MEETING RISING STUDENT EXPECTATIONS OF ONLINE ASSIGNMENT SUBMISSION AND ONLINE FEEDBACK

Stuart Hepplestone and Richard Mather

Meeting Rising Student Expectations of Online Assignment Submission and Online Feedback

Stuart Hepplestone and Richard Mather Learning and Teaching Institute Sheffield Hallam University Sheffield S1 1WB S.J.Hepplestone@shu.ac.uk Richard.Mather@shu.ac.uk

Abstract

Students at Sheffield Hallam University are increasingly demanding the ability to submit assignments online and to receive feedback and their marks online. A key theme of the University's Learning, Teaching and Assessment strategy (2006-2010) is "to enhance the students' learning experience, making assessment activities, support and feedback a powerful integrated feature of learning". Students will be encouraged to reflect on feedback to "enhance their on-going learner development through timely and effective feedback". This short paper will explore how the University is currently working to meet its students' expectations for online assignment submission and online feedback, through the development of a new Blackboard Building Block that supports the flexible submission of student assignments and the timely delivery of feedback online.

Introduction

As most student assignments now originate in an electronic format, the ability to submit work and return feedback online offers natural benefits for students (Bridge and Appleyard, 2005) including:

- the saving of paper and printing costs (and postage costs for distance-learning students)
- the flexibility to submit assignments any time, any place
- speeding up the process of returning feedback (as students no longer have to wait until their work is returned to a collection point)

When responding to the Student Expectations survey (in which new and returning students are invited to express their expectations of a supportive elearning environment) conducted at the University in September 2006, many students commented on the usefulness and flexibility of online submission and electronic feedback, and that they would expect to be able to use it within their modules:

- "My placement is an hour away so being able to submit work online is extremely helpful"
- "I think all coursework assignments should be sent electronically"
- "I will be submitting assignments electronically"
- "Online feedback from tutors is a brilliant idea...I sometimes find that I can forget verbal feedback"
- "Online feedback is useful"

When asked in a more recent survey (February 2007) about what enhancements they would like to see made to their existing Blackboard sites to improve their online learning experience, students at the University once again responded in favour of being able to submit assignments and receive marks online:

- "Handing in essays online would be helpful"
- "Ability to submit work on Blackboard"
- "More online things like handing in ... coursework"
- "Being able to receive all grades online, including coursework"
- "Coursework grades put on them"

The Sheffield Hallam Assignment Handler

To meet these growing student expectations of online assignment submission and feedback, the University undertook a project to investigate improving the way that student assignments are processed and to enhance the way in which feedback can be provided using Blackboard. Tutors at Sheffield Hallam have been able to receive, track and store student assignments, and return marks and feedback in the Blackboard Gradebook since 2003 using the Assignments functionality. The starting point for this project was to map out the lifecycle of a student assignment from the perspective a tutor setting an assignment, a student completing and submitting their work, the tutor then providing feedback and marks on the student work, and finally the student accessing their feedback and marks for the assignment (Figure 1). As the resulting 'map' clearly indicates where students have responsibilities in the course of completing and submitting assignments, and reflecting and acting upon feedback, tutors are keen to share this representation with their own students.

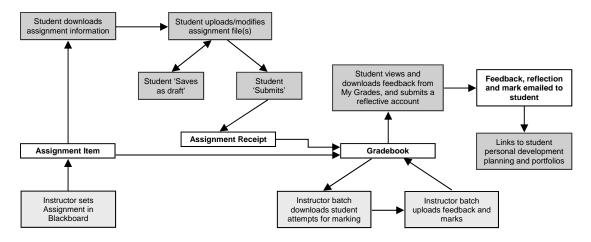


Figure 1: Blackboard Assignment Mapping

The outcome of this activity highlighted two key areas for development.

