bioscience education

Website Review

Enhancing Assessment in the Biological Sciences: