Raising the profile of diagnostic, formative and summative e-assessments. Providing e-assessment design principles and disciplinary examples for higher education academic staff

http://andy.services.adelaide.edu.au/moodle/course/category.php?id=8

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University of Adelaide
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2008
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Executive summary

This Fellowship has promoted learning and teaching in Australian higher education by enhancing approaches to e-assessment through the articulation of an e-assessment design model and the collection of disciplinary examples of interactive e-assessments.

The use of technology will not, by itself, lead to improvements in student learning outcomes. In order to achieve demonstrable improvements in learning outcomes a design process that connects the three complementary assessment activities, diagnostic, formative and summative with learning and feedback, is needed. A simple model for diagnostic, formative and summative assessment tasks linked with learning activities was developed and used throughout this Fellowship. An integrated learning-assessment model facilitates appropriate feedback to students because of the inherent links between learning and assessment.

The widespread use of multiple-choice questions has led to a preponderance of selected response question types in e-assessments. Teachers would like to use questions that require more constructed responses, so that relational and extended abstract responses can be assessed. We have prepared some examples of e-assessment questions that are more interactive and require students to use additional resources to construct their responses, without necessarily involving complex scenarios or sentence constructions. I have promoted the use of java applets, QuickTime VR and interactive spreadsheets as tools that discipline academics could use in their own e-assessments with minimal training. The website created as part of the Fellowship activities, http://andy.services.adelaide.edu.au/moodle, contains discipline examples of interactive e-assessments under the ALTC project section. This website is one of the main outputs from the Fellowship.

A number of presentations and workshops have been completed as part of the Fellowship activities. These presentations have included meetings with international experts in learning, teaching and assessment; presentations and workshops conducted at Australian, New Zealand and UK universities; as well as conference presentations. Many of the presentations promoted local activities directed towards improving assessment practices.

During the Fellowship I became aware of a convenient means of using mobile phones for students to provide feedback instead of using the more traditional personal response systems (clickers). This method is very convenient and significantly less time consuming for teachers, compared to the use of clickers. The system demonstrated in the Fellowship presentations was the freely available Votapedia system developed by CSIRO.
1. Introduction

In Australia, there have been renewed efforts to highlight the link between assessment practices and student learning behaviours (James, McInnis, and Devlin, 2002). As educational environments become more flexible, students look for guidance on appropriate ways to develop generic skills, such as those associated with communication, group work and critical thinking. The ability of academics to develop methods for the assessment of these generic skills is seen as an important component of the Australian educational scene. There has been an emerging appreciation of new technological possibilities for assessment, including the potential to integrate assessment and learning in new ways. The report from the Centre for Study of Higher Education, highlighted five contemporary assessment issues in higher education (James, McInnis and Devlin, 2002);

(i) capturing the potential of e-assessment;
(ii) designing efficient and effective assessment for large classes;
(iii) responding to plagiarism and developing policies to foster academic honesty;
(iv) using assessment to guide effective group work;
(v) recognising the needs of students unfamiliar with assessment practices in Australian higher education.

The Computer-Assisted Assessment (CAA) Centre in the UK operated between 1998 and 2001, and made a significant contribution to higher education assessment practice with strategic advice on the implementation of e-assessment, the production of staff development and training material and an annual international conference on computer-based assessment (still offered and highly popular). One of the highlights from the work of the Centre has been the CAA Blueprint, which lists seven reasons for using e-assessment (Bull and McKenna, 2003);

(i) to increase the frequency of assessment to improve learning;
(ii) to enable a broad range of topics to be covered in assessment;
(iii) to enable timely feedback;
(iv) to offer a range of assessment methods;
(v) to improve objectivity and consistency;
(vi) to reduce staff workload for marking;
(vii) to improve administration of assessment.

The CAA Blueprint commented that increasing the frequency of high stakes assessment will have a positive impact on students if it is coupled to appropriate learning activities, and not perceived as simply an additional burden. Academics can facilitate higher-level learning by designing the curriculum around authentic learning and authentic assessment activities.
transferring face-to-face classroom assessment tasks to an online environment will not allow for authentic, performance-based assessments. Authentic assessments require the student to interact with real world tools and to contemplate the real world consequences of their responses. Authentic assessment attempts to measure the process of generating a response, as well as the response itself. It is essential that academic staff incorporate appropriate design principles into their use of e-assessment, and do not simply try to digitize paper-based assessment paradigms.

In the UK, JISC (Joint Information Systems Committee) has sponsored a number of projects aimed at enhancing assessment in higher education (http://www.jisc.ac.uk). In particular, the REAP (Re-Engineering Assessment Practices) project and the e-Assessment Roadmap Project are highlighting the benefits of diagnostic and formative e-assessment coupled with appropriate feedback.

Academics' epistemologies for learning and assessment are closely linked, and range from an academic-centred focus on knowledge reproduction through to a learning-centred focus on knowledge transformation (Samuelowicz and Bain, 2002). Assessment tasks not only determine to a significant extent what students will learn, but also the methods they will employ to retain, reproduce, reconstruct, engage and build on, or with, learnt content or concepts (Biggs, 2002). Student responses to proposed assessment tasks will often dominate other extrinsic or intrinsic motivators that initially drive learning behaviour. The motivational factors associated with student behaviour towards assessment may be quite different to those associated with learning itself, yet the assessment outcome is often the lasting legacy that a student from an educational institution will take with them into the future. The ability of academics to facilitate higher-level learning through purposely designed content and group interactivity, coupled with inspirational delivery methods, may be reduced significantly if the assessment tasks are not aligned closely to the articulated learning outcomes (Elwood and Klenowski, 2002).

Biggs (2002) has been one of the leading proponents of the concept that assessment drives student learning (or at least approaches to learning) and that teachers should take a strategic and integrated approach to curriculum design so that assessment for learning is clearly distinguished from assessment of learning.

Core knowledge for a discipline is often assessed by convergent methodologies, because less time is required to make a judgement about the appropriateness of the student response and specific feedback is readily available because the expected response is predetermined. This type of knowledge and assessment is often associated with many of the current examples of e-assessment (Bull and McKenna, 2003). Declarative knowledge (knowing what), is often assessed in a decontextualized environment, and is associated with the unistructural or multistructural level of the
SOLO hierarchy (Biggs and Collis 1982). Declarative knowledge is mostly fixed and independent of the context in which it is used. Divergent assessment, where alternative responses have equal validity, allows relational or extended abstract knowledge to be applied, often in a contextual framework that adds meaning for both the student and the teacher.


2. Fellowship Activity Outcomes

2.1 e-Assessment model

This Fellowship has promoted learning and teaching in Australian higher education by enhancing approaches to e-assessment through the articulation of an e-assessment design model and the collection of disciplinary examples of interactive e-assessments.

