

There is considerable choice available when selecting assessment options, yet experience shows that only a fraction of these are normally employed in higher education. It is important to recognize that traditional forms of assessment reward certain types of knowledge and skills, but undervalue others. Moreover, traditional assessment creates a particular framework within which learning takes place; change that framework and you can completely change the way in which students learn.

GEES Subject Centre links

GEES Subject Centre PLANET Special Edition 23 (2010). Special edition on Assessment. Soon available at: <http://www.gees.ac.uk/pubs/planet/index.htm>

GEES Subject centre Assessment Briefings 'Giving Feedback' and 'Modes of Feedback' by Carolyn Roberts <http://www.gees.ac.uk/pubs/briefings/briefings.htm>

GEES Subject Centre Assessment for Learning Conference – 22 June 2009, Manchester <http://gees.ac.uk/events/2009/assess09/assess09.htm>

GEES Subject Centre swap-shop event: 'Postgraduateness' Skill Development and Vocational Relevance - 10th June 2004, Northampton <http://gees.ac.uk/events/2004/postgrad/pgevent.htm>

GEES Subject Centre. Project Theme web page: Learning, Teaching and Assessment in the GEES Disciplines <http://www.gees.ac.uk/projtheme/lt/lt.htm>

Hughes, P. & Boyle, A. (2005). Assessment in the Earth Sciences, Environmental Sciences and Environmental Studies. GEES Learning and Teaching Guide. The GEES Subject Centre. <http://www.gees.ac.uk/pubs/guides/assess/geesassessment.pdf>

GEES Subject Centre Small-Scale Learning and Teaching Research and Development Projects (2001-2009)

The following projects can be found by visiting: <http://gees.ac.uk/funding/smallfunding.htm>

- Building and testing incremental on-line assessment and feedback systems for Level 1 undergraduates in GEES - ? (2009)
- Diversifying assessment across the 'Two Cultures': student-produced podcasts in geography – Justine Kemp (2009)
- Geography Undergraduate Dissertations in the UK: a review of assessment schemes and procedures - Dawn Nicholson, 2008
- Completing the cycle: an investigation of structured reflection as a tool to encourage student engagement with feedback - Jackie Pates, 2008
- Evaluating the effectiveness of different styles of feedback on student learning - Jasper Knight, 2007
- Enhancing Feedback Opportunities for Students through the use of Podcasting - Derek France, 2006
- Extended international work-related placements: the challenges of supporting remote learning and assessment - Simon K. Haslett, 2005
- Getting ahead with the Hat - the Mexican Hat Approach in the GEES Disciplines - Paul Wright, 2004

Planet Articles (2001-2009)

The following articles can be found by visiting: <http://gees.ac.uk/pubs/planet/index.htm>

Fox, R. & Rowntree, K. (2004) Linking the doing to the thinking: using criterion-based assessment in role-playing stimulations. *Planet*, 13, pp. 12-16

France, D. & Wheeler, A. (2007) Reflections on using podcasting for student feedback. *Planet*, 18, pp.9-12.

Heard, S. & Hole, M. (2006) Designing effective learning opportunities and promoting employment skills through a range of continuous assessments. *Planet*, Special Edition 17, pp. 40-41.

Hughes, I. (2001) But isn't this what you're paid for? (The pros and cons of peer assessment). *Planet*, 2, pp.20-23.

Philip, L. (2006) Encouraging reflective practice amongst students: a direct assessment approach. *Planet* Special Edition 17, pp. 37-40

Robinson, Z. (2009) Embedding employability context through assessment design. *Planet*, Special Edition 21, pp. 64-68.

Simm, D. (2005) Experiential learning: assessing process and product. *Planet*, 15, pp.16-19.

Whalley, B. & Tylor, L. (2008) Using criterion-referenced assessment and 'preflights' to enhance education in practical assignments. *Planet*, 20, pp. 29-36.

Whitelegg, D. (2002) Breaking the feedback loop: problems with anonymous assessment. *Planet* 3, pp. 7-8.

Wheater, C. P., Langan, A. M. & Dunleavy, P.J. (2005) Students assessing students: case studies on peer assessment. *Planet*, 15, pp.13-15.

Winlow, H., Simm, D. & Haslett, S. (2007) Extended work-related placements in developing countries: supporting remote learning and assessment. *Planet*, 18, pp. 28-32

Worsley, A. (2001) A pilot study using the mini-conference to externalise geo-assessment. *Planet*, Special Edition 1, pp.

