning, promote engagement and empowerment through a range of assessment methods while maximizing the opportunities and benefits afforded by technology enhanced learning. The study aimed to improve the University's understanding and awareness of the benefits, challenges and barriers associated with a more strategic approach to fully online coursework submission and feedback - Electronic Management of Assessment (EMA) by September 2015 to improve the student experience and take advantage of resource efficiencies. The outputs were a Teaching and Learning Enhancement (TLE) Seminar to showcase Abertay's current practice using technology to support assessment and feedback and a training programme to support staff. Feedback on progress was gained through the EMA Working group whose members included senior management, teaching staff from all schools, and service stakeholders. Abertay is now in a position to accept most forms of coursework online and provide electronic feedback to students and has a clear idea of the work required to achieve further process efficiencies for staff and a better student experience.

Introduction

The University's Teaching and Learning Enhancement policy aims to "incentivise students' performance' through an integrated approach to assessment which includes assessment principles, quicker feedback turnaround, approval for number and types of assessment per module, structured feedback and revision weeks, a new literal grading scheme, joint honours, GPA degree classification and implementation of HEAR and electronic management of assessment. Within the framework of the new assessment related policy the study aimed to identify current effective practice using learning technology for assessment and feedback and promote this throughout the university.

Abertay had progressively increased the use of coursework submission via the Turnitin plugin since 2008. Four out of five schools used the plugin by 2009 and the final school adopted Blackboard and Turnitin in 2012. This meant that both staff and students were familiar with the use of online submission, however, students also submitted a hard paper copy which meant they incurred printing and travel costs when handing in coursework and picking up paper based feedback. Staff checked student coursework originality reports but not many provided feedback or grades online. Some use was also made of wikis, journals, discussion forums, online tests, audio feedback and iterative feedback using e-portfolios.

Electronic management of assessment was seen as a method of improving the student experience while creating efficiencies relating to speed of feedback turnaround and handling and storing coursework. Abertay undertook a project to understand the Student journey which resulted in a recommendation that a Student Enquiry Zone should be established to support all student questions (including problems submitting coursework) and that Registry should administer all exams and coursework submission. Having central areas for

coursework administration and student support made it easier to implement the training required for EMA.

Methodology

The study undertook a review of current literature (Ferrell 2014) that indicated a more strategic approach can lead to real quality enhancements, especially when aligned with institutional Principles of Assessment, produce resource efficiencies (JISC 2010) and act as a *precursor* to change in assessment policy and practice (HEA 2012).

A concurrent review was made of the use of learning technology in academic session 2013-14 by analysing each Blackboard module, noting whether a Blackboard assessment, Turnitin Assessment or another form of electronic assessment such as journals, blogs discussion forums, wikis or online exams. Other technologies noted were PebblePad e-portfolios and students creating content via video or Xerte. Focus groups were also held with students relating to their attitudes to online tests and typed exams.

Abertay responded to the Jisc EMA Questionnaire then participated in JISC's EAM Think Tank event held on 14th May 2014 where the aim was to understand the assessment/feedback lifecycle across the UK HE sector to inform discussions with software suppliers re possible changes to workflows. The MMU TRAFFIC Project model was used as a focus for discussion. It highlighted the importance of analysing all aspects of the assessment lifecycle before embarking on an EMA project, for example retention and archiving of coursework, system reliability/contingency planning, and the data that EMA can produce regarding quality of feedback. Students were given access to past Blackboard modules to allow access to past online feedback.

A Teaching and Learning Enhancement Seminar was held to demonstrate current best practice at Abertay and disseminate guidelines relating to providing feedback and entering grades in the grade centre. These sessions were filmed then posted on the TLE website. Staff Development sessions were held for staff at divisional levels, then for mixed groups of staff or individuals. Students were able to submit fully online without providing a paper copy from September 2014 and staff were encouraged to try online marking and feedback for at least 1 module prior to September 2015. All coursework will be submitted online from September 2015 and feedback and grades provided online.

An EMA working group was established, chaired by the Registrar which included 1 member of teaching staff from each school, the Director of Teaching and Learning Enhancement; Corporate Information Systems & Infrastructure Manager; Technology Enhanced Learning Support Team Leader; Information Services Desktops Team Leader; Assessment Examinations Officer; Academic Governance Manager; Student Association President and Vice President; Student Enquiry Zone Team Leader. This group reported back on issues which led to actions described in outcomes such as a staff experience survey, roadshows to demonstrate the use of mobile equipment and double screens, investigation re Blackboard SITS Tribal link.

An anonymised programme level student survey has been designed to focus on the quality of learning and teaching, including assessment and feedback, complementing the mid module student survey. This was sent to students on the 16th of March and will close on the 6th of April.

A toolkit including a matrix that lists current challenges with assessment and feedback, and matches them to illustrative uses of technology and the potential benefits of each approach is currently under development.

Outcomes

Survey Findings Online Submission 2013/14	Survey Findings Online Submission 2014/ March 15
67% of modules have online submission, either Turnitin or Blackboard	94%
15% of Turnitin Tutors using Grademark for feedback (90 Turnitin Tutors)	90% of Turnitin Tutors using Grademark for Feedback Note: Some prefer to use the Blackboard grade centre & rubric with a Turnitin assignment (210 Turnitin Tutors)
8% of Turnitin tutors using Grademark for Grading	Difficult to gain a reliable figure because of changed Grading Scheme
2% of Modules using Online Exams	3%
27 modules use Blackboard Blogs (AMG mostly)	requires re-survey
2 modules using Summative Discussion forums	requires re-survey
12 modules using Journals (Popular on Placements)	requires re-survey
1 using Wikis	requires re-survey
3 modules using PebblePad for summative assessment	Requires re-survey
2 using XERTE	3 using WeVideo

In another ATLEF project relating to student attitudes to learning technology students were canvassed re online tests. Out of 18 respondents, 89% had taken an online test, 100% would not want to be invigilated via web-cam and 61% would like to type essay exams online. Students could see no benefit to them when taking an online MCQ exam versus a paper exam. (The benefit to students comes in formative online tests where they can be given immediate feedback).

Focus group discussions relating to typed exams – 24 students participated in student led focus groups in Semester 2 (16 female students and 8 male students participated, 13 undergraduates and 11 postgraduate, mean age 28 years.)

Students expressed mixed interest in typed exams, they commented that they may get distracted by their own environment if taking exams at home. They would prefer to be given a choice, eg not forced to write or type. They could see a benefit to lecturers not having to read student handwriting. The majority of computing students (games development, Ethical hacking and IT) prefer typed exams, students in other disciplines preferred hand written exams. Students felt there should be an agreement that students who do not feel comfortable typing exams on a computer should still be allowed to handwrite responses.

Students polled re the type of feedback they prefer expressed a preference for online written feedback. Audio feedback was preferred slightly more than video feedback.

We have found that students are very conservative regarding learning technology unless they have tried it and like it.

Staff were surveyed re their experiences with online marking and further support requirements.

Staff surveyed re their experiences noted that “students like online feedback”; “having stuff ready to mark in one place was good”; “it took time to build a bank of quick comments but when that was done, marking was relatively straightforward”; “it was easier to ensure students definitely receive the feedback in an auditable fashion as opposed to relying on students collecting hardcopy feedback”; “Online tests worked well for the large cohorts with instant feedback”. “Easier for students to understand feedback as they don’t have to decipher my handwriting. It was easier for me to keep track of what I have done and what I still needed to do”.

Representative problems staff reported were “Difficult trying to enter grades in the Grade Centre”; “Some uploading problems for students”; Having to move around a few windows and pages to mark student work”; “The main frustration is that the grade centre and student information system don’t talk to each other – this wastes time and increases the risk of grade entry error”. I am often trying to mark offline, during my long train commute (when the wi-fi drops out regularly). This should be valuable work time but I can no longer use it for marking since moving to electronic submissions – I do not have an iPad”; “I have only 1 screen at work, it can be really small and tiresome for the eyes”.

We have held roadshows to demonstrate the best hardware/software options available to staff, including workstation setup advice when using mobile devices while carrying out electronic management of assessment. The options included a pc with 2 screens; a laptop with additional screen and an iPad with Turnitin app.

We have investigated the possibility of linking the Blackboard grade centre to our Student Information System (SITS Tribal). There is a choice of interface on Blackboard, using Building Blocks or Web Services and XML flat files. SITS Tribal requires Person & Course data exchange (IC301), Grades/Marks exchange (IC302) and the Stu Talk Suite.

We have experienced problems submitting large video files to Blackboard when all students submit around the same time. We are hoping this will be solved when they submit to the Helix media server which is currently under test. We are currently investigating what should be stipulated as a reasonable file size limit for large media file coursework.

Conclusions and Recommendations

At present Abertay uses Blackboard and Turnitin assignments to submit coursework online. This is because each type of assignment has strengths and weaknesses, main points listed below. There may never be a one fits all solution but we will welcome the use of non-integers when grading in Turnitin which is their current development plan. We aim to use the Helix Media Server for large video files.

Blackboard Strength	Turnitin/Grademark Strength
Can take > 20MB but can cause problems	
Allows submission of multiple files	
	Saved comments (Quickmarks)
Can add comments to grading rubric for each student	
	Turnitin Originality Report
Handles Abertay grading scheme	
Same grading method for Blogs, Wikis, Journals and Discussion Forums	
	Can grade offline using Turnitin App on iPad
Allows double marking	Allows double marking when combined with Blackboard grade centre

Now that staff are familiar with the Blackboard assignments and Turnitin Grademark we will concentrate on streamlining their use:

- Provide further sessions on the use of rubrics, audio feedback, peer review and grading schemas
- Help staff create organised grade centre columns to move towards a link to our student information system.
- Continue to grow the variety of assessment especially where students create content using XERTE or video software.
- Investigate longitudinal feedback processes
- Provide support to staff by blending use of technology with pedagogy in PGCertHET. (All PGCertHET sessions open to all staff).
- Provide a report to Registry with details of hardware requested by staff relating to their use of EMA.

References

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