

## **Assessment Online**

Putting assessment items online requires the same preparation and consideration as print-based instruction. That is, there is an expectation that online assessment will:

- be clearly related to the aims and objectives of the subject,
- occur at integrated moments along the learning continuum,
- embody students utilising authentic, real life skills and processes,
- include provision of proactive skills support if required, and,
- allow for students to make choices and be informed of their learning progress.

Online assessment, however, as a relatively new medium for enabling students to express their learning, has a few significant differences. Admittedly, while some of these differences effectively constrain what can be achieved, online assessment methods can also constitute an expansion of the way students experience their learning at University. The latter is particularly the case when online assessment items are designed to incorporate the best use of developments within the student centred learning approaches and the most appropriate innovations of multimedia technologies.

While a recent survey of online assessment items by O'Reilly & Patterson (1998) suggests 'the scope and variety of assessment has generally been disappointingly limited' (1), these limitations are not inherent to the media. Most common forms have to date included the essay and the multiple-choice response. Essay assessment items can be delivered in print or as an email attachment, and multiple choice responses – summative or formative – can be automatic in their online delivery and marking. As multimedia technologies become more familiar and gain wider utility within the academic context, there has been further innovation in how students can be assessed online so as to include

interactive problem solving, as well as making broader use of the audio, visual and publishing capabilities of the internet. In short, online assessment can include, where pedagogically appropriate, any or all of the following examples:

- web page production
- net publications
- role play and simulations
- online discussion
- folio production
- video conferencing
- audio presentations

as well as incorporating the better known assessment items such as quizzes, short answer responses, essays and multiple choice selection.

A key phrase in the foregoing is ‘pedagogically appropriate’, and ignoring this element can limit some of the learning opportunities available online. Constructing ‘pedagogically appropriate’ assessment online involves learning outcomes being taken as the driving force behind the decisions whether and how to make best use of the available technologies. Pedagogical appropriateness, however, *also* involves an awareness of what is practical and/or feasible in the students’ individual learning environments. For example, while it may well be aesthetically exciting and enhance concept acquisition to incorporate an animation component into a student’s assessment item, consideration needs to be taken as to how the student can access this if their computer environment is limited, or whether it is so very useful having students spend many hours struggling to produce online what could be achieved in comparatively very little time on paper or in person.

Ways of overcoming some of the more common glitches in online assessment (which are often largely the result of innovations being technologically driven) could include:

- giving students the choice of submitting their work either online or in print form
- allowing students to choose a 'text only' version of online delivery
- ensuring the items make use of culturally inclusive language, images and sound
- utilising an appropriate mix of online, face-to-face and print tasks
- incorporating clear instructions for using the technologies within the assessment item itself
- factoring in a 'lead-up' time to ensure that the particular delivery system is fully operational
- providing non-assessable practice sessions to help students become familiar with the technology prior to the actual task
- including the particular software package required as part of the learning environment of the subject, or having instructional support readily available
- providing a 'panic' button for students to immediately report any glitches or incomprehensions in delivery and/or submission of the assessment items
- ensuring students are familiar with online protocols such as virus protection, netiquette.

Bearing these suggestions in mind, what follows is a more comprehensive explanation of some of the assessment variations currently available, drawing, where possible, on exemplars from within Swinburne and at other Australian universities.

### **Web Page Production**

An advantage of web page production is the vast array of presentation methods and tricks available and the opportunity for creative expression. Disadvantages could include student skill levels and a possibly inappropriate focus on 'look' over content. Ways of circumventing these flaws could be to have an instructional template (or recommended layout) which could both limit some of the possibilities within web page design, and focus student energies and efforts where it is most desired.

URL: <http://www.swin.edu.au/ssb/media/alm310/projects/pepi/coverpg.htm>

### **Net Publications**

In addition to placing print-based texts online and allowing a 'high gloss' presentation medium, this facility could incorporate producing a journal of student work, a relatively easy facilitation of peer evaluation, an editorial section and links to other student journals within or outside of the School. As with web page production generally, care would need to be taken to ensure copyright regulations are adhered to, and, if preferred, access limited through password protection.

URL: <http://www.latrobe.edu.au/www/graded/introduction.html>

### **Online Discussion**

Online discussion can be simultaneous utilising chat-lines and web/video conferencing technologies, or asynchronous making use of threaded web discussion. In the latter students post a comment or query to an open site and students respond at will. Often this component is slow to start due to a combination of technological hesitation and the odd

hiccup in the system, so it is recommended that if student participation forms part of the assessment, this participation has a lead up time to allow for technical problems to be resolved. Actual assessment of online discussions can be quantitative (the number of times a student participates) and/or qualitative, where, for example, students select their 'best' examples of participation and justify this selection.

### **Role-play and Simulations**

As well as forming a stimulus for producing assessment items, situated learning in the form of role-play and simulations has been successfully utilised via online discussion and bulletin boards. Typically this assessment item involves setting up a scenario appropriate to the subject concerned, assigning roles and limitations to playing out the simulation, and requiring students to refer to relevant concepts and research. Participation in the simulation is often in the form of asynchronous discussion where the 'group' has ready access to the story as it unfolds.

URL: <http://hardy.ocs.mq.edu.au/~control1/>

### **Quizzes**

Into this category can fall the auto-correct question types, including, for example, true-false, multiple choice, numeric and single answer responses. These types of assessment online can be used very productively by students to monitor their own progress as they learn, as well as the more formal submission of an assessment item which is automatically marked and recorded. Variations within these items can include a multiple answer facility, where each correct option can have a value attributed to it, and for self-paced learning, incorrect responses can have a built in suggestion for further learning. Numeric range responses can have an auto-correct function which includes a designated

range, rather than just one response only, but in contrast, single word response questions, while potentially useful, have a fairly key issue of precision. That is, single word response items require an awareness of case sensitivity, typos, spelling mistakes, local variations and aliases and therefore in order to enable the auto-correct function, each item would need to include the complete range of possible 'correct' responses.

Overall, quizzes can be very useful, particularly given the speed in which the items can be marked and the results returned to the student. There is a strong recommendation, however, particularly if these items are being used for formal assessment, that students be given practice sessions. These practice sessions would work to ensure that students are familiar with the ways of responding and submitting quizzes appropriately – and in so doing, avoid an inadvertent assessment of students on their technical competence rather than their subject knowledge.

<http://www.online.swin.edu.au/subjects/s034/t02/pracexam/h00.htm>

<http://www.online.swin.edu.au/subjects/s062/assess.htm>

### **References and suggestions for further reading**

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<http://cleo.murdoch.edu.au/asu/pubs/tlf/tlf97/vuor341.html>