Wright, P.N. (2006) Applying the 'Mexican hat approach' to GEES subjects – an evaluation. *Planet*, 16, pp.22-25.

Case Studies of Interesting Learning, Teaching and Assessment Practices in Geography, Earth and Environmental Sciences in Higher Education

The following case studies can be found by visiting: <http://goodpractice.gees.ac.uk>

Other GEES (and GEES-Related) resources

Bradford, M. & O'Connell, C. (1998) *Assessment in Geography*. (Cheltenham: Geography Discipline Network). . Case studies available on line at:
<http://www2.glos.ac.uk/GDN/guides/casestud.htm#Assessment>

- Earth Science Staff Development Project (1998) *Computer-based Assessment: can it really reduce marking loads?* No. 5. Contact GEES SC for further information
- Earth Science Staff Development Project (1998) *The UK Geosciences Education Symposium: Assessment in the New Millennium*, No. 9. Contact GEES SC for further information
- France, D. & Ribchester, C. (2004) Producing websites for assessment: a case study from a level 1 fieldwork module. *Journal of Geography in Higher Education*, 28 (1), pp. 49- 62.
- Healey, M. & Roberts, J. (2004) *Engaging Student in Active Learning*. (Cheltenham: Geography Discipline Network).
- Herd, S., Bull, J. & Pendlebury, M. (1997) *Setting Effective Objective Tests* (Aberdeen: Centre for Computer-based Learning in Land Use and Environmental Sciences)
- Knight, J. (2004) Comparison of student perception and performance in individual and group assessments in practical classes. *Journal of Geography in Higher Education*, 28 (1), pp. 63-81
- Maguire, S. & Edmondson, S. (2001) Student Evaluation and Assessment of Group Projects, *Journal of Geography in Higher Education*, 25 (2), pp. 209-217
- Pain, R. & Mowl, G. (1996) Improving geography essay writing using innovative assessment, *Journal of Geography in Higher Education*, 20 (1), pp.19-31
- Pepper, D., Webster, F. & Jenkins, A. (2001) Benchmarking in Geography: some implications for assessing dissertations in the undergraduate curriculum. *Journal of Geography in Higher Education*, 25 (1), pp. 23-35
- Stewart, M., Andrews, J., Sougnez, W., Stott, T., Kneale, P. (2003) Fieldwork in the curriculum - To what extent does fieldwork relate to Biggs' theory of constructive alignment? Learning to do Pedagogic Research and Researching Fieldwork in GEES Disciplines.
<http://www.gees.ac.uk/pedresfw/pedrbiggs.htm>
- Staff and Educational Development Association (SEDA) series 'Developing Skill-based Curricula through the Disciplines: Case Studies of Good Practice in Geography', SEDA Paper 89
<http://www2.glos.ac.uk/gdn/seda/index.htm>
- Profiling and learning outcomes: the enhancement of a professional training programme in geography
- Thompson, Pilgrim, A. & Oliver, K. (2005) Self-assessment and Reflective Learning for First-year University Geography Students: a Simple Guide or Simply Misguided? *Journal of Geography in Higher Education*, 29 (3), pp. 403-420

Projects

On the Cutting Edge project

<http://serc.carleton.edu/NAGTWorkshops/assess/index.html>

Project of the National Association of Geosciences Teachers (NAGT) aiming to help geoscience faculty stay up-to-date with both geoscience research and teaching methods. The Assessment of Learning section contains assessment tools and case studies.

