

EFFECTIVE ASSESSMENT WHICH PROMOTES LEARNING

Rationale and Online Strategies

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LTDU Current Issues in Higher Education



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The theme for the LTDU's MyUni Post Orientation Workshops (POW) for Semester 1, 2004 is 'Effective Assessment which Promotes Learning'. This seminar will provide a rationale for this theme, including online strategies such as rubrics, groupwork, interactivity and multimedia.

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MyUni Post Orientation Workshops S1 2004

[http://www.adelaide.edu.au/myuni/instruct/
using/po_training.html](http://www.adelaide.edu.au/myuni/instruct/using/po_training.html)

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Slide 3

Six half day workshops have been scheduled with the theme ‘Effective Assessment which Promotes Learning’

Each session discrete but a linked theme.

Resources uploaded at completion of each workshop for those people who are unable to make all sessions and wish to review previous workshops

ASSUMPTIONS

- **Formative as well as summative assessment**
- **Higher order learning is goal**
- **Formative assessment which promotes learning implies feedback to students**

Other assumptions – learning outcomes clearly defined

All lecturers and students have access to MyUni courses

FRAMEWORK

- **Much of HE still in 1st generation stage of e-learning**
- **Online learning is here to stay**
- **Online interactive technologies promote higher order learning**

Background – little use being made, not just at U of A, but generally, of interactive and collaborative features of learning management systems such as MyUni. Includes assessment, discussion board and group features. Still in first generation stage of e-learning – content repository.

Research also indicates that online learning is here to stay. Not instead of traditional face to face, and not only for distance education, but in a blended learning environment

Reasonably current research also indicates that online interactive technologies including written asynchronous communications can help promote higher order learning more effectively than in traditional classroom settings

Generations of Educational Technology

<p style="text-align: center; border: 1px solid gray; border-radius: 15px; padding: 2px 10px; display: inline-block;">First Generation</p> <p>Characteristics</p> <ul style="list-style-type: none"> ▪ Mass production for DE ▪ Print based ▪ Independent study <p>Interaction</p> <ul style="list-style-type: none"> ▪ With teacher via mail, email, phone ▪ No peer interaction 	<p style="text-align: center; border: 1px solid gray; border-radius: 15px; padding: 2px 10px; display: inline-block;">Second Generation</p> <p>Characteristics</p> <ul style="list-style-type: none"> ▪ Mass, broadcast media - videoconferencing ▪ Simulations, multimedia drill & practice ▪ Self-paced tutorials ▪ Still independent study ▪ Cognitive learning theory <p>Interaction</p> <ul style="list-style-type: none"> ▪ As with first generation ▪ + students & delivery institutions 	<p style="text-align: center; border: 1px solid gray; border-radius: 15px; padding: 2px 10px; display: inline-block;">Emerging</p> <p>Characteristics</p> <ul style="list-style-type: none"> ▪ Learning management systems ▪ Information retrieval ▪ Interactive features ▪ Artificial intelligence <p>Interaction</p> <ul style="list-style-type: none"> ▪ Animated learning objects ▪ Automatically updated & created ▪ Agent tools
<p style="text-align: center; border: 1px solid gray; border-radius: 15px; padding: 2px 10px; display: inline-block;">Third Generation</p> <p>Characteristics</p> <ul style="list-style-type: none"> ▪ Audio, video & computer conferencing ▪ Constructivist learning ▪ Problem-based learning <p>Interaction</p> <ul style="list-style-type: none"> ▪ Asynchronous & synchronous ▪ Human interaction ▪ Individual & group learning 		

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GENERATIONS OF EDUCATION TECHNOLOGY

Adapted from Garrison and Anderson 2003: 35-39

Refer to separate handout

ONLINE EDUCATION'S FOCUS

- Online learning is a very different way of learning from traditional learning.
- Access to information is one of its features, however **its strengths are its communicative and interactive features.**
- Our goal is to ensure that these features are used well to impart learning.

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Slide 7

Our focus is on assisting academics provide a quality e-learning experience for their students. And to allow academics to get to know their students and the quality of their learning. We further support Garrison and Archer's view that

'assessment fundamentally shapes learning, particularly if we hope to approach learning in a deep and meaningful way.'

and also

'education should be a collaborative constructivist experience where understanding is developed within a critical community of inquiry.' (Garrison, Archer: 93)

The dominant educational feature of online learning is asynchronous, collaborative learning, although recently there have also been advancements in synchronous collaborative technologies.