- 1. Supporting the timely delivery of feedback online by:
 - Enabling tutors to batch upload student marks with file attachments providing detailed feedback for both assignments submitted through Blackboard and for hard-copy assignment submissions. At present tutors uploading feedback for assignments into the Blackboard Gradebook must access each individual submission, and for large student cohorts this repetitive process can take considerable effort and delay the time it takes for students to receive feedback. Tutors wishing to give feedback online for assignments not submitted through Blackboard are currently limited to only providing marks in the Blackboard Gradebook
 - Providing feedback on group assignments to each individual in the group, rather than one per group
 - Allowing students to access their feedback all in one place and presented within the context of the module alongside learning materials and activities
 - Automatic email notification of feedback availability
 - Encouraging students to engage with their written feedback and identify key learning points in order to activate the release of their mark (after Black & Wiliam, 1998, who argued that the "effects of feedback were reduced if students had access to the answers before the feedback was conveyed"; and Potts, 1992, who claimed that abolishing grades encourages students to engage with feedback, as they are "obliged to find for themselves value in what they did", ensuing a richer learning experience). At present any feedback provided to students is linked from the mark that is displayed in the Student Gradebook tool, and students can simply view their mark without accessing the attached feedback. Students will also be prompted to download a copy of their feedback to attach to their submitted reflective account

- 2. Supporting the submission of student assignments online by:
 - Enabling tutors to set up the submission quickly and easily (supporting both individual and group assignments) with the assignment brief presented at the point of submission
 - Allowing students to submit their assignments any time, any place, and providing a detailed electronic receipt for their work
 - Storing all submitted assignments within the Blackboard Gradebook for staff to access whenever they need
 - Automatically renaming submitted files with the module code and student number to make them easier to manage
 - Reducing time delay and the administrative burden associated with the distribution of student assignments to tutors
 - Providing tutors with an at-a-glance check of who has not submitted to identify at-risk students

In conjunction with Blackboard Inc., these enhancements have been developed into a new Building Block. The Sheffield Hallam Assignment Handler has been made available to tutors at the University during Semester 2 2006/7, and even though its use will be evaluated from Semester 1 2007/8, tutor feedback to date has been extremely positive:

"Uploading grades individually via Gradebook was time-consuming and frustrating but this has been resolved with the new Assignment Handler"

Electronic and automated feedback generation

The next stage of our work is to further streamline the process of developing and writing feedback electronically, and to investigate the possible range of methods for reviewing and marking student assignments on-screen.

A generic feedback template is being developed which will allow tutors to create feedback documents specific to each Assignment item created in Blackboard, incorporating features that allow student assignments to be assessed quickly and efficiently. This development follows on from the work of a tutor in the Faculty of Development and Society at the University who realised he was re-writing similar comments when marking his students' assignments. By including a matrix of statements in a Microsoft Excel spreadsheet, he found that he could save time in generating and returning individual feedback for each student. Printed copies of this individualised feedback are supplemented with verbal comments when handed back to students. Individual feedback can also be returned to students via email and this has been used by another tutor in the same Faculty since 2005.

A customised version of this spreadsheet used since 2006 by a tutor in the Faculty of Health and Wellbeing at the University, has reduced her marking time for a cohort of 120 students from "six weeks of intensive marking to three weeks of more relaxed marking", and now finds that it is easier to mark work consistently. The same spreadsheet is now used among the rest of the subject group. However, the feedback files are printed and returned to the students in hard copy.

All of these developments parallel the work of Denton (2001) who developed a technique using a combination of Microsoft Excel 97 and Microsoft Word 97 to generate personalised feedback sheets which include the student's mark, who also reported that such procedures "can make the assessment of work from large groups considerably less onerous".

The continued development and use of the original feedback spreadsheet template will be accompanied by the creation of an associated tool that will allow the generation of a generic feedback template for an entire student cohort, which has been developed in parallel with the Sheffield Hallam Assignment Handler. This new tool will make use of the student information downloaded along with their assignment attempts from the Blackboard Gradebook, and will allow tutors to create a matrix of assessment criteria (which the students will have received when the assignment was set) in preparation for reviewing, marking and providing feedback on student assignment submissions. As the tool stores the data automatically for each student as it is entered, marking can take place in more than one session. Tutors enter a mark against each assessment criteria, automatically generating a feedback comment and general comments can be added for each student.