The use of technology will not, by itself, lead to improvements in student learning outcomes. In order to achieve demonstrable improvements in learning outcomes a design process that connects the three complementary assessment activities, diagnostic, formative and summative with learning and feedback, is needed. A model for diagnostic, formative and summative assessment tasks linked with learning activities is shown in Figure 1. An integrated learning-assessment model facilitates appropriate feedback to students because of the inherent links between learning and assessment.

![Figure 1. Model of e-assessment types and their relationship to learning](image)

Online assessment tasks can provide teachers with appropriate opportunities to offer strategic and timely feedback to students, especially for large classes where individual feedback is difficult or costly in a face-to-face format. In the online environment, multimedia and helper applications may be readily incorporated into both the assessment question and students’ responses, enabling a
The primary reason teachers use technology for assessment is to facilitate automated marking of the test, coupled with the ease with which feedback may be provided to students in a timely manner. Selected response tests (MCQ-type questions) can enable a relatively large number of questions to be included in one assessment, thus allowing a wide coverage of the knowledge base for a course. The most common concern from teachers with selected response tests is that it is perceived that such tests cannot assess learning beyond basic comprehension. The widespread use of MCQs has led to a preponderance of quantitative question types in e-assessments. Teachers would like to use questions that require a more qualitative response, so that relational and extended abstract responses can be assessed. We have prepared some examples of e-assessment questions that are more interactive and require students to use additional resources to construct their responses, without necessarily having complex scenarios or sentence constructions for the stem. The website created as part of the Fellowship activities, http://andy.services.adelaide.edu.au/moodle, contains discipline examples of interactive e-assessments under the ALTC project section. This website is one of the main outputs from the Fellowship.

One of the characteristics of the online environment is its ability to facilitate interactivity; to provide participants with instant feedback in response to their actions. When students undertake assessments that are interactive in nature they have the potential to respond in unexpected, but equally valid, ways. When students are provided with interactive tools, they have the capacity to create new knowledge, or to reorganize existing knowledge in new ways. Teachers should be providing opportunities for students to explore these potentials as they facilitate the assessment of higher order capabilities and are likely to be more closely aligned to the objectives and graduate attributes (skills) outlined for a course.

2.2 Interactive e-Assessment examples

e-Assessments should not simply be paper-based assessments delivered via the Internet. The Internet is interactive; it responds to users input and allows users to manipulate information and data. Simulations and interactive tools such as Java applets, Flash files or QuickTime VR (three-dimensional digital images) allow students to explore, to test ideas, to try the unexpected. From the teacher’s perspective, it is usually more convenient to have the interactive tool exist as a separate object from the questions in an e-assessment, and to link to the tool from within the question when
the student is ready to interact with it. This allows one copy of the interactive tool to exist on an institutional server and be used many times for different purposes. Complex simulations are usually expensive to produce, and it is unlikely that teachers will want to produce the variety of simulations required for each assessment task. It is more efficient to reuse well-produced interactive tools and incorporate them into purposely built e-assessment tasks where the teacher has concentrated on developing appropriate questions with strategic feedback, rather than on building a complex tool. Most teachers will wish to incorporate an existing tool into their assessments using a minimum of technical knowledge. This means teachers should only be expected to learn how to incorporate a simple web link within an existing e-assessment system so that students are able to click on the link to open the tool within their questions. Since teachers may be using different assessment software, the method for incorporating the interactive tool should be applicable to all operating platforms and all common learning or assessment management systems. An example question using a Java applet is shown in Figure 2.

![Figure 2. e-Assessment question incorporating a java applet](image)

Many Java applets are freely available on the Internet and teachers who wish to use them as standalone tools within an e-assessment task will usually find it unnecessary to write their own applets. Usually some form of attribution will be required when using such Java applets locally. Alternatively, teachers may wish (or be required to by the creator) to use the tool from its remote
location on a server outside of the teacher’s institution. From the point of view of the student using the Java applet in an e-assessment, it usually makes little difference whether the tool is located on a local or a remote server, although download times may vary and the availability of the tool is more difficult to manage from a remote server.

Quicktime VR files allow viewers to control movement within a three-dimensional image. This is a particularly useful format for interactive e-assessments because it allows a student to access a rich source of data and to form connections between different parts of a three-dimensional image or structure. An example is shown in Figure 3 where a Quicktime VR image of the Bayeux Tapestry is made available to students during an assessment. A static image of the entire Tapestry would be useless for the student as the original is 70 metres in length and no detail would be visible in a single static image. The Quicktime VR file allows students to scroll the entire length of the Tapestry and so be able to form relationships between disparate parts of the object. Teachers are able to construct more complex questions for students and expect responses of a relational and extended abstract type. Other examples of useful Quicktime VR images would be sculptures and paintings, archaeological sites, geological or landscape features or architectural plans for buildings.

Figure 3. e-Assessment question incorporating a Quicktime VR image
2.3 Outcomes against original objectives

There were 5 outcomes originally proposed for this Fellowship. The actual outcomes have been summarised under the 5 original headings.

1. **Promotion and understanding of a variety of approaches to e-assessment designs, based on the use of diagnostic, formative and summative assessments.**

A simple model relating the 3 different types of assessment tasks and their relationship to learning has been promoted, as illustrated in Figure 1. The importance of feedback to students has been emphasized in the use of the model. Table 1 outlines the presentations that have been completed as part of the Fellowship activities. These presentations have included meetings with international experts in learning, teaching and assessment; presentations and workshops conducted at Australian, New Zealand and UK universities; as well as conference presentations. Appendix 1 is an example of the flyer used for the presentations and workshops; Appendix 2 is the handout used at the workshops; Appendix 3 contains an example of the presentation slides.

The major output from the Fellowship has been the construction of a website containing discipline examples of interactive e-assessments, all within a standard learning management system. This is a public access website at [http://andy.services.adelaide.edu.au/moodle](http://andy.services.adelaide.edu.au/moodle). Figure 4 outlines the discipline headings from the website and Figure 5 exemplifies the entries under the discipline areas. Some discipline areas have more examples than other areas. The website promotes the use of interactive e-assessment; the actual questions are not particularly sophisticated, they are meant to illustrate the model of interactive e-assessment tasks and are not meant to represent exemplary online assessment questions themselves. Figure 5 illustrates the manner in which the examples under each discipline have been organized. The website contains actual assessment questions containing some type of interactivity; the sections within a discipline are framed around the use of a particular tool that allows students to interact in some manner with an object, data or concept.
2. Development of a community of practice in e-assessment through the use of webinars and workshops.

Table 1 outlines the presentations and workshops conducted as part of the Fellowship. Webinars were not undertaken as part of the Fellowship as most areas preferred to have a face-to-face session so that they could bring people together from across their own institution. Some institutions recorded the presentation for later distribution and internal use; some sessions incorporated a live videoconference with remote campuses of the institution as part of the presentation. The sessions on e-assessment were used as professional development opportunities in most institutions and were essentially catalysts for local discussions on assessment issues.
Part of the evaluation study for the Fellowship was to determine if discussions took place at the local institution after the e-assessment presentation or workshop. The outcomes from this evaluation are contained in the Evaluation Report at the end of this document.