Generic resources

Books and reports

- Biggs, J. (2003). *Aligning teaching for constructing learning*. The Higher Education Academy
http://www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id477_aligning_teaching_for_constructing_learning.pdf
- Black, P.; Harrison, C.; Lee, C.; Marshall, B. and Wiliam, D. (2003) *Assessment for Learning: Putting it into Practice*. Open University Press.
- Bloxham, S. and Boyd, P.F. (2007). *Developing Assessment in Higher Education: A Practical Guide*. Open University Press.
- Boud, D. and Falchikov, N. (Eds.) (2007). *Rethinking Assessment in Higher Education: Learning for the Longer Term* Routledge.
- Brown, S. and Smith, B. (1997). *Getting to Grips With Assessment*. SEDA Special Publication.
Brown, S. and Glasner, A. (Eds.). (1999). *Assessment Matters in Higher Education: Choosing and using diverse approaches*. The Society for Research into Higher Education.
- Brown, S. (2004). *500 Tips on Assessment*. Routledge.
- Bryan, C. and Clegg, K. (Eds.) (2006). *Innovative Assessment in Higher Education*. Routledge.
- Carroll, J. (2007) *A Handbook for Deterring Plagiarism in Higher Education* (2nd ed). OCSLD, UK.
- Falchikov, N. (2004). *Improving Assessment through Student Involvement: Practical Solutions for Higher and Further Education Teaching and Learning*. Routledge.
- Gladwin, R. (2005) *Getting started with computer-aided assessment*. Physical Sciences Subject Centre Primer.
http://www.heacademy.ac.uk/assets/ps/documents/primers/primers/ps0084_getting_atated_with_computer_assissted_assessment_mar_2005.pdf
- Irons, A. (2007). *Enhancing Learning Through Formative Assessment and Feedback (Key Guides for Effective Teaching in Higher Education)*. Routledge.
- Jackson, N., Wisdom, J. & Shaw, M. (2003). *Using Learning Outcomes to Design*. Imaginative Curriculum project team. Guide for Busy Academics: LTSN Genetic Centre.
http://www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id252_Guide_for_Busy_%20Academics_Using_Learning_Outcomes_to_Design.rtf
- King, T. & White, I. (1999) *A university wide protocol for the conduct of computer assisted assessment: technical report no 3*. Fund for the Development of Teaching and Learning (FDTL), Milton Keynes.
- McAlpine, M. (2002). *Principles of Assessment*. Bluepaper Number 1. CAA Centre.
- Moon, J., (2002) *The Module and Programme Development Handbook*, (Kogan Page), London (lots on learning outcomes, assessment and assessment criteria)
- Neville, C. (2010) *The complete guide to referencing and avoiding plagiarism*. 2nd edition. (Maidenhead: Open University Press)

- Overton, T. (2005). Writing Programme Specifications: A discourse on the QAA requirements. Physical Sciences Subject Centre.
http://www.heacademy.ac.uk/assets/ps/documents/briefing_papers/ps0011_writing_programme_specifications_feb_2005.pdf
- Overton, T. (2005) Writing learning outcomes: advice on defining courses using an outcomes-based approach. Physical Sciences Subject Centre Primer.
http://www.heacademy.ac.uk/assets/ps/documents/primers/primers/ps0091_writing_learning_outcomes_mar_2005.pdf
- Overton, T. (2005) Writing programme specifications - a discourse on the QAA requirements. Physical Sciences Subject Centre Primer.
http://www.heacademy.ac.uk/assets/ps/documents/briefing_papers/ps0011_writing_programme_specifications_feb_2005.pdf
- Race, P. (2009) Designing assessment to improve physical sciences learning. A Physical Sciences Practice Guide. Physical Sciences Subject Centre.
http://www.heacademy.ac.uk/assets/ps/documents/practice_guides/practice_guides/ps0069_designing_assessment_to_improve_physical_sciences_learning_march_2009.pdf
- Ramsden, P. (2000) *Learning to Teach in Higher Education*. (RoutledgeFalmer, London). (Chapter 8 p.121 – 149 is particularly useful for goal and objective/learning outcome setting).

Papers and journals

- Bacon, D. & Smith, G., (2003) IMS question and test interoperability. Centre for Bioscience Bulletin, Autumn 2003, No.10 <http://www.bioscience.heacademy.ac.uk/resources/bulletin.aspx>
- Dawson M.M.&Overfield J.A. (2006) Plagiarism: Do Students Know What It Is? *Bioscience Education e-Journal*, volume 8. www.bioscience.heacademy.ac.uk/journal/vol8/beej-8-1.aspx
- Drew, S. (1998). Students' Perceptions of their Learning Outcomes. *Teaching in Higher Education*, Vol. 3, No. 2. <http://www.informaworld.com/smpp/content~content=a746988556>
- Gibbs, G. & Simpson, C. (2003) *Measuring the response of students to assessment: the Assessment Experience Questionnaire*. 11th Improving Student Learning Symposium.
<http://www.open.ac.uk/fast/pdfs/Gibbs%20and%20Simpson%202003.pdf>
- Gibbs, G. & Simpson, C. (2004-05) Conditions Under Which Assessment Supports Students' Learning. *Learning and Teaching in Higher Education, Issue 1, 2004-05*
<http://www.open.ac.uk/fast/pdfs/Gibbs%20and%20Simpson%202004-05.pdf>
- Gill, J (2008) *Cultural insight can help tackle plagiarism*. Article published in the Times Higher Education 24 April 2008, available at:
<http://www.timeshighereducation.co.uk/story.asp?storycode=401564>
- Journal: *Assessment & Evaluation in Higher Education*. Routledge.
<http://www.tandf.co.uk/journals/titles/02602938.asp>
- Knight, P. (2007) Fostering and assessing wicked competencies.
<http://www.open.ac.uk/pbpl/resources/details/detail.php?itemId=460d2370a2b6b>
- Matthews, H.; Healey, M. and Jones, R. (1995). Profiling and learning outcomes: the enhancement of

