10 ideas for enhancing feedback with technology

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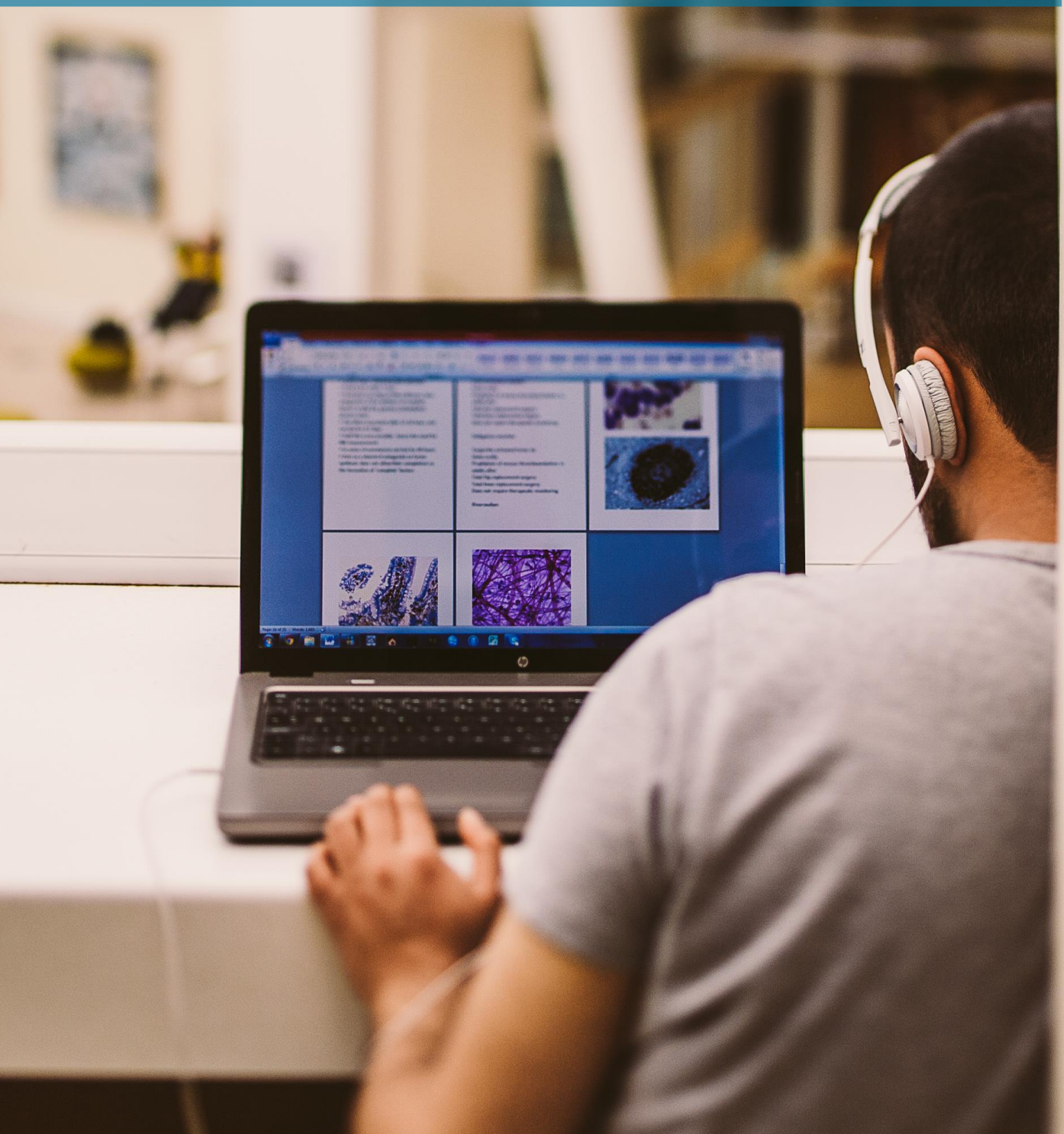

Technology can promote and facilitate peer feedback through the sharing of student work online

Technology can be used to allow students a wider audience for their assessed work than is commonly available in traditional assessment contexts. This means that they have access to multiple sources of feedback from peers rather than just the one tutor, which in itself can lead to enhanced understanding and self-awareness.

In the context of an extended project-like assessment undertaken through a tool like a wiki, this can take the form of an ongoing, iterative, process of peer-feedback through cycles of Critical Friend Review.

The shared environment similarly allows students to view good pieces of assessed work produced by their peers, and by comparison with their own work, understand where the weaknesses highlighted in feedback on their own work lie.

Example:
Nguyen, T. (2010) Using Blogs for peer feedback and discussion - Case study. University of New South Wales.
Available online at:
http://www.youtube.com/watch?v=T4HLGRzhWBs&feature=related.

Technology can foster one-to-one, or group, discussion of feedback even at a distance

One-to-one discussion of feedback on work can be undertaken even at a distance using a Virtual Classroom or VOIP (e.g. Skype).

Similarly, tutors can facilitate discussion around feedback with a whole group, either synchronously through a Virtual Classroom tool, or in a simple, asynchronous, text-based way within a VLE. In this way, common mistakes can be highlighted, misunderstandings clarified, and questions asked and answered, thus providing the opportunity to enhance student understanding of the expectations and standards outside the confines of timetabled class time.

Technology can be used to engage students in reflection and dialogue around Feedback

Technology allows us to break the traditional system of providing feedback alongside marks and delivering the feedback as a one-way process which does not necessarily engage the learner.

Through technology we can break the process down, and formally involve students in reflection and/or dialogue in relation to the feedback they receive.

Example:
Hepplestone, S., Parkin, H., Irwin, B., Holden, G. Thorpe, L. and Burn, C. (2010)
Feedback:
A student guide to using feedback. Sheffield Hallam University, pp.8-11.
Available online at:
http://evidencenet.pbworks.com/f/guide+for+students+FINAL.pdf

Example:
University of Westminster (2010) Case study 8: Reflecting on feedback, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_rereflectingfdback.pdf

Technology can support personalised spoken feedback outside timetabling constraints

Technology allows us to achieve the power of personalisation in feedback through providing recorded Audio / Video feedback even where timetabling constraints and staff-student ratios do not permit one:one tutorial time: 'Many learners find feedback via digital audio and video more detailed and helpful. In contrast, written feedback is perceived as brief, unclear and difficult to recall' (JISC 2010, p.22).

Example:
University of Leicester (2010) Case study 6: Enhancing the experience of feedback, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_enhancingfeedbk.pdf

Technology can embed feedback within online simulations and video technologies which support risk-free rehearsal of real-world skills and enhance future performance in professional and vocational education

The use of computer simulations as a learning tool, provides feedback to students in relation to the complex decisions they make in authentic professional scenarios, and information on their performance of vital professional skills. Students report this to be of tremendous importance and even report taking the opportunity to further their learning by using the technology to explore the likely consequences of wrong decisions and seeing, as feedback, what the resultant outcome would be.

Example:
St George's, University of London (2010) Case study 9:
Assessing my own professional performance, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_assessmyown.pdf

Example:
University of Strathclyde and Northumbria University (2010) Case study 10:
Assessment in an authentic learning context, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_assessauthen.pdf

Technology can offer opportunities for anonymous peer-feedback for group work to promote higher-order thinking skills

Opportunities for students to learn from each other through structured, anonymous peer-feedback can be enhanced using technology. WebPA supports online peer feedback, by every

team member, in relation to individual contributions to group work: 'learners find that anonymous online peer assessment develops skills of self-appraisal and makes the assessment of group work fairer' (JISC 2010, p.22).

Example:
University of Hull and Loughborough University (2010) Case study 7:
Facilitating peer and self-assessment, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_assessingselfpeers.pdf

See also related video at:
http://www.jisc.ac.uk/assessresource

Technology can offer enhanced opportunities for self-evaluation, through activities such as self-checking of own work for the accuracy of referencing

By adjusting settings within originality checking software such as Turnitin students can be given the opportunity to formatively check the accuracy of their referencing without any interference with later formal checks for improper citation or potential plagiarism in submitted work. Because the system works only by a process of comparison, seeking similarity with other sources, academic judgement is still required to evaluate what emerges through the reports, and to decide on any action to be taken to improve referencing. This can help students develop understanding and confidence by generating ownership of learning.

Example:
See information on Turnitin – the software typically used across UK Higher Education institutions:
Avaliable online at::
http://submit.ac.uk/en_gb/products/originalitycheck

Technology can enable rapid feedback when using formative interactive online tests which can immediately correct misconceptions.

Immediate expert, personalised, feedback which focuses on individual weaknesses in skills and conceptual understanding can be provided through online interactive testing, especially for formative assessment. In this case we provide the opportunity for frequent feedback on progress: 'Immediate expert feedback delivered online in response to answers selected by learners can rapidly correct misconceptions; and the time saved in marking can be used in more productive ways, for example in supporting learners experiencing difficulties.' (JISC 2010 p.8)

Example:
Adaptive eLearning - a new medium for intelligent assessment and feedback – Dror Ben-Naim in Posters Booklet L&T Forum 2011 Semester, UNSW, p.27-28 -
Available online at:
https://docs.google.com/file/d/0BzBa-7dgHH4sNWYwOWY5YzAtM2FlNS00NWY0LWIzMDEtMWQ5MTE3YjU2NWEx/edit?hl=en_US&pli=1

Example:
The Open University (2010) Case study 4:

Designing interactive assessments to promote independent learning, in Effective Assessment in a Digital Age, JISC.
Available online at:
http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassess_interactiveassessments.pdf

Technology for speed and ease of processing the production of feedback

Various technological tools are being used to help teaching staff save time on the writing of individual feedback and thereby provide richer feedback to students.

The application of editorial highlights, and insertion of customised comments and pre-written editing marks can all be added directly onto the student papers through tools such as the Grademark tool from Turnitin.

Example:
Information about the Grademark tool from Turnitin
Available online at:
http://submit.ac.uk/en_gb/products/grademark

Technology can be used to ensure we deliver instant, or speedy, feedback to learners

We can use email to speed up the return of individual feedback to students, and can use a VLE forum, bulletin board or other social media tool to distribute generic group feedback in an efficient way.

Simply sending feedback to students by email, or through the VLE, has the advantage of speeding things up and increasing the chance that students receive their feedback in a timely manner, while it still matters to them. It additionally avoids the need for students to collect feedback in person; we push feedback TO students rather than expecting them to collect it.

Example:
Hepplestone, S., Parkin, H., Irwin, B., Holden, G. and Thorpe, L. (2010) Technology, Feedback, Action! pp.7-9.
Available online at:
http://www.heacademy.ac.uk/assets/EvidenceNet/TFA_report_final.pdf

Research shows that timeliness is a critical factor in the effectiveness of feedback. Students have expressed a preference for individualised feedback, it is true, but technology additionally offers us the opportunity to share generic feedback for whole group ahead of the processing of moderation of individual feedback and marks.

For guidance on effective use of generic feedback see:
ASKE Using generic feedback effectively.
Available online at:
http://www.brookes.ac.uk/aske/documents/2483_123-GenericFeedback.pdf