INTERACTIVITY

- The internet and WWW have been used to store and retrieve information but as a medium of communication and interaction, is yet to be fully exploited within education.
...the educational community has barely begun to appreciate the collaborative capabilities of e-learning and, as a result, these capabilities are greatly under-utilized
Garrison and Anderson 2003:23

Extensive research has been undertaken into the importance of interaction within education, eg Laurillard (2000), Palloff and Pratt (1999), Hannafin (1989), Anderson and Garrison (1997)

Hannafin (1989) identifies five functions of interaction which are critical within the e-learning educational context – pacing, elaboration, confirmation, navigation and inquiry. Garrison and Anderson add a sixth – study pleasure and motivation (2003:42).

These interactions can be supported individually or in groups, in real time (synchronously) or in delayed time (asynchronously).

A quality e-learning experience incorporates interaction and engagement between teacher and learner, learner and learner, learner and content, teacher and content, teacher and teacher and even content and content.

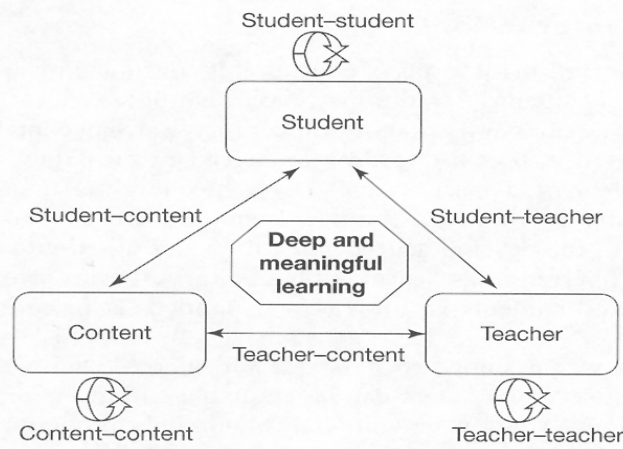


Figure 4.3 Modes of interaction

Garrison, D. & Anderson, T. (2003). *E-Learning in the 21st Century*, London, RoutledgeFalmer, pp43.

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Slide 9

Garrison, D. & Anderson, T. (2003). *E-Learning in the 21st Century*, London, RoutledgeFalmer, pp43.

Student-content interaction, teacher-content interaction – content can now be animated, give individual feedback etc.

COMMUNITY OF INQUIRY FRAMEWORK

- *A **critical community of learners** is composed of teachers and students transacting with the specific purposes of facilitating, constructing and validating understanding, and of developing capabilities that will lead to further learning. Garrison and Anderson 2003:23*
- Such a community encourages cognitive independence and social interdependence simultaneously.

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Slide 10

This is a session in itself. The framework incorporates and expands on teaching, social and cognitive presence in an online learning environment. Rather than pursue this framework further today, it will be uploaded as a separate resource to this presentation.

Higher order learning: “higher order thinking that is conceptually rich, coherently organized and persistently exploratory” Garrison et al (2003)

Bereiter 1992:352 ‘the teaching of high-level concepts inevitably involves a considerable amount of discourse’.

The Learning Community

E-learning, properly designed, has all the potential to not compromise the values of higher education, but to create the idealized community of inquiry.
(25)

Such a community encourages cognitive independence and social interdependence simultaneously.

STRATEGIES EMPLOYED

- **Designed effective assessment criteria and solutions**

- **Current Issues in HE**

http://www.adelaide.edu.au/ltdu/staff/seminar_papers/031031_baron.pdf

- **Collaboration and conference presentation with like-minded lecturers**

<http://www.unisa.edu.au/evaluations/Full-papers/BaronFull.doc>

<http://www.unisa.edu.au/evaluations/Presentations/BaronRubric.doc>

Adjusted format of MyUni POW

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Compiled criteria and solutions of effective assessment. Separate handout.

Ran a session in 2003 within Current Issues in HE – avoiding plagiarism via MyUni

Collaborated with like-minded MyUni lecturers and presented at an Evaluations and Assessment Conference in late 2003, along with Dr Mike Keller. Rubrics and Online Assessment

Adjusted the format of the MyUni Advanced Workshops to MyUni Post Orientation Workshops using a theme approach. Each workshop incorporates some theory as well as hands-on practice. Each workshop stands alone but complements other workshops. Resources uploaded at end of each session.