3. **Facilitation of changes in approaches to assessment, including the increased use of:**
   a. helper applications and simulations
   b. role-plays and scenario-based learning coupled to e-assessment
   c. authentic assessments that use digital tools that are relevant to the professional lives of graduates
   d. improved use of multistructural and relational diagnostic and formative assessment items with appropriate feedback

The website (http://andy.services.adelaide.edu.au/moodle) provides examples of how interactive e-assessments might be constructed to provide more authentic assessment tasks for students and encourage the use of questions that test conceptual understanding rather than recall. Seminars and workshops have been undertaken to promote discussion about the use of interactive e-assessment (Table 1). The purpose of the presentations and workshops was to facilitate discussions at the local level of approaches to assessment. The feedback sheet used for the presentations and workshops is shown in Appendix 4 and the separate Evaluation Report contains the results of these surveys at the local institutions.

4. **Increased awareness of the possibilities for diagnostic and formative assessment and feedback through the use of personal response systems (PRS) and wireless technologies for alternative forms of e-assessment in the classroom.**

In the early stages of the program, two sets of personal response systems were used in the presentations; InterWrite (http://www.interwrite.com.au/) and KeePad from TurningPoint (http://www.keepad.com). These were demonstrated and their use for diagnostic and formative assessment in face-to-face sessions was emphasised. These tools provided a convenient way for teachers to engage students, particularly in large classes, and for teachers to modify their pace or direction in a class in response to the level of understanding exhibited by students in real time.

Later in the fellowship program a more convenient approach to this teaching method was demonstrated. This involved the use of mobile phones instead of clickers; students responded to in-class questions using their own mobile phone. This method is very convenient and significantly less time consuming for teachers, compared to the use of personal response systems. The system demonstrated in the fellowship presentations was the freely available Votapedia website from CSIRO. This is demonstration site constructed by CSIRO and freely available to educational institutions in Australia, http://www.votapedia.com. Figure 6 illustrates a typical quiz that could be undertaken in a classroom. This tool proved very popular at the presentations and workshops and many participants signed up for this free service as a result of the sessions.
5. Raising awareness of the use of online peer review systems that allow students to develop capabilities in assessing their own written work.

This aspect was not formally part of the presentations or workshops as the existing content was more than enough to fill the time available. However, we did install the open source e-portfolio system Mahara (http://www.mahara.org/) and the open source peer assessment system WebPA (http://webpaproject.lboro.ac.uk/) to investigate their ability to facilitate student self and peer assessment. This will be an ongoing activity as we begin to explore assessment issues associated with the use of Internet virtual environments.
2.4 Personal and professional development

The ALTC Associate Fellowship has provided me with an opportunity to interact with a large number of colleagues in Australia, New Zealand and the UK. This has enabled me to forge new networks and has significantly improved my understanding of assessment issues at the discipline level. The emphasis of the Fellowship activities was to engage with both discipline academics as well as academic developers.

I have been able to collect a significant number of learning, teaching and assessment items and have placed these on our public website (http://andy.services.adelaide.edu.au/moodle); these resources are available for others to use in their own context.

I have been able to develop my conceptual understanding of the relationship between learning, teaching and assessment and have formulated a framework for the use of interactivity in e-assessment. This has been an important outcome from the Fellowship activities; the understanding that students are able to be engaged at a much higher cognitive and affective level in an assessment task if they are provided with access to interactive tools within an assessment task. This framework will facilitate changes to assessment tasks that enable students to be an active partner in the assessment activity, rather than just a recipient of a narrow, prescriptive activity.

I have been made aware of the very convenient manner in which mobile phones may be used to engage students in large classes; the Votapedia system (http://www.votapedia.com) is more convenient to use when compared to the traditional personal response systems based on radio frequency transmission or infrared transmission technology.

As a result of the Associate Fellowship activities I was made the Open and Distance Learning Association of Australia (ODLAA) Visiting Scholar for 2008; this involved further presentations and workshops on e-assessment and was an opportunity to network further with colleagues (http://www.odlaa.org/events/events.html).
3. Summary of Fellowship presentation activities

Table 1. Meetings, seminars and workshops completed as part of the Fellowship activities.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Presentation type</th>
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<tr>
<td>14 May 2007</td>
<td>University of London, Centre for Distance Education</td>
<td>Seminar presented</td>
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<tr>
<td>15 May 2007</td>
<td>Birkbeck College, University of London</td>
<td>Meeting with Dr Richard Rayne</td>
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<td>16 May 2007</td>
<td>London Knowledge Lab, University of London; Institute of Education, University of London</td>
<td>Meeting with Professors Diana Laurillard and Dylan Wiliam</td>
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<td>17 May 2007</td>
<td>Open University, UK</td>
<td>Meeting with Professor Stephen Swithenby, Director - Centre for Open Learning of Mathematics and Dr P.G. Butcher</td>
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<td>18 May 2007</td>
<td>Open University, UK</td>
<td>Meeting with N.L. Sclater, VLE Programme Director</td>
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<td>24 October 2008</td>
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Interactive e-Assessment: more than just multiple-choice

Abstract
This session explores some of the opportunities afforded by online assessment to improve student outcomes and the quality of the assessment tasks. The work is based on the ALTC Associate Fellowship project and describes how academics can prepare interactive, computer-based assessments using helper tools such as browser plugins, Java applets, QuickTime VR and Flash. The aim of the project is to assist teachers to move beyond simple multiple choice questions in an online environment to provide much richer, authentic and meaningful assessment tasks for students. Discipline examples may be viewed at http://andy.services.adelaide.edu.au/moodle/

About the Presenter

Geoff completed his BSc (Honours, First Class) at the University of Queensland in 1977 and his PhD in Chemistry at the Research School of Chemistry, Australian National University in 1981. After a Humboldt Fellowship completed at the Max Planck Institute für Kohlenforschung in Mulheim an der Ruhr and postdoctoral positions at Colorado State University and the Australian National University, Geoff began his first academic appointment in 1985 in the Chemistry Department at the University of Melbourne. In 1988 he moved to the Chemistry Department at the University of Adelaide and continued discipline research and teaching until 2001. Geoff developed his passion for learning and teaching as well as continuing his work in chemistry during this time, being Associate Dean for Learning and Teaching for the Faculty of Science from 1999-2001. He was actively involved in the development of online learning and was appointed the Director of the Online Learning and Teaching Unit in 2001 to oversee the implementation of the university online system (MyUni). Geoff made the permanent move to educational and staff development and online learning when he was appointed the Director of the Centre for Learning and Professional Development in 2002.

