Assessment and feedback in the digital age university

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Outline

• The current context of assessment and what that implies
• What does assessment need to do?
• Key themes:
  – Formative assessment/ feedback
  – Student engagement
  – Program-wide (to be discussed by Sue Bloxham)
  – Digital enablement (embedded in everything)
Why assess?

- Engage and direct learning productively
- Enable feedback
- Demonstrate and celebrate outcomes
Outcomes are central

• International convergence on the importance of representing courses in terms of learning outcomes
• Learning outcomes are demonstrated against agreed academic standards indicated by particular criteria
• International discussions to establish agreed threshold learning outcomes for each discipline
What is assessment (in the context of learning outcomes)?

• Judging whether students can demonstrate attainment of learning outcomes to a given standard.

• Transparent standards must be established for assessment tasks
  – Setting a pass mark is not setting a standard!
  – Setting a general set of standards for a course is not enough
  – Use of terms such as good, superior, excellent does not indicate a standard or communicate a level

• All assessment must be standards-based (criterion-referenced)
  – Norm-referencing is inappropriate
What does this imply?

• All assessment involves identifying appropriate standards for the tasks students undertake
• A range of assessment approaches must be used appropriate to the learning outcomes to be assessed
• The balance of assessment approaches must reflect the range of learning outcomes
  – eg. overemphasis on tests, examinations or any other single measure is precluded
What does it *not* imply?

- Standards are unilaterally applied
- Students are not involved in assessment
- All learning can be predetermined
- All learning can be easily measured/judged or is worthwhile
What does assessment need to do?

• Contribute to certifying student performance
  – Summative assessment

• Provide them with useful information to aid their learning now
  – Formative assessment

• Build their capacity to make judgements about their own learning
  – Sustainable assessment
Key themes

A. Formative assessment and feedback
   – ensuring assessment really supports learning
B. Student engagement in assessment
   – seeing assessment not as something ‘done’ to students
C. Program-wide assessment
   – How can the whole be greater than the sum of the parts?
D. What else arises?
   – Other pressing issues that must be considered.
A. Formative assessment

• Formative assessment is a *purpose* of assessment not a type of assessment

• Resources limit the amount of feedback information from staff, so be very strategic/selective in *what* we do and *when* we do it

• Other humans (peers, practitioners) and non-humans (eg. on-line self-testing and remediation) have important roles, which need to be clarified
Feedback needs to be properly understood and embedded in courses

Feedback is about **effects** not inputs

- Feedback is *not* synonymous with comments provided to students’ about their work
- Feedback cannot be said to occur unless a student’s work is positively influenced

*Implies:*

*course units deliberately designed to allow for multiple feedback loops to be incorporated each semester. Feedback is used where it is most needed to match courses to student differences*
Feedback as Iterative Task Design
Nesting of tasks enables feedback loop to be completed through knowledge of the effects of earlier information provision in subsequent tasks.
From Boud and Molloy (2013)
What does feedback do?

• It bridges the gap between teaching and learning, ensuring the curriculum is adjusted to the needs and learning of students.
• It cannot be enacted without the engagement of participants—students and teachers.
• It only makes sense and it is necessarily stimulated by what students actually do.
What is feedback?

“a process whereby learners obtain information about their work in order to appreciate the similarities and differences between appropriate standards for any given work, and the qualities of the work itself, in order to generate improved work”

Boud and Molloy 2013
Elements of feedback we can influence

- Location of tasks
- The nature of tasks involving feedback
- Who provides input to learners
- The nature of that input
- When that input is provided (vis a vis completion of the task)
- What students are expected to do prior to the task with earlier information
- Identifying that the input has been utilised effectively
For feedback to have an effect, students *must* be engaged

- Through engaging tasks
- Through engagement with the processes of feedback
- As initiators of feedback interventions
- As contributors to feedback for others
What do/can students do?

• Be expected to act on feedback—at least to respond to it
• Ask for particular feedback—position them as active players
• Engage in a subsequent task in which they practice in areas in which they have not reached an appropriate standard
• Be expected to monitor their own achievement
What is sustainable feedback?

• Doesn’t continually need a teacher (or teaching system) to generate
• Helps develop students’ judgement of their work
• Develops learners’ capacity to identify appropriate standards and criteria
• Develops learners’ ability to locate and access useful sources of feedback
• Involves learners working with multiple others in giving and receiving feedback
B. Student engagement in assessment

Why involve them?

• They need to know how to judge the work of themselves and others
• They need to appreciate standards and criteria for good work to be effective learners
• They can’t act effectively unless they know what they know/don’t know, can/cannot do.
Every act of assessment builds student capacity to judge work

• The most basic outcome of any course is that students can judge good work
• This capacity needs to be developed over time in conjunction with the assessment of tasks

*Implies:*

*Identifying how the activities involved in each task enable students to develop skills of judging their own work and that of others*
How can students be more actively involved in assessment?