a professional training programme in geography. In Jenkins, A. and Ward, A. (eds) *Developing Skill Based Curricula: Case studies of Good Practice in Geography*. SEDA Paper 89, SEDA, Birmingham. <http://www2.glos.ac.uk/gdn/seda/matthews.htm>

Strivens, J. (2006) Efficient assessment of portfolios.

<http://www.open.ac.uk/pbpl/resources/details/detail.php?itemId=460d156285141>

Tariq, V.N., Stefano., A.J., Butcher, A.C., & Heylings, D.J.A. (1998) Developing a New Approach to the Assessment of Project Work. *Assessment & Evaluation in Higher Education*, 23(3), 211-240.

Tierney A. (2006) Tackling Plagiarism in the Level One Biology Class. *Practice and Evidence of Scholarship of Teaching and Learning and Higher Education*. 1:13-21

Watson, P. (2002). The Role and Integration of Learning Outcomes into the Educational Process. *Active Learning in Higher Education*, Vol. 3, No. 3, pp 205-219.

<http://alh.sagepub.com/cgi/content/abstract/3/3/205>

Willmott, C.J.R. and Harrison, T.M. (2003) An exercise to teach bioscience students about plagiarism. *Journal of Biological Education*. 37, pp. 139-140.

Yorke, M. (2005) Issues in the assessment of practice-based professional learning at:

<http://www.open.ac.uk/cetl-workspace/cetlcontent/documents/464428ed4aa20.pdf>

Web resources and tools

AA Computer Assisted Assessment Centre – University of Luton

<http://www.caacentre.ac.uk/> with CAA Bibliography:

<http://www.caacentre.ac.uk/resources/bibliography/bib0.shtml>

Centre for Bioscience. Assessment audit tool.

<http://www.bioscience.heacademy.ac.uk/ftp/events/birmingham/auditool.pdf>

Centre for Bioscience (2008) *Preventing and Designing out Plagiarism*. Short guide produced by the Centre for Bioscience.

www.bioscience.heacademy.ac.uk/ftp/resources/shortguides/plagiarism.pdf

Deliberations. Deliberations is an international website on issues of learning and teaching for the higher education community

<http://www.londonmet.ac.uk/deliberations/assessment/index.cfm>

Higher Education Academy. Assessment Pages.

<http://www.heacademy.ac.uk/ourwork/learning/assessment>

JISC Plagiarism Advisory Service <http://www.jisc.ac.uk/whatwedo/services/pas.aspx>

The JISC Plagiarism Advisory Service provides generic advice and guidance on all aspects of plagiarism prevention and detection to institutions, academics and students.

Online plagiarism tutorial for students from the University of Leicester

<http://www2.le.ac.uk/offices/ssds/sd/ld/resources/study/plagiarism-tutorial>

Oxford Brookes University. Oxford Centre for Staff and Learning Development. Writing learning outcomes: some suggestions.

http://www.brookes.ac.uk/services/ocsltd/resources/writing_learning_outcomes.html

QAA Code of practice for the assurance of academic quality and standards in higher education.
Section 6: Assessment of students - September 2006
<http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section6/default.asp>

Race, Phil. Assessment, Learning and Teaching in Higher Education <http://phil-race.co.uk/>
A website/blog that contains workshops, presentations, publications. It includes a section of materials for students.