Recent Education Related Publications and Presentations
Appendix 2 Workshop flyer

Workshop on e-Assessment

A. Open the web site http://andy.services.adelaide.edu.au/moodle/
   - Create an account on the Moodle web site. You can select your own logon name and password. You will receive an email requiring you to confirm your account.
   - Open the Interactive e-Assessment ALTC Project section and view a discipline area of your interest. You will need to enrol yourself in each course, left hand side of the page.
   - You may practice making an e-assessment task in the Workshop Sandpit site. I will make you a teacher in this area once you have created your logon.

B. Consider the diagram below which summarises the major types of assessment and their relationship to student learning.
   1. What types of assessment are appropriate for your teaching practice?
   2. How could you use diagnostic assessment to inform your teaching and student learning?
   3. What are the workload implications of incorporating diagnostic and formative assessment in your teaching?
   4. How much feedback can you provide to students on their responses to assessment tasks?

C. Consider the table below which summarises the major decision-making issues that accompany different types of assessment.
What are the workload implications of incorporating diagnostic and formative assessment in your teaching?

Summary of decision-making issues for assessment formats

<table>
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<th>Purpose of assessment</th>
<th>Low stakes assessment</th>
<th>Medium stakes assessment</th>
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<tbody>
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<td>Improve learning, identify teaching gaps</td>
<td>Improve learning, progression to new concepts</td>
<td>Credentials, gate keeping, progression, certification</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consequences if problems arise</th>
<th>Few with low impact</th>
<th>Some with modest impact</th>
<th>Significant with high impact</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Resources required</th>
<th>Often minimal, can use low threshold software</th>
<th>Modest investment in large scale system</th>
<th>Significant investment in enterprise system</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Consequences of cheating</th>
<th>Few</th>
<th>Some</th>
<th>Significant</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Authentication of learner</th>
<th>Not important</th>
<th>Maybe important</th>
<th>Very important</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Invigilation required</th>
<th>Not usual</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Development effort</th>
<th>Minor</th>
<th>Medium</th>
<th>Major</th>
</tr>
</thead>
</table>

| Evaluation of reliability and validity | Not usual, anecdotal feedback from colleagues and learners sought | Subject matter expert provide feedback | Requires professional psychometric analysis |

D. Consider the paper ‘Rethinking Formative Assessment in HE: a theoretical model and seven principles of good feedback practice’ by Dr David Nicol, University of Strathclyde and Debra Macfarlane-Dick, University of Glasgow

Good feedback practice:

- Facilitates the development of self-assessment (reflection) in learning.
- Encourages teacher and peer dialogue around learning.
- Helps clarify what good performance is (goals, criteria, expected standards).
- Provides opportunities to close the gap between current and desired performance.
- Delivers high quality information to students about their learning.
- Encourages positive motivational beliefs and self-esteem.
- Provides information to teachers that can be used to help shape the teaching.

1. Why is feedback on assessment important for students?
2. How much feedback can you provide to students on their responses to assessment tasks?
3. What are the workload implications of incorporating diagnostic and formative assessment in your teaching?

E. View the student interviews on feedback from the Higher education Academy in the UK. [http://www.heacademy.ac.uk/ourwork/learning/assessment/senlef](http://www.heacademy.ac.uk/ourwork/learning/assessment/senlef)
1. Why is feedback on assessment important for students?
2. How much feedback can you provide to students on their responses to assessment tasks?
3. What are the workload implications of incorporating diagnostic and formative assessment in your teaching?

**Student Enhanced Learning through Effective Feedback**

The Student Enhanced Learning through Effective Feedback (SENLEF) project is a resource for practitioners wishing to improve their feedback practice or get some exciting new ideas.

The project team has explored feedback issues with Higher Education Institutions (HEIs) across Scotland. From this we have collated case studies, devised a set of principles for good practice and developed a range of resources including a literature review, web links and workshop materials. These can be found in the resources section of the website.

**Assessment and Feedback Video Clips**

You can view our assessment and feedback video clips below which highlight students opinions on the assessment and feedback experiences they have had.
6. Appendix 3 Slides from presentation

Interactive e-assessment - more than just multiple choice

Presentation for HERDSANZ

Geoffrey Crisp
Associate Fellow, ALTC
ODLAA Visiting Scholar
Director, Centre for Learning and Professional Development
University of Adelaide

Outline of presentation

- brief introduction to assessment
- diagnostic quiz and JITT
- simple assessment model
- examples of interactive e-assessment
- future types of assessment
Types of assessment

- **convergent** type, in which one correct answer is expected, and **divergent** responses, in which the answer depends on opinion or analysis (Torrance et al., 2001)

- **convergent assessment** has its origins in mastery-learning models and involves assessment of the student by the master-teacher

- **divergent assessment** is often associated with a constructivist view of learning, where the teacher and student engage collaboratively within Vygotsky’s (1996) zone of proximal development

---

Teachers need to decide:

- whether a norm-referenced or criterion-referenced assessment scheme is more appropriate for the particular learning outcomes

- whether the **process** of solving a problem and the **product** of solving a problem are both assessed, and what is the relative weighting for the two components

- whether **constructed** or **selected** responses are appropriate

---

Interactivity - IMMEX

[Diagram of IMMEX system]

http://www.immex.ucla.edu/
Outline of presentation

- brief introduction to assessment
- diagnostic quiz and JITT
- simple assessment model
- examples of interactive e-assessment
- future types of assessment

Open the Excel spreadsheet in a separate window to answer the question. If the average total cost decreases, and all other parameters remain the same

A. the profit will increase
B. the profit will decrease
C. the marginal cost increases

Votapedia – Questionnaire 2
Outline of presentation

- brief introduction to assessment
- diagnostic quiz and JITT
- simple assessment model
- examples of interactive e-assessment
- future types of assessment
Effective e-Assessment

- can offer new possibilities for immersion and interactivity
- has the potential to facilitate enhanced social interactions
- can begin to resemble games and role-playing
- can facilitate the exposition of advanced skills and capabilities

Outline of presentation

- brief introduction to types of assessment
- simple assessment model
- diagnostic quiz and JITT
- examples of interactive e-assessment
- future types of assessment

Second Life – Virtual worlds

Second Life is a virtual world that allows users to create avatars, build virtual environments, and interact with each other. It provides a platform for educational and entertainment purposes, enabling users to explore different subjects in a more immersive and interactive way. It also supports collaborative learning experiences, allowing educators to design virtual spaces for teaching and learning activities.
Role Plays

http://www.ucalgary.ca/sp/MD57699/simulation.html

Interactivity – Virtual Worlds

http://www.bized.co.uk/virtual/home.htm
Interactivity - Browser Plugins

- A browser plugin is a software application that adds a specific service or feature to standard browser.

- Aware of plugins such as Acrobat Reader from Adobe Systems, Flash and Shockwave Players from Macromedia, Java from Sun Microsystems and Quicktime from Apple Computers or Windows Media Player from Microsoft.

The language used throughout the Bayeux Tapestry is

A. English
B. French
C. Latin

http://panograph.free.fr/BayeuxTapestry.html

Quicktime VR

Interactivity - Java and Java applets

a simple platform-independent (Mac, PC or Linux) object-oriented programming language (objects rather than functions) used for writing applets (small applications) that are downloaded from the www by a client (you or the student) and run on the client's machine.

Simple java script

- Nursing calculations

Interactivity - Chemistry Java applet

<table>
<thead>
<tr>
<th>Molecularization Gaussian-likelihood score</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCBR ligand</td>
</tr>
<tr>
<td>Ion channel modulator</td>
</tr>
<tr>
<td>N2ase inhibitor</td>
</tr>
<tr>
<td>N2ase receptor ligand</td>
</tr>
</tbody>
</table>

Molecularization Gaussian-likelihood score

QCBR ligand: 0.15
Ion channel modulator: 0.04
N2ase inhibitor: -0.49
N2ase receptor ligand: -0.68

MolAssist (v.5.0)
SAS (v.8.0)
SAS Institute
SAS Institute of America
SAS Institute
SAS Institute
SAS Institute
Interactivity - Physics Java applet

http://www.phy.ntnu.edu.tw/htmljava/
Interactivity - Jelsim

- http://www.jelsim.org/content/applets/solar/solargraphs.html

Interactivity - Jelsim

- http://www.jelsim.org/content/applets/bizstartup/index.html

Interactivity - Maths
Outline of presentation

- Brief introduction to types of assessment
- Simple assessment model
- Diagnostic quiz and JITT
- Examples of interactive e-assessment
- Future types of assessment

Future assessments?

- What will assessment tasks look like in the future?
- Will we see universal development of immersive and authentic learning and assessment environments?
- Will assessments measure approaches to problem solving and student responses in terms of efficiency, ethical considerations and the involvement of others?
- Will teachers be able to construct future assessments or will this be a specialty activity?

The e-Assessment Handbook
**Interactive e-assessment**

<table>
<thead>
<tr>
<th>Question</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have a detailed knowledge of computer or Internet based assessment.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. I frequently set computer or Internet based assessment tasks for my students.</td>
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<tr>
<td>3. I frequently develop computer or Internet based assessment tasks.</td>
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<td></td>
</tr>
<tr>
<td>4. This session has improved my understanding of computer or Internet based assessment.</td>
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</tr>
<tr>
<td>5. I will be able to use information from this session in my own teaching or practice.</td>
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<tr>
<td>6. I would like to learn more about computer or Internet based assessment.</td>
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<tr>
<td>8. I think computer or Internet based assessment is only useful for simple questions relying on recall or memory.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The best aspect of this session was:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10. This session could be improved by:</td>
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<td></td>
</tr>
</tbody>
</table>
Survey 1 – feedback from participants immediately after seminar or workshop

After each seminar or workshop by Professor Crisp participants filled out the standard survey outlined in Appendix 4 to this report. The survey consisted of 8 Likert scale questions and 2 open-ended questions. Some of the questions related to current assessment practices of the participants and others related to the presentation or workshop. The analysis from the Likert scale questions and the open-ended comments are shown below. There were 187-188 responses to each Likert question in the survey. Open-ended comments (the full list contained in Appendix 6) have been modified where the text contained information that might identify the respondent or their institution.

Likert Questions

Q1. I have a detailed knowledge of computer or Internet based assessment.

Responses indicated only a 39% broad agreement with this statement. From this one might infer that the participants in these sessions were not experts in the field and so might have attended to raise their awareness of e-assessment issues.

Q2. I frequently set computer or Internet based assessment tasks for my students.

Responses indicated only a 40% broad agreement with this statement. Similar inferences to Q1.

Q3. I frequently develop computer or Internet based assessment tasks.

Responses indicated only a 37% broad agreement with this statement. Similar inferences to Q1.
Q4. This session has improved my understanding of computer or Internet based assessment.

Responses indicated a 90% broad agreement with this statement. Professor Crisp had indicated that one of the key purposes for the presentations was to improve participants’ understanding of e-assessment. The results from this question suggest that the presentations were successful in this regard.

Q5. I will be able to use information from this session in my own teaching or practice.

Responses indicated a 78% broad agreement with this statement. This would indicate that the majority of participants felt the information and examples that were presented were relevant and could be translated into practice.

Q6. I would like to learn more about computer or Internet based assessment.

Responses indicated a 92% broad agreement with this statement. This would indicate that the issue of e-assessments is topical and likely to result in a reasonable level of interest and engagement.
Q7. I use diagnostic assessment (assessment for learning) in my teaching.

Responses indicated a 47% broad agreement with this statement. Professor Crisp indicated that he would be emphasising the use of e-assessment for diagnostic and formative assessment, so the responses to this question indicated that approximately half were already using some form of diagnostic tasks for students.

Q8. I think computer or Internet based assessment is only useful for simple questions relying on recall or memory.

Responses indicated only a 4% broad agreement with this statement, with 87% disagreeing or strongly disagreeing. This would indicate that the majority of respondents understood that e-assessment could potentially be used to assess higher order learning.

Open Ended responses

The open-ended responses, ordered by the most popular themes highlighted by the questions, are shown below. *The full set of responses to the open-ended questions is included as Appendix 6.* Respondents focussed on the presented examples, the quality of the speaker and presentation, and the opportunity to reflect on assessment as highlights. Areas for improvement included local issues with equipment not working as expected, some discipline areas not being covered in the e-assessment examples, more details for the assessment of Web 2.0 learning technologies including social networking and virtual worlds, more details on automated marking of essays.
**Q9. The best aspect of this session was:**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of respondents to address theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion of practical examples</td>
<td>55</td>
</tr>
<tr>
<td>Reflecting about assessment</td>
<td>25</td>
</tr>
<tr>
<td>Excellence of presenter/presentation</td>
<td>6/10</td>
</tr>
<tr>
<td>Breadth of content</td>
<td>12</td>
</tr>
<tr>
<td>Increased knowledge on assessment</td>
<td>12</td>
</tr>
<tr>
<td>Links to web site</td>
<td>9</td>
</tr>
<tr>
<td>Votapedia</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
</tr>
</tbody>
</table>

**Q10. This session could be improved by:**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of respondents to address theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time for session</td>
<td>11</td>
</tr>
<tr>
<td>Equipment not working</td>
<td>11</td>
</tr>
<tr>
<td>More information in specific areas of interest</td>
<td>13</td>
</tr>
<tr>
<td>Logistics (venue, equipment etc)</td>
<td>7</td>
</tr>
<tr>
<td>Handouts</td>
<td>7</td>
</tr>
<tr>
<td>Positive comments only</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
</tr>
</tbody>
</table>
Survey 2 – feedback from participants subsequent to seminar or workshop

Evaluator – Edward Palmer, University of Adelaide

At the conclusion of the Fellowship, an online survey was undertaken over a 3 week period to determine if the seminars and workshops had any impact over a period of time. The contact person at each visit site outlined in Table 1 (main report) was sent an email with a link to the online survey. They were invited to pass on the email to any relevant local participants who attended the seminars or workshops. The survey consisted of 6 Likert scale questions, 2 multiple response question and 2 open-ended questions. The results of the 28 completed surveys are shown below. Open-ended comments (the full list contained in Appendix 5) have only been modified where the text contained information that might identify the person or the location.