When the marking process is complete, the tool automatically creates a spreadsheet file containing marks and feedback against each assessment criteria for each student. Tutors can select whether to keep the total mark for the assignment hidden from the feedback. All files can then be batch uploaded to the Blackboard Gradebook in a single zip file where the relevant feedback file and mark is automatically attached to the relevant student for that assignment. This has a considerable time-saving benefit for tutors with large student cohorts, as they no longer have to access each student's assignment attempt in turn to attach feedback. Students can then access their feedback all in one place and presented within the context of the module alongside learning materials and activities in Blackboard, rather than separately by email. If the total mark for an assignment is hidden from the feedback, students will be encouraged to engage with their written feedback and identify key learning points in order to activate the release of their mark.

In a more recent and separate development, another tutor in the Faculty of Health and Wellbeing at the University has devised an electronic system that uses 'visual sliders' for marking and providing students with feedback. As the sliders are linked to 'development actions' which suggest how the students could improve on their performance, the need for being specific about marks is removed. Students receive a visual representation of their position on the

marking scale for each assessment criteria alongside the associated development actions. These are currently output using a combination of HTML, Flash and XML data. This development is still in its infancy and opportunities for linking it to the generic feedback template for batch upload to the Blackboard Gradebook are currently being investigated.

There is still some resistance from tutors concerning the on-screen reviewing and marking of student assignments, with a general perception that it requires them to be in a fixed location and reading on-screen for a great deal of time. To address this we will be exploring, piloting and generating user case studies on a range of strategies and techniques for on-screen reading and marking of student assignments in a paperless environment. In addition to investigating the annotation of student work with typed comments and feedback, we will explore the use of digital ink technology to write handwritten comments (which can be digitised by recognition software) directly onto the surface of a tablet PC or digital notepad, retaining the flexibility of traditional marginal comments (Plimmer and Mason, 2006). This investigation will include the loan of a range of hardware and software to tutors, such as lightweight laptops, tablet computers installed with Microsoft OneNote, and recording equipment for the creation of audio feedback. This investigation will reflect the mapping process used for the lifecycle of a student assignment as demonstrated in Figure 1.

References

Black, P. & Wiliam, D. (1998). Assessment and classroom learning, Assessment in Education, **5** (1), pp. 7-74

Bridge, P. & Appleyard, R. (2005). System failure: A comparison of electronic and paper-based assignment submission, marking and feedback, *British Journal of Educational Technology*, **36** (4), pp. 669-671

Denton, P. (2001). Generating Coursework Feedback for Large Groups of Students Using MS Excel and MS Word, [online]. *University Chemistry Education*, **5** (1), pp. 1-8. Last accessed 1 May 2007 at: http://www.rsc.org/pdf/uchemed/papers/2001/p1_denton.pdf

Denton, P. (2001). Generating Coursework Feedback for Large Groups of Students Using MS Excel and MS Word. [online] In: Proc. Fifth International Computer Assisted Assessment Conference, Loughborough, 2-3 July 2001. Learning and Teaching Development, Loughborough University. Last accessed 1 May 2007, at: http://www.caaconference.com/pastConferences/2001/proceedings/j3.pdf

Plimmer, B. and Mason, P. (2006). A Pen-based Paperless Environment for Annotating and Marking Student Assignments. [online]. In: Proc. Seventh Australian User Interface Conference (AUIC2006), Hobart, Australia, 16-19 January 2006. Australian Computer Society Inc. Last accessed 1 May 2007, at: http://crpit.com/confpapers/CRPITV50Plimmer.pdf

Potts, D. (1992). Case study: You can't teach those things to rats. A case for neither grading nor failing students, *Educational and Training Technology International*, **29** (4), pp.296-309

Sheffield Hallam University Learning and Teaching Strategy 2006/10. Internal document