Projects

ASKe Cetl

Assessment Standards Knowledge exchange. Oxford Brookes University.
<http://www.brookes.ac.uk/aske/>

Includes the 1, 2, 3 Leaflets series (<http://www.brookes.ac.uk/aske/Resources/>)

- Improve your students' performance in 90 minutes!
- Reduce the risk of Plagiarism in just 30 mins!
- How to make your feedback work in three easy steps!
- Using generic feedback effectively
- Adopting a social constructivist approach to assessment in three easy steps!
- Using Turnitin to provide powerful formative feedback
- Cultivating Community: why it's worth doing and three ways of getting there
- Making peer feedback work in three easy steps!

Assessment Plus

<http://www.writtenow.ac.uk/assessmentplus/workshopmaterials.htm>

Assessment Plus is a consortium-led project with the initial work taking place at London Metropolitan University, Liverpool Hope University and Aston University. Summary of project activities in form of resources can be found under 'Project outcomes'. Furthermore very useful assessment workshop activity materials for staff in higher education.

Centre for Excellence in Teaching & Learning in Assessment for Learning

http://www.northumbria.ac.uk/cetl_afl/

Includes the 'Signposts' resource series.

http://www.northumbria.ac.uk/sd/central/ar/academy/cetl_afl/resources/signposts/

- Signpost 1 - Collaborative learning for conceptual understanding
- Signpost 2 - Authenticity, autonomy and writing
- Signpost 3 - Making summative assessment authentic through 'double use'
- Signpost 4 - Having a go before it counts
- Signpost 5 - Here's one we did earlier
- Signpost 6 - Making it real: Bringing summative assessment to life
- Signpost 7 - Making your mark: Encouraging contributions in a 'low-stakes' environment
- Signpost 8 - Practice makes perfect: Working towards a summative essay through drafts and edits
- Signpost 9 - Using posters for formative feedback
- Signpost 10 - Using peer review to improve assignments
- Signpost 11 - Where do I go from here? Making the most of alumni visits
- Signpost 12 - Learning through peer assessment: The league table approach
- Signpost 13 - On the edge: Supporting marginalised students in groupwork assessment
- Signpost 14 - Collaboration + peer review = motivation
- Signpost 15 - Developing students' learning through group poster activity

- Signpost 16 - Group cohesion: Just my job or that of everyone in the group?
- Signpost 17 - Breaking it down: Providing rapid feedback as a benchmark for new students
- Signpost 18 - Rethinking the focus of poster-based assessment
- Signpost 19 - Embedding employability in English
- Signpost 20 - Assessing oral presentations in English

Enhancement Themes

<http://www.enhancementthemes.ac.uk/default.asp>

The Enhancement Themes initiative aims to enhance the student learning experience in Scottish higher education by identifying specific areas for development. Two themes relate to assessment:

- Assessment. Contains links to 8 workshops on a variety of assessment themes available to download. <http://www.enhancementthemes.ac.uk/themes/Assessment/outcomes.asp>
- Integrative Assessment. Focus on 'Optimising the Balance between Formative and Summative assessment. This theme has produced four publications available for download. <http://www.enhancementthemes.ac.uk/themes/IntegrativeAssessment/themes.asp>

SENLEF project

<http://www.heacademy.ac.uk/ourwork/learning/assessment/senlef>

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.

TRIADS

TRIADS was a computer-based project from round one of funding by the HEFCE Fund for the Development of Learning and Teaching (FDTL), involving the Earth Science departments of the Universities of Liverpool, Derby and the Open University. FDTL funding for this project has ceased, however development now continues through CIAD (Centre for Interactive Assessment Development) at Derby University where software and training is available on a commercial basis.

Case Studies

HE Academy (2005) Managing Effective Student Assessment

<http://www.heacademy.ac.uk/ourwork/learning/assessment/mesa>

10 different case studies illustrate assessment issues, with recommendations for workshop activities

Staff and Educational Development Association (SEDA) series 'Enhancing Employability and Educational Experience' (Standing conference for Educational Development, Occasional Paper 27, 1988). A series of case studies looking at the teaching of communication and groupwork skills in higher education. <http://www2.glos.ac.uk/gdn/pepper/index.htm>

- Student self-assessment of essays
- Student self-assessment of seminar contribution (1998)

The Centre for Active Learning (CeAL)

<http://www.glos.ac.uk/ceal/resources/engagingstudents/partd.cfm>

CeAL based at the University of Gloucestershire. The web site provides online access to the publication "Engaging Students in Active Learning: Case Studies in Geography, Environment and Related Disciplines" written by Mick Healy and Jane Roberts. It's chapter 'Active learning through assessment and evaluation' might be of use: