Taking it to the next step: Managing large-scale, meaningful e-assessment in new curricula.

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Theme(s)
Teaching/Professional practice: Managing e-Assessment

The background context

This is an interprofessional learning (IPL) module delivered on three geographically distant centres. The module focuses on research awareness and is one of three IPL modules located within nursing, midwifery and social work undergraduate awards, this one being delivered in semester one of year one in the nursing and midwifery programmes. Further IPL modules will be offered in year two and year three.

Twenty tutorial groups of mixed professions were created from a cohort of 360+ students. A particular design feature was the creation of placement related interprofessional groups, which meant students were allocated based on placement area rather than usual site of study. This meant that students who had not met face-to-face were brought together through online discussion tools.

The module constituted 36 hours of content delivery over 6 weeks of which only 6 hours (3 X 2 hours) was face-to-face with a dedicated facilitator per group. The majority of the content was delivered through the institutional Virtual Learning Environment (VLE) using multimedia rich materials and focused online learning activities to build skills required for research appreciation and literature retrieval. Development of reflective skills was a small component of this introductory module and reflective tasks were achieved through use of PebblePad and our own VLE. Face-to-face sessions focused on building interprofessional group work with the intention of keeping the groups together for the following two interprofessional modules in years 2 and 3. The learner group was diverse in terms of cultural, academic and e-learning skill background. Most were new to the university and our e-learning systems. Limited time was available for induction into IT systems and students were not able to access formal lab teaching in the use of PebblePad or our VLE because of time constraints.

How things are currently done

This was a newly validated module in two newly validated awards. We have experience of using both the VLE and PebblePad for e-assessment on a smaller scale but this is our largest scale use of e-assessment in a single cohort. Across the rest of the academic portfolio there is a mixture of e-assessment and paper submission. A generic aim was to provide students with a convenient distance learning package and to speed up the return of assignments with timely, contextualised feedback. Students on these awards typically submit assignments during placement periods and so we wanted to avoid travel into the University from placement and reduce our carbon footprint. The newly validated curricula are committed to using mainly e-submission for assessments and so this experience was important as a proof-of-concept for other module teams in managing our large student groups.

Why PebblePad?

- Able to assign tutor groups to accommodate named marker groups (20 teachers) across three sites for groups of learners of 15-22 per group, allowing an interprofessional, geographically dispersed team of teachers to have rapid access to their scripts for marking.
- Able to restrict markers to a tutor view of their students' scripts by the use of gateway tutor groups, thus simplifying the task for new users of the tools.
- By creating criterion statements using the comment bank

facility we provided markers with 'stock statements' to speed up feedback and increase consistency in feedback.

- Conducted internal moderation of scripts in the Gateway space and communicated this to markers and external examiners easily and confidentially. Stored evidence for internal and external review.
- Rapid release of grades and feedback to students.
- Replace the 'module box' for NMC validation events with an archive of all scripts, reviewer evidence and important module documents.

The purpose

By using PebblePad we aimed to:

- Provide markers with rapid access to scripts despite their tutorial groups being geographically dispersed.
- Enable markers to mark at the location of their choice without piles of scripts to carry.
- Enable students to submit from home or campus according to their circumstances but as most were on placements it made it easier to reduce travel and costs (printing). Assignments could be submitted as late as midnight on the day of submission.
- Achieve criterion referenced marking using new University-wide level descriptors by creating marker groups using the gateway tools.
- Rationalise the management of a very large student and marker population.
- Manage internal and external review more effectively over geographical distances reducing carbon footprint.
- Provide more robust evidence of moderation that was open and transparent.
- Replace physically located and cumbersome module evidence boxes required for external review, with gateway archives of module scripts and associated documents.