Q1. The e-assessment presentation provided a useful mechanism for bringing staff together to talk about assessment issues.
Responses indicated an 82% broad agreement with this statement.

Q2. The e-assessment presentation promoted discussion amongst staff about assessment issues on the day of the presentation.
Responses indicated an 86% broad agreement with this statement. Taken together with Q1 and the open-ended comments to Q8 it would appear the majority of respondents to the survey felt the seminars and workshops were useful and did facilitate some level of discussion of assessment at the local level.

Q3. The e-assessment presentation promoted discussion amongst staff about assessment issues in the week(s) after the presentation.
Responses indicated a 64% broad agreement with this statement: lower than the level of broad agreement reported for the 2 previous questions. 28% of respondents were not sure or neither agreed nor disagreed with the statement. These responses begin to highlight one of the issues with visits from scholars, they are often useful and well received on the day, but it is not always clear what lasting impact they have had on the participants. Nevertheless, a 64% broad agreement could be taken to indicate some level of impact in the period beyond the day of the seminars and workshops.

Q4. Teaching staff have PLANNED changes to their assessments as a result of discussions since the e-assessment presentation.
Responses indicated only a 33% broad agreement with this statement. 63% of respondents were not sure or neither agreed nor disagreed with the statement. This reinforces the issues highlighted for responses for Q3.

**Q5. Teaching staff have MADE changes to their assessments as a result of discussions since the e-assessment presentation.**
Responses indicated only a 15% broad agreement with this statement. 74% of respondents were not sure or neither agreed nor disagreed with the statement. This again reinforces the issues highlighted for responses for Q3.

**Q6. We have formed a community of practice around assessment issues as a result of the e-assessment presentation.**
Responses indicated only a 27% broad agreement with this statement. 42% of respondents disagreed or strongly disagreed with the statement. One of the purposes Geoff stated for making visits to so many locations was to facilitate the formation of local communities of practice around e-assessment. These responses would indicate that this has not happened to a significant extent. It is likely that further activities would need to be undertaken to encourage the development of sustainable local communities around key issues.

**Q7. Teaching staff have planned or made changes to their assessments in the following areas as a result of the e-assessment presentation (tick all that apply):**
59% of respondents plan to use the mobile phone voting system Votapedia. This appears to be one of the most popular aspects to arise from the seminars and workshop, along with the use of interactivity in assessments, also supported by a 59% response rate. Since the seminars and workshops were framed around interactive e-assessments and the importance of feedback for students, this seems a positive outcome.

The open-ended responses tended to support the results reported from the Likert questions. Local areas used the visit as a catalyst to bring colleagues together to discuss assessment issues; the visits generated discussion on the day, and in some cases, in the period following the visit. It is not clear from the survey responses whether these types of visits facilitate long term change and it may be unreasonable to expect a single visit to bring about significant structural change.
Appendix 5

Open-ended comments for Survey 2 – feedback from participants subsequent to seminar or workshop

Q8. What was the major impact of having the e-assessment presentation at your institution?

1. The chance to bring interested people together to talk about assessment and to invite colleagues from a neighbouring university which enriched and extended that discussion.

2. Generating discussion around academic staff regarding the possibilities and limitations of e-assessment. The importance of feedback in particular was a great topic of discussion.

3. Raising awareness of the range of assessment that was possible in an e-framework.

4. Information and new ideas. It is always helpful to explore new ways to assess. Many staff will now think of alternative ways to assess, it is not likely that many will change. The institution will be doing some new things with assessment in the future. Nothing has changed so far from the institution’s perspective.

5. Having an opportunity for staff to come together to hear an outside speaker (with a very good reputation) talk about ideas and issues that are of real relevance to teaching and learning.

6. The use of java applets and Votapedia is gaining greater momentum as a result of Geoff’s seminar.

7. Raise profile of e-assessment across the university; reinforce ideas of good practice; provide further impetus to discussion about assessment taking place across the university.

8. The presentation was timely, in that it was at the beginning of a unit series rewrite. We invited Professor Crisp back to our school to participate in a further assessment workshops and discussions. In our school, I cannot speak for the wider xxxx community, e-assessment is widely used and is being designed to fit within our criterion referenced assessment framework. The initial e-assessment presentation was a catalyst for many staff to redesign their assessment.

9. Caused the audience (educators from xxx in the xxx sector plus Learning and development managers working in xxxx) to question how they teach and assess students.

10. The presentation triggered a more varied and more creative approach to assessment, based on the examples shown.

11. Being introduced to new ways to interact with students.

12. Well, it wasn't actually at my institution, but the impact on me was that (a) I came away to my own institution and organized a professional development activity on assessment (b) I commented on Geoff's presentation in my professional "blog" (it's actually an internal xxxx site).


14. I attended the xxxx session that Geoff presented. I found the discipline-specific focus of some of Geoff's initiatives a key driver and point of interest.

15. The presentation was excellent. Good to foreground assessment as a vital issue for students, staff and the wider community. Good to get together with others interested in the issue. I am a xxxx and encounter assessment issues in my interaction with students. I am unsure about Q7, so have left it blank.

16. As a one-time presentation on approaches from a specific Australian uni, it is probably too much to expect that significant changes will result.

17. Raising awareness of possibilities for on-line learning.
18. It provided a vehicle for those who prioritized limited capacity to attend and engage with this. It was a terrific presentation, however in the face of contemporary research output focus teaching is not seen as a priority. this ongoing dichotomy is a disgrace.

19. It launched a process that led to the creation of a task force on assessment for all the distance education programmes of the xxx of the University of xxxx. It provided a great opportunity to bring a lot of people together to start to talk about assessment.

20. Opportunity for staff to meet and discuss with presenter. As part of assessment initiatives already in place (and ongoing) the presentation was another opportunity to highlight issues.

21. Made me unpopular, as my colleagues who didn't attend still think the only way to assess is with big written tests and written assignments. ;-)

22. It brought staff in the Faculty together and generated good discussion on the day. If some of the answers to the above questions are inconclusive, it's simply because we have not followed up on the session to see what impact it may have had beyond the particular day - a problem for us, not for the presenter, to deal with.

