Assessment for Teaching & Learning Audit Benchmarks (ATLAB) Project

Dr Denise Whitelock
Senior Lecturer
Institute of Educational Technology
Open University

Dr Simon Cross
Learning & Teaching Development Team
Institute of Educational Technology
Open University

1 Aim

Benchmarking offers a comprehensive way of measuring current practice in an institution whilst also gauging achievement against external standards or competitors. Although attempts have been made to benchmark e-learning across a number of universities in the UK (Bacsich 2005; Marshall 2006; Higher Education Academy 2009), no one to date has tackled the area of assessment. We believe with the advent of more e-assessment, changing pedagogies and greater emphasis on learning (and assessment) designing that this area merits further investigation.

Our aims are two-fold:

- To develop a comprehensive set of measures with which to benchmark the processes and practices that promote quality assessment for teaching and learning. This will be done in consultation with university staff and the wider Higher Education sector,
- To create a tool that can capture the practices and processes associated with assessment and use the tool at the OU and with other external partners.

In developing measures and a tool our objective is to help provide module teams, faculties and the university with a method for:

- Benchmarking against good practice,
- Benchmarking across the university and between modules,
- Benchmarking against other national or international universities,
- Setting baselines,
- Module review, (re)design and development,
- Supporting continuous improvement initiatives ,
- Staff development and awareness raising,
- Contrasting student expectations and experience of assessment with staff perceptions.

2 Approach

The benchmarking of key practices and processes that support, drive and deliver assessment should be an activity all universities periodically undertake. Our approach is focused on assessment in Higher Education institutions and on finding a relatively 'light-touch' methodology for gathering data. In doing so we hope to counter some issues traditionally associated with 'benchmarking' such as high resource and time expenditure and the perception of detachment from daily practice.

3 Building assessment benchmarking measures

In the four months since starting this project, we have made good progress towards achieving the first aim. Initial enquiries could not locate a predefined and comprehensive set of benchmark measures for assessment although there are a plethora of assessment principles, guidelines, recommendation of best practices and quality assurance indicators. We instead decided to turn to methodologies for benchmarking e-learning with the expectation that assessment measures could be found within these. The five benchmark methodologies used by projects in the HEFCE funded Benchmarking and Pathfinder Programme (2005-2008) offer a representative selection of these:

- Embedding Learning Technologies Institutionally (ELTI) methodology,
- e-Learning Maturity Model (eMM),
- MIT90s conceptual framework,
- Observatory for Borderless education/Association of Commonwealth Universities (OBHE/ACU),
- and the Pick&Mix approach (HEA, 2009).

For our purposes the eMM seemed particularly appropriate as a starting point. It is essentially a process benchmarking method and was developed by Stephen Marshall at the Victoria University of Wellington. It is based on the principle that the maturity of a process in an institution is an indicator of how effective and accomplished the process is. This offers a continuum from partial 'ad hoc' processes through to those that are comprehensive and integrated. These can likewise be judged on a scale from 'not adequate' to 'fully adequate'. There are around forty overarching benchmark categories which the eMM called 'processes' and under each is listed a series of around twenty to thirty discrete, specific measures called 'practices'. These practices define aspects of the process and therefore, when scored can be augmented to give a score for the process (Marshall, 2006).

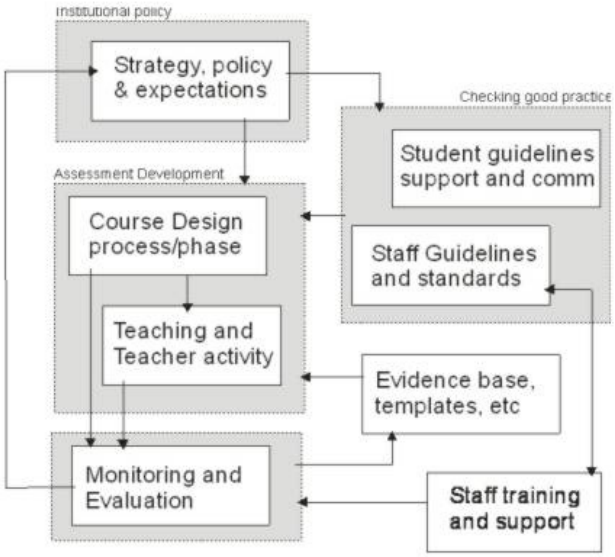
The eMM method, therefore, offered both 'headline' process criterion and more finer measures of practice – the latter of a much greater granularity than other benchmarks we had encountered. This additional specification and clarity promised greater utility for our assembling of a core of assessment benchmark measures. A review of the approximately one thousand practices given in the eMM identified around 150 that included the words or concepts associated with assessment or that covered practice that would include assessment. In addition, two other sources were consulted: the QAA's Code of practice for the assurance of academic quality and standards in higher education (2006) and work on formative feedback by Nicol & Macfarlane-Dick (2006). Each measure was recorded in an Excel spreadsheet.

Our next step was to begin to group these measures in to headline process categories. A thematic analysis identified fifteen broad groups and each measure was added to one or more of these groups. During this process some similar measures were combined or removed and it was reassuring to find overlap in measures from the three sources. A final rationalisation of groupings ended with the definition of just seven headline categories.

Category	Number of measures in category
A1. Teaching and teaching activity	17
A2. Student guidelines, support and communications	14
A3. Monitoring, measurement and evaluation	13
A4. Staff training and support	14
A5. Evidence base, templates and examples	11
A6. Course design process and phases	16
A7. Strategy, policy, guidelines and standards	14

These measures aim to cover the full range of processes and practices required for designing, delivering, supporting and measuring assessment. The relationship between the headlines measures is shown in Figure below and reveals that the measures probe three main areas that affect Assessment practice. These are:

- Institutional Policy,
- Assessment development,
- Checking Good Practice which not only deals with Quality assurance Measures but also includes staff training and support.



It must perhaps be stressed that the value in using these measures is in the discussion, reflection, review of current practice and future planning that they promote; not just in ascertaining a university 'score'. We would anticipate this to include the sharing of good practice and identification of gaps or differences in perceptions and practices across staff groups.

In checking on good practice, such measures will also reflect how an institution is engaging in redesigning approaches that leverage the use of new technologies, such as that shown by the work of the REAP project. This Scottish research has revealed that technology supported assessment can result in 'improved learning, higher student satisfaction and more efficient use of staff time' (Nicol, 2007). We have also taken note of the findings of the REAQ project (Gilbert et al., 2009) and included quality issues in our measures.

4 Piloting and Validation

The survey instrument we have developed is defined in full later in this document. We have approached the validation of our measures in the following ways:

- Pilot with some IET staff,
- Discussions with Associate Deans,
- Peer review via presentation at the CAA Conference,
- Entering discussion with external experts.

In addition, a current trial with the S104 module team and associated staff will end in late October, and comments from external experts will be compiled in November. We have so far received valuable comments and feedback and are in our seventeenth iteration of the benchmark measures.

5 Survey Methodology

Staff in all roles and at all levels are asked to work through the survey document (see p5 onwards). Key staff groups would include the module team, associate lecturers, module manager, programme manager, LTS and library support, Associate Deans, students, and senior management (however, for the piloting of the survey, we have restricted the reach to those involved in a particular module).

Staff are asked to read each statement and tell us to what extent they think the practice or process is occurring / going on at the OU. They have five response options:

- **F = Fully** occurring
- **M = Mostly** occurring
- **P = Partially** occurring
- **N = Not** occurring
- **X** = I'm not in a position to say

They then simply write in the first column (next to the statement) the letter relating to the response that you think most accurately describes the situation. E.g. in the example below (shown in blue) the respondent felt that assessment of individual student capabilities etc. was partially occurring at the university. And that Assessment marking rubrics are written and used is fully occurring.

	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) Assessment of individual student capabilities are undertaken before or early in the course, and used to guide teaching during the remainder of the course	P	F
b) Assessment marking rubrics are written and used	F	F

In the second column staff are asked to tell us instead about what they think should be the minimal acceptable level of practice or process at the university. The emphasis here is on the 'minimal acceptable level'. The same response options as before are used:

- **F = Fully** occurring
- **M = Mostly** occurring
- **P = Partially** occurring
- **N = Not** occurring
- **X** = I'm not in a position to say

We will stress to staff that this minimal acceptable level need not always be 'fully occurring'. Indeed, we must also be realistic and practical, so the minimal acceptable level may be 'mostly occurring' or even in some case 'not going on at all.' We appreciate this score is harder to give, but it allows us to understand the expectations and personally benchmarks/standards that staff hold. In our example (above), the respondent believed the minimal acceptable level of practice/process was 'fully going on / occurring' for both measures and has therefore written an 'F' in both boxes (shown in green). If used with students, the measures would of course need to be rephrased in to appropriate questions.

A1 Assessment is used effectively in teaching and learning activity

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) Assessment of individual student capabilities are undertaken before or early in the course, and used to guide teaching during the remainder of the course		
b) Assessment marking rubrics are written and used		
c) Students are able to integrate previous experience and knowledge into assessment activities and tasks		
d) All marking rubrics are shared with students in advance and feedback refers to them		
e) Students have opportunities to discuss assessment tasks and try any associated e-learning technology before attempting marked work		
f) There are mechanisms for students to be provided with feedback beyond the marks assigned for assessed work		
g) Feedback is given that addresses motivation and encourages positive motivational beliefs and esteem		
h) Students have opportunities for a feedback dialogue (peer or teacher-student) around assessment tasks on the course		
i) Feedback is intended to acknowledge, consolidate and promote student learning		
j) Students get feedback which corrects errors and supplies further information		
k) Students have sufficient opportunities to describe, assess and reflect on their own learning and make comparisons against their own goals		
l) Assessment activities and tasks develop students responsibility for their own learning		
m) Students have opportunities to select or chose aspects of assessment (such as topics for extended essays or project work)		
n) Students have opportunities for cooperative and collaborative assessment		
o) Assessment includes the use of a portfolio or similar practice		
p) Assessment activities are situated within real-world contexts (i.e. they reflect the problems, tasks or competencies a practitioner would face)		
q) Multiple choice assessments are used and integrated into the assessment strategy		

A2 Students are provided with appropriate guidelines, support and communication

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) The programme of assessment and timescale is given to students at the outset		
b) The relationship between individual assessment tasks and other learning activities is made clear to students		
c) A variety of communication channels are used to provide feedback to students		
d) Students are given an explicit description of the pedagogical approach and assessment forms being used		
e) Students are told what quality of feedback they can expect and when and how they will receive it		
f) Students receive substantive feedback on their individual performance in assessment tasks is built into the course		
g) Guidance about intellectual property and plagiarism issues and policies is given to students		
h) Students are given guidelines and materials about how to effectively use the feedback staff provide		
i) Students are given support, guidelines and materials to help them in self-assessment and reflection		
j) The relationships between the individual components and assessment activities within courses are made explicit to students		
k) Students are provided with practice sessions or tutorials in using e-learning assessment technologies		
l) Students have opportunities to engage actively with assessment goals, criteria and standard setting		
m) students are formally consulted about assessment during the design process		
n) Decisions about how to communicate with students take into account student satisfaction with the quality, nature and process of assessment and feedback		

A3 Monitoring, measuring and evaluation of students and staff is integral to the use of assessment