STRATEGIES continued

- **Revamped the MyUni Support for Instructors website**

<http://www.adelaide.edu.au/myuni/instruct/>

- **Update the Online Learning and Teaching website**

<http://www.adelaide.edu.au/ltdu/staff/online/>

- **Promote services of LTDU's Online Education at faculty level for seminars, workshops etc**
- **Continue to research and collaborate**

Access MyUni Support for Instructors website from MyUni login page

Access Online Learning and Teaching website from LTDU home page

MyUni FEATURES

- **Groups**
- **Discussion Board**
- **Assessment**
- **Collaboration**

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Slide 13

1 These first three features of MyUni are promoted extensively at the moment by LTDU in order to provide strategies for lecturers to design effective assessment which promotes learning. All are asynchronous forms of communications

Being able to competently employ the MyUni features as an Instructor eg set up groups, forums and threads, assessment activities with feedback, embed multimedia etc, is one thing. To effectively design, facilitate and evaluate these features is another thing.

Instructional design, using rubrics, exemplars, providing tips of online facilitation, group learning etc, ie the pedagogy of online learning is another thing. Undertaken via POW, faculty level seminars, online resources, individual consultation.....

2 Collaboration – MyUni has two types of real-time (synchronous communication tools) the lightweight chat and the virtual classroom. Neither are being used very much within UofA, however this is expected to change when the technology is more stable and LTDU actively promote it more.

A complementary technology, which can be linked to from within MyUni is a virtual classroom which has been successfully trialled this year by Online Ed and now forms part of the curriculum within Burns Unit, Clinical Nursing.

Multimedia

MyUni Post Orientation Workshop

AIMS: To develop an understanding of

1. The educational value of multimedia in course delivery.
2. Types and examples of multimedia.
3. How to effectively include multimedia in course material.
4. Multimedia in MyUni – hands on practice of using multimedia and the assessment tools in MyUni.

We use the term 'multimedia' quite loosely often referring to anything interactive or with audio / video.

The next POW workshop will focus on Multimedia.

The workshop will promote interactivity within online materials, and particularly assessment for learning. It will demonstrate how MyUni can be effectively used as an online environment rather than just a content repository.

Why use multimedia in course delivery?

- To demonstrate abstract concepts
- To accommodate students with a variety of learning styles
- To engage students
- To enable active learning

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Pow workshops focus on **Pedagogy first, Technology second**

We aim to put across the idea that learning should drive technology, not technology drive the learning.

Why use multimedia?

Engaging, Meaningful, Flexible, Allows for reflection, Active learning, Learning Styles, Abstract concepts

Why not use multimedia?

Don't use multimedia just because you can.

When the media doesn't have a clear purpose and is just used as a 'wow' factor it can actually take away from the intended learning.

Different types of educational multimedia.

Text, images, audio, video.

Interactive technologies – Flash, Shockwave, Java Applets, Dynamic webpages

How to effectively include multimedia in course material.

In General:

Provide options, Address accessibility, Chose the right media for the right content

In assessment:

Feedback, Reflection, Formative assessment

Multimedia and assessment for learning

- Assessment drives learning to a high degree.
- By incorporating multimedia into assessment activities, students can manipulate, create and interact with material rather than just absorb representations created by others.
- Multimedia can be used to help students construct their own knowledge.

Theme for POW Semester 1 2004 is:

EFFECTIVE ASSESSMENT WHICH PROMOTES LEARNING

Hands on practice with MyUni

- Using multimedia in online assessment:

Developing an online formative MyUni quiz incorporating various forms of multimedia.

Theme of POW workshops for Semester 1 2004:

EFFECTIVE ASSESSMENT WHICH PROMOTES LEARNING

10 Steps for including multimedia in your course:

media. Determine educational outcome that is to be achieved by the

Collect / build media

step 1? Evaluate - Does the media meet cover the outcome identified in

Customise media

Optimise media

Upload media

Write instructions

Test media

Review instructions

later....

Evaluate effectiveness of media in achieving outcome.

REFERENCES

- Anderson T & Garrison D (1997) 'New roles for learners at a distance', in CC Gibson (ed.) Distance learners in higher education: Institutional responses for quality outcomes, Madison, WI: Atwood Publishing
- Bereiter, C (1992) Referent-centred and problem-centred knowledge: Elements of an educational epistemology, *Interchange*, 23, 337-361
- Garrison D & Anderson T (2003) *E-Learning in the 21st Century: A framework for research and practice*, London, Routledge
- Hannafin M (1989) Inter-action strategies and emerging instructional technologies: Psychological perspectives, *Canadian Journal of Educational Communication*, 18: 167-179
- Laurillard D (2000) New technologies and the curriculum, in P Scott (ed) *Higher Education Re-formed*, London: Falmer Press
- Palloff R and Pratt K (1999) *Building learning communities in Cyberspace*, San Francisco: Jossey-Bass



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Slide 19

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