23. Flexibility in the type of assessments taken.

24. no impact as major structural reorganisation at this Institution has dominated academics time

25. consciousness raising, a vital first step

Q9. What changes could have been made to the e-assessment presentation that would have made it more useful to your institution?

1. More time! It would have been great to have Geoff for more than a few hours so that he could run more 'hands on' workshops. In the available time, he did a great presentation.

2. Perhaps a more interactive discussion on assessment practice, however, in fairness, this may be a hindsight view.

3. It was very informative and presented well

4. I could have asked for a longer session. As it turned out the interest was there and many of the participants would have appreciated more time to hear and interact with Geoff. What was presented was excellent, but my decision to ask for a shortened time was made on the basis of trying to gauge what might be just enough to get people along. The lunch that was provided afterwards served to allow people to talk informally amongst themselves and with Geoff, so that provided some avenue for thought and discussion, for those who were able to stay.

5. Geoff's presentation was excellent. I find it difficult to find any areas where it can be improved.

6. We have issues around online examinations which a project is now addressing, some of these things could have been raised. Overall the presentations and workshops suited the audience well

7. We were on a videolink - face-to-face would have been better.

8. Have no suggestions for change; the presentation was excellent and introduced many developments and educational concepts to the audience.

9. None - it was a professional and thought-provoking presentation

10. It was a good presentation but I will not be using e-assessment in quite the way presented in this session

11. Solid value and excellent site.

12. Technical hitches at xxxx with logging on to the site in the afternoon session.

13. Our own situation would have benefited from less of a general focus on assessment and more discipline-based examples of the practices being recommended.
14. None--interesting and effective presentation

15. Simplistic surveys such as this that fail to take account of the realities of practice. This is very much a work in progress and hence was a great vehicle for those already engaged to refocus/re-energise attention. The average academic (if there is such a person) was not in attendance.

16. Make use of e-assessment during the presentation to show how it works and that this is more than just “do as I say not as I do”. Add an online component setting up an online community of practice to provide an ongoing forum of like minded people across institutions.

17. None - it was very appropriate

18. Additional simple examples of e-assessment, especially of different applications/situations would be useful.
Appendix 6
Open-ended comments for Survey 1 – feedback immediately after the seminar or workshop

Open-ended comments have only been modified where the text contained information that might identify the person or the location.

Q9. The best aspect of this session was:
The range of practical examples shown
Getting us to think about possible types of problems to ask.
Encouraging reflective practice around assessment.
Emphasis on reflective practice
Broad view of the subject, good examples.
Pointer[sic] to subject based examples to encourage use of tools.
The examples of plugins. Talk about xxxxx.
Introduction of different assessment tools
Clarity of concepts explained, well presented, good speaker
Seeing examples. Discussion of more radical approaches
Examples of interactive questions. Using applets virtual 3D etc
Improving understanding + possibilities regarding interaction in e-assessment.
Helping me to think through how to use e-based assessment
Increased my knowledge of the diversity of e-assessment
It confirmed my belief in the inability of current systems (LMS etc) to allow the flexibility of learning/assessing that determines truly universal ODL.
The online examples
Web-based demonstrations
Looking at examples that can be used as questions for computer/internet based assessment. Handouts for the session would have been really useful.
Receiving an overview of various e-assessment interactive tools available. Affirmation that there is a degree of flexibility in terms of choice which is vital if ones it to maintain academic rigour.
Examples, sources.
The Discussion and responses to the points made.
Useful ideas scattered throughout the session.
Opening my vision to greater use of the diagnostic to inform and improve practice.
The concept and examples were conveyed succinctly. Helped to re kindle interest. Had personally used a content free tool for students to work in groups to produce case plans based on different case scenarios many years ago.
Good overview of field
Discussion; useful examples in presentation
Seeing the range of applications that are out there.
Practical examples. Thankyou interesting stuff.
Very good practical examples. Very good presenter
Seeing the difference between using e tools for learning and applying to assessment.
The volume & diversity of examples to look at and interact with.
The different assessment types & Java Plugins that are available.
Exposure to different concepts/ideas/free software
The idea of separating the tools from the assessment so they can be used for many different things.
Demonstrations of clicker system.

Web links
It increased my knowledge and understanding of e-assessment, so I am more likely to consider using it.
Ideas for different areas
Exposure to e-assessment tools used in other disciplines
Knowledge regarding the present state of e-assessment and realising the scope for it
Motivation for very new methods of assessment
The new possibilities for interactivity in e-assessment.
Learning new options for both e-assessment and e-learning generally

Breadth of coverage. Concrete examples

Opportunity to access andy.services.adelaide.au.

Enhanced understanding of the resources that are available to explore and think about in relation to e-assessment possibilities.

Broadened my knowledge.

Introduction to the response card

Easy to follow and engaging

Reminder of the need for flexibility during presentation

Good examples. Readily understandable for the technophobes!

Being able to gauge current level of knowledge, level of interest and understanding.

Examples of e-assessment, java applets

Idea for creating sophisticated test item on computer. (Not just a copy of paper-test form)

Chemistry examples, since I'm a chemist developing e-learning chemistry courses...

I learned a lot not withstanding the limited time allocated for presentation.

Showing us the possibilities - giving useful links to look at e-assessment examples

First exposure to the e-learning. E-assessment possibilities which was very timely. Have funding to do some of this in a new unit in semester 2

Good overview

Learning that the material is publically available on a moodle and that there are Education examples.

Exposure to freely available tools. Keeping the tool separate from the asmt.

Excellent in every way! Visuals, talk, background.

Changed my approach to delivering e-assessment - separating the LMS from the applets etc.

Excellent collection of resources

Exposure to new ideas & examples

Being made aware of different methods for providing more diverse assessments.

All of it. Thanks Geoff.

Sharing information - useful sites that I will explore for myself

Useful websites and sample e-assessment exercises, ways in which existing sites could be incorporated into elearning

Computer demonstration

Examples, models of teaching

Useful!

Expert input

Interesting. Loved the examples

Breadth of options

Conceptual issues associated with e-assessment - with practical examples

Good visuals; order of content; interesting choice of examples

Geoff's presentation was highly informative & relevant

Applets and discussion after talk on "creating instances" as a computer assessable divergent response type question

Reflection on what we are doing as teacher

Good coverage of a range of tools. Clearly explained

Learning about new resources available

Range of examples- very informative guide to where to look next

Examples of how e-assessment can be used

Examples of different e-assessment techniques

Geoff's style and extensive expertise

Examples, URLs

Examples of uses, reference to existing and accessible tools (sites, applets, etc)

Will make more use of diagnostic assessment - especially useful for distance education.

Practical examples

Good examples shown. The best thing about e Assessment is that it makes us think about better ways of assessing in general. Knowing about votapedia & clickers might encourage us to check student engagement understanding & response by hand raising etc.