The approach

- We used the assessment gateway to set up a file upload task for the students and gave them more than one practice activity to test their ability to carry out the task (rehearsal).
- We used the tutor group tool to provide discrete access to own students' scripts for the facilitators and this encouraged criterion-referenced marking.
- We used the comment bank to provide markers with grade descriptors to increase the consistency of feedback across the twenty marker groups.
- We were able to provide students with detailed, in context feedback using annotation of scripts which were then uploaded to the file asset type.
- We internally reviewed scripts and recorded this in the tutor blog, forming the basis of the moderators report.
- We specifically appointed an external examiner for all three interprofessional learning modules who was keen to support online marking and moderation.

The result

- Most students successfully submitted into the correct gateway with a file upload but some did not and we have taken steps to reduce submission error with the next cohort (February intake).
- We were able to immediately see a normal distribution of

grades across the cohort but also within marker groups.
- All markers returned scripts on time electronically but not all markers uploaded annotated scripts. There were still some differences in quality of feedback but most markers gave criterion based feedback.
- At the end of the marking and internal review process all markers had access to all scripts and reviewers comments to facilitate learning about, from and with others which is a key tenet of interprofessional learning.
- We had ready agreement where internal reviewers raised questions about parity of marking and we will discuss reasons for this in our presentation/workshop.

The impact

We feel that we have learnt important lessons on large-scale management of e-assessment and have already implemented changes for our second iteration starting in January 2012. Planning has commenced for year two IPL modules that will use the same model. We have considered our processes to endeavour to fool-proof the submission process but have recommendations for developers based on user behaviours. In particular, the recognition of valid file type rather than just asset submission, and extra feedback to users to reassure less confident users of technology. Evidence for this will be statistically analysed numerical data and extensive user free-text feedback. We will also provide marker feedback on the process, including that of external reviewers.

Some student comments from our data include:

> "I would have to make an 84 mile round trip which would possibly cost £15 plus in petrol".
> "It definitely saves time, effort and cost to come into Uni to submit a paper copy. When your printer is running out of ink and you haven't got the time or money to print off your assignment, and you're on placement, this all adds to the stress. Submitting on PebblePAD is easy and I've never encountered any problems. The receipt by email is always reassuring."
>
> "I much prefer submitting my work electronically and receiving feedback electronically……., if you want to make a last minute change to your work, if you have printed it already, then you have to re-print it so it's a waste of paper and ink. However with online submission, you can just edit your work on PebblePad and re-send it to the gateway. I like getting my grades back in private as well."

Markers using PebblePad e-submission have commented:

> **" Once I got into the swing of things, the on-line marking process using Pebblepad has been a positive change for me. I have probably been more efficient than traditional paper, word processing a feedback sheet. "**

Marker A [has marked online in the VLE but mainly paper assignments]

> "So far I'm finding the process good to follow, and I like the drop down box of feedback.[using Comment Bank]" Marker B [new to e-submission]

"I find the PebblePad mechanism of marking a bit tedious - having used systems elsewhere that allow feedback and comments in one file or downloading of all files makes it much quicker and easier. It certainly adds to the time needed to mark using pebble" Marker C [experienced in online marking]

Lessons learnt

<u>Barriers to implementation</u>

Duplication of work and unnecessary errors for the module leader because of lack of institutional support for integration between gateway grading facility and our student management system (e-vision) grade input system.

<u>What have we learnt</u>

We have demonstrated that we were able to scale-up our use of e-assessment and we have shared practices with module teams that had already used the gateway for smaller student numbers.

We learnt that digital illiteracy remained despite what we feel was careful instruction and that where possible systems should be designed to alert users to submission errors such as failure to upload a file/wrong file type.

We observed that perceptions of staff with regard to submission default is different for electronic submission to paper submission and this stimulated new conversations within award teams about policies and expectations.

In brief – making the case for PebblePad

The system has provided:

- A sophisticated system for module leaders to manage large scale complex tutor-student groups efficiently
- Rapid release of feedback
- Excellent archive of all scripts and relevant documents that would not be feasible to keep as a paper.
- Reduced carbon footprint (travel and print/paper costs)
- Easier production of consistent feedback