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) The extent to which feedback is given to a student is measured and collected		
b) The range and use of formative assessment techniques are measured and collected		
c) Changes in assessment that occur because of student feedback and evaluation is monitored and reported		
d) An evaluation plan accompanies the introduction of all new assessment / e-learning technologies or pedagogies		
e) Student feedback on the learning support they have and the feedback provided is regularly collected		
f) Student feedback on the robustness and reliability of the assessment infrastructure and technology is regularly collected		
g) Student feedback on the role and effectiveness of the assessment infrastructure and technology is regularly collected		
h) Student feedback on the assessment pedagogies used by staff is regularly collected		
i) Regular staff feedback is collected about how effective they feel the support and training they receive is		
j) Staff feedback on the infrastructure, technical support and technology used in student assessment is regularly collected		
k) Staff feedback is collected on the quality and effectiveness of the student assessment experience		
l) There is regular collection and reporting of the capability/capacity of staff to teach using assessment pedagogies and technologies		
m) Feedback is collected on the use of any technology or media that is not formally designed in to the course		

A4 Training and support for staff is provided to address skills and understanding of assessment

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) Staff are helped to use learning objectives explicitly in the *design* of assessment		
b) Staff are supported in using learning objectives explicitly in the *delivery* of assessment		
c) Staff are encouraged to understand and use a variety of effective assessment tasks and strategies		
d) Staff are able to support students in avoiding plagiarism and violations of intellectual property, and to correctly use information created by other students or accessed electronically		
e) Staff are helped in using formative assessment for feedback and feed-forward to improve student learning		
f) Staff understand how to support and promote active engagement in assessment by students		
g) Staff are trained in how to assess students capabilities for learning and how to use this to plan formative assessment strategy		
h) Staff are advised on how to design e-learning assessment programmes which mix formative and summative assessment		
i) Staff are helped in achieving incremental development of student skills through effective assessment tasks and strategies		
j) Exchange of experience and good practice is promoted between staff		
k) Institutional strategies and technology plans make adequate provision for staff support in relation to assessment		
l) There is a process to consider any requests for support from staff attempting assessment		
m) Regular review of staff training is undertaken including the use of student satisfaction with assessment tasks and structures		
n) The design, (re)development and delivery of assessment is supported by teams of specialist staff such as teaching and learning professionals		

A5 Assessment is founded upon and references a researched evidence base and staff are provided with examples and templates

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) A regular audit of the assessment formats, technologies and pedagogies used in courses is made and reported		
b) Assessment design and (re)development activities reference a researched evidence base		
c) The institution maintains a researched evidence base and/or case study repository of university assessment practice and related teaching and learning		
d) Information about course assessment is made readily available to others involved in designing or producing the course or other courses.		
e) A regular assessment benchmarking process is carried out by the institution		
f) There is monitoring and reporting of the rate of reuse of assessment materials		
g) There is a managed processes of internal dissemination of good practice and outcomes of institutional e-learning projects and initiatives		
h) Staff are encouraged to locate assessment activities and tasks within an authentic context		
i) Courses are evaluated to ensure that appropriate assessment techniques and formats are used		
j) There is monitoring and reporting of the financial costs and benefits of assessment and providing feedback		
k) There is regular monitoring and review of course compliance with institutional expectations for assessment quality, timing and feedback quality		

A6 Assessment is designed for and integral in the process of course and learning design

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) Course assessment are designed in respect to the Learning outcomes		
b) Design of assessment closely follows formally developed procedures and standards		
c) Course development and design considers both formative and summative assessment		
d) There is an alignment between formative and summative assessments		
e) Assessment is designed to make effective use of e-learning technologies		
f) A combination of separate formative and summative assessments are used in the course		
g) eLearning technologies are used consistently across the course teaching and assessment strategy		
h) Course assessment is detailed in the course or programme e-learning development plan (if no plan exists answer 'N')		
i) There is a clear and logical relationship between assessment and other timetabled activities and course elements		
j) Course designers consider the disability and accessibility aspects of assessment		
k) Assessment is designed to assist with the development of student skills and capabilities incrementally or in stages through the course		
l) Assessment is deigned to assist with the development of student skills and competences for life-long learning		
m) Assessment is designed to help prepare students with the skills and competences necessary to pass external professional assessment		
n) Course designers and writers can articulate and justify the assessment strategies being used in the promotion of learning		
o) Course assessment is designed to support self-assessment by students		
p) Assessment activities are designed to encourage and support students in creating and using electronic information		