Applicable to all students

• Through not being the passive recipients of assessment acts
• Through choosing assessment tasks appropriate to learning outcomes
• Through identifying standards and developing suitable criteria by which to judge their work
• Through acting as sources of feedback information for others
• Through being expected to act on feedback in subsequent work
Criteria for good assessment

1. Together, assessment activities address the different purposes of assessment
2. Linked to full range of unit and (agreed) program outcomes
3. Enables multiple feedback loops to be utilised
4. Aligned with learning activities, not just presentations
5. Tasks are worthwhile/significant in their own right (not unnaturally contrived for assessment purposes)
6. Enables judgements to be made about whether all students have met given standards
7. Equips students to judge their own work
8. Builds students’ capacity to continue to learn
C. Program-wide assessment
View student experience of assessment across a program

- Students graduate from a program or course; the external world expects the outcomes of the program to be met
- Courses units are a means to this end
- Assessment needs to look across program elements; unit elements must combine to lead to the program outcomes

*Implies:*

much greater levels of cooperation and sequencing in a program in designing assessment. Holistic assessment planning
Curriculum mapping and alignment

• Undertaken to connect assessment tasks with unit and course outcomes, including graduate attributes
• Do the various course units enable students to develop the planned outcomes, and are they being assessed to ensure they have been achieved?
• Is the balance across different units and over time balanced and appropriate?
• Focus is on what is intended
An example of a curriculum mapping tool

Curriculum Mapping Tool – Subject Overview Spreadsheet (SOS): (Bajada, Lawson, & Lee)

• The SOS is a tool for curriculum mapping to plan for student graduate attribute development across a whole program. It collects data for course units, then produces a series of tables so that course teaching teams can view the types, weightings, and distribution of intended graduate attributes, program and unit learning outcomes and assessment tasks.

• The tables are used to identify ‘gaps’ or ‘overloading’ in the assessment design so subjects can be adapted to provide a more appropriate balance for the students.

Download available from assuringlearning.com
An example—Re:View

• ReView is a web application developed to aid marking, feedback and graduate attribute development.

• Student self-assessment and comparisons with tutors is an option that can be selected for each task.

• It enables students to track their development over time.

http://reviewsecure.com
Evidence of understanding & ability to identify design determinants for thermal performance.

Critical review and evaluation of overall design with respect to thermal performance demonstrated through reasoned argument and illustrations.

Discussion and Interpretation of your analysis (quantitative and qualitative)

Ability to make creative and informed design decisions to enhance thermal and environmental performance and occupant comfort.

Ability to use quantitative and qualitative evaluative processes to inform design decisions that enhance thermal performance of building.

Evidence of understanding selected topic area in sustainability and its implementation to design project

Evidence of thoughtful design integration of selected sustainability strategy
Close up of staff marking screen with student’s self assessment

- Evidence of understanding & ability to identify design determinants for thermal performance.
  - Grade: 81

- Critical review and evaluation of overall design with respect to thermal performance demonstrated through reasoned argument and illustrations.
  - Grade: 74

- Discussion and Interpretation of your analysis (quantitative and qualitative)
  - Grade: 70

- Ability to make creative and informed design decisions to enhance thermal and environmental performance and occupant comfort.
  - Grade: 62

- Ability to use quantitative and qualitative evaluative processes to inform design decisions that enhance thermal performance of building.
  - Grade: 73

- Evidence of understanding selected topic area in sustainability and its implementation to design project.
  - Grade: 61

- Evidence of thoughtful design integration of selected sustainability strategy.
  - Grade: 81
Resources

• **Assessment decision-making for course units**  
  OLT project: [assessmentdecisions.org](http://assessmentdecisions.org)

• **Assuring learning**  
  OLT project: [assuringlearning.org](http://assuringlearning.org)

• **Feedback**
  
  University of Edinburgh feedback resources:  
  [tla.ed.ac.uk/feedback/index.html](http://tla.ed.ac.uk/feedback/index.html)

  Re-Engineering Assessment Practices:  
  [reap.ac.uk](http://reap.ac.uk)

• **Assessment for future learning**  
  OLT Fellowship: [assessmentfutures.com](http://assessmentfutures.com)
References


Assessment Futures
Many students currently graduate without appropriate skills in assessment.

Assessment serves many purposes, including:
- helping students improve their learning, and
- certifying their learning.

This website is about an important additional purpose for assessment.

It is about equipping students for the learning and assessing they will need to do after completing their course and the challenges they will face after graduation.

Broad structure of the website:
This site provides information on:
- ideas and strategies to browse and consider, but no prescriptions for what you should do.
- ideas that are potentially applicable across a wide range of disciplinary areas.
- examples of how these ideas and strategies have already been used and tested.
- how to adapt and extend these ideas to suit your own subject matter and local circumstances.

Key assessment elements
- Engaging students
- Authentic activities
- Students design assessments
- Integrative tasks
- Learning and judgement
- Modelling and practice
- Working with peers
- Giving and receiving feedback

Who is this Assessment Futures website for?
- Experienced teachers in higher education, who have completed some study in the area. (It is not a basic introduction to teaching and assessment.)
- Teachers who have developed knowledge and skills in teaching and learning. They will know how to take ideas and design guidelines to develop and rework effective activities and strategies for their students.

Evidence and research findings
Assessment Futures is supported by theory and empirical evidence. For clarity this information is not foregrounded, but it can be accessed through hyperlinks to the various examples and to the references section of the site. Where evidence is partial or incomplete, the professional judgement of the author has been applied.

Research on assessment practice in Higher Education is limited and is often generated by a local problem or situation. It rarely tracks a major intervention or brings together different studies of the same thing. It tends to be suggestive and ambiguous. Implications are not always easily drawn from it.

If you have evidence that informs the practices described here, please contact us.