Consideration of links between learning + assessment + different types of assessment. Seeing possibilities.

Working examples of e-assessment questions & applications.
The presentation’s ability to situate the objectives of the session in a wider framework of assessment.
A very considered, interesting seminar utilising great examples.
The context & overview to what assessment is & how e-assessment can fit into this.
Examples that used in this presentation
Value adding ideas eg create models students can manipulate, spreadsheets
The great examples - relaxed presenter.
The concept that assessment can go beyond simple question or convergent assessment.
Practical examples across a variety of disciplines. Clear explanations
Came late - but had practical approach to using existing tools for approach to assessment. Adaptable to classroom, online only delivery
I found out about a whole world of assessment in other disciplines that I didn't know anything about. It seems more relevant to sciences, engineering, nursing etc as shown.
Exploring options beyond MCQ - seeing the potential
The pace of the session
Examples of tools
Introduced a useful perspective and examples of connecting E learning activities with assessment.
The idea of providing online tools within assessment
Web links to explore
Great to see another system
Practical examples provided.
The fact that real examples have been used
Finding out about votapedia and some of the other tools.
The diversity of possibilities presented and the inclusion of science/math based content and its "address"
Learning about what can be used for problem based learning
Getting us thinking
Finding out what is available
Clarity of terminology + of message; variety of possibilities and simplicity of applications (ie. Written Q with link).
Expanding the limits of my imagination
Seeing variety of assessments
Plenethora of examples from many disciplines.
An obvious commitment to developing more pedagogically appropriate strategies.
Practical examples
Votapedia demo
Vodaphone experiment
Strong connection to assessment principles generally and how this looks in appropriate contexts in practice.
New vistas
It's accessibility for someone like me who doesn't use e-assessment
Open my eyes with e-learning & e-assessment. Good presentation. Thanks a lot!
Concepts useful, will probe further
The ideas that it sparked with regard to my own courses - at times this was in parallel to the talk itself but I found the environment of the talk very conducive to reflecting on my courses + about creating new methods.
Seeing the range of examples & the theoretical framework.
Contexts set (assessment concepts) Examples
It gave me a chance to think about what I'm doing and provoked some ideas. I'm pondering how to include more divergent activities or assessment.
Internet links to useful sites. Showed me how much I have to learn
It was excellent in terms of demonstrating what is available + opening up the opportunities.
Examples. Likely resources - must take a look at the website
Real life info that could be useful for Teacher Ed. formative assessment uses in lectures - v. useful
Speaker content - very clear speaking style, good handling of questions, many different examples
Q10. This session could be improved by:

More example assessments
More humanities-based examples
Sound examples? Music/video slides
Enough clickers!
Giving us all a computer card to play with
It would have been nice if the technology available had supported the interactive elements!
Examples of assessment from the social sciences
More time spent/detail on the development of interactive e-assessments.
Giving it to Instructional Designers rather than ‘teachers’!
A break in the middle. More interactivity. (I’m human - if I sit in one place for too long I go to sleep!)
More information on relevance and examples of interactive e-assessment from a summative point of view.
Handing out presentation before session for notes!
If the interactive evaln assessment worked! Mind you - illustrates the problems.
Handout with PPT notes before the session. More specific information available about the technology aspects.
A follow up where an e-mail with a link to my discipline automatically happens!
Handout with basic information on the urls etc used
I would have liked to try out the clickers.
Perhaps making us think about how we could use some of the ideas in our own subjects
Adding activity for audience. Adding more dimension of e-assessment/ie peer review over e-assessment
For discipline - specific relevance
I would like to know the efficiency of these tests for student learning. How do you know the students are still not memorizing the answers when a lot of the answer systems are still multiple choice.
Could be longer
Material on Law!
More info about law related online assessment! (or specific sessions for different areas eg health, law, education etc)
Further examples from different academic areas.
Providing handouts for session at session. Many thanks.
A bit more time spent on "how to"
Longer!
Longer!
Longer time to discuss applications
Opportunity to hear more from longer session.
Allowing more time for it.
More detail, more time. I’d like to get the book
Slow down speed of talking, a little bit.
Seeing the 1 hour version
The examples used to show e-learning actually working
Making the computer stuff actually work. If the expert can’t get it to run what hope do we mere mortals have.
IT issues - but this was illustrative of some issues with the technology.
Targeted to specific disciplines
Thanks!
The equipment working!
Thank-you!
Nothing i could think of. Thankyou
More info on finding applets, particularly reliable ones.
More advice/practical assistance on finding appropriate tools/java applets - ideas on where and how to look.
Better room, enough seating for respondents. Explaining better how summative Ex works. Does the computer determine outcome? Or is that up to the academic?
Better venue
Handout with websites
Can't think of anything. It was very informative
Difficult to think how
No good suggestions at this time
URL listing used in presentation
(ok in andy-services site) Sharing selection of tools and creation of assessment materials for some (2-3) assessment objects- ie. Process. Eg desired outcome ->choice of question & online tools -> how to create
Coffee
Nothing. It was extremely informative & gave me many ideas. Thanks.
Demonstration of e-assessment techniques to support group work & PBL & role plays, peer assessment
Getting the computer working
Links to the web sites - Pool or cluster where we can get info.
It didn't seem relevant to my area and probably can't be because of the assessment type (essays, presentations & teaching practice) we use. Don't know what you can do about that.
Making sure the technology works. Showing us more of the interactive examples. Not sure from your talk about the 'brief intro to assessment' relates to the interactive e-assessment section of the seminar.
Having java applet working - a xxxxx issue
Having a computer with the required software (eg Java) installed. Cut the lengthy intro - it took the first 20 minutes of the session before getting onto the first item in the abstract. Have larger images in the handouts - the handouts were mostly unreadably small. A couple of more thoroughly demonstrated examples using plugins would have been a good way to illustrate their use rather than many superficially discussed examples.
All good - a session on sakai version
Working out practical individual cases or solutions for our situation.
Access to technical support when I start using these tools
Framework
It was great for this session. One day I'd love to hear how you'd talk this through with academics - nuts and bolts stuff about developing the materials
Getting vol equipment to work!
Very good. Really liked that initial picture
Shorten the presentation (a little) by presenting lesser (slightly) examples for explaining an idea/a concept.
More examples of complex problem solving case studies from start to end. A few less simple examples - 1 in enough for each point otherwise becomes tedious.
Having a number of computers for audience can play on.
Focus on smaller number of examples, but showing more detail of how it has been done in reality.
More interaction with the audience. This is too long to sit quietly and stay engaged.
Follow up needed
I had no idea it was about e-assessment so I was a bit unprepared - whoops! A lot of what was discussed was irrelevant to me although I can see the applications. Thanks
Positioning of speaker and screen (having 2 screens?). Gives speaker orientation/affiliation of speakers so can choose examples to show tailored to group.