A7 Assessment is embedded in institutional strategy, policy, guidelines and standards

Key *F = Fully occurring* *M = Mostly occurring* *P = Partially occurring* *N = Not occurring* *X = Not in a position to say*	To what extent you think this practice or process is going on at the OU	What should be the minimal acceptable level of practice or process at the university
a) Measures of student performance and their satisfaction with feedback are used to inform strategic planning of future assessment initiatives		
b) Teaching staff are encouraged to design e-learning assessment programmes with sufficient time for feedback and student reflection		
c) Risk assessment and mitigation strategies are regularly updated in respect to the changing nature of assessment (staff requirements, technologies used, pedagogies used etc.)		
d) There is a policy and plan covering students access to and/or ownership of necessary technologies for assessment		
e) The experience gained with successful and unsuccessful e-learning initiatives is used to inform strategy and business management		
f) Institutional standards for assessing staff in their effective use of assessment technology and pedagogies are defined and applied		
g) Staff are recognised, rewarded and supported in their work with innovative assessment initiatives or trials		
h) There is coordination of assessment projects, initiatives, policies and strategies across the institution		
i) There are formally defined criteria for the allocation of resources for assessment design, development and delivery		
j) Regular reviews assess risks and costs associated with providing support and training for staff		
k) There is consistency across all institutional guidelines, policies, and standards for assessment		
l) Institutional expectations of the quality and type of feedback to be provided to students are defined and communicated to staff		
m) There are defined institutional processes and standards for assessing the success of new assessment technologies and innovations		
n) Standards for e-learning assessment requirements exist		

References

Bacsich, P. (2005). *Theory of Benchmarking for e-Learning: A Top-Level Literature Review*. [Online]. Available at: from http://www.matic-media.co.uk/benchmarking/Bacsich-benchmarking-2005-04.doc [Accessed 20 June 2010].

Bacsich, P. (2006) Higher Education Academy e-Learning Benchmarking Project: Consultant Final Public Report. [Online]. Available at: http://elearning.heacademy.ac.uk/weblogs/benchmarking/wp-content/uploads/2006/09/bacsich-report-public20060901.doc [Accessed 20 June 2010].

Crook, C., Gross, H. & Dymott, R. (2004). Assessment relationships in higher education: the tension of process and practice. *British Educational Research Journal*, 32 (1), 95-114.

Gilbert, L., Gale, V., Wills, G. & Warburton, B. (2009). *JISC Report on E-Assessment Quality (REAQ) in UK Higher Education*. LSL: University of Southampton.

Higher Education Academy (2009). *E-learning benchmarking + pathfinder programme.* York: Higher Education Authority.

Institute for Higher Education Policy (2000). *Quality on the Line: Benchmarks fo Success in Internet-Based Distance Education*, Washington DC.

Jackson, N. (1998). Pilot benchmarking study of assessment practice in seven engineering departments. *Pilot studies in benchmarking assessment practice*, Gloucester: The Quality Assurance Agency for Higher Education.

Marshall, S. (2006). *E–learning Maturity Model Process Assessment Workbook*, New Zealand: Ministry of Education.

Nicol, D.J. & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.

Nicol, D. (2007) JISC Report on REAP: Re-engineering Assessment Practices in Scottish Higher Education, [Online] JISC. Available at http://www.jisc.ac.uk/media/documents/programmes/elearningsfc/sfcbooklet reap.pdf [Accessed 20 June 2010].

Quality Assurance Agency for Higher Education (2006) *Code of Practice for the assurance of academic quality and standards in higher education - Section 6: Assessment of Students*. Gloucester: Quality Assurance Agency for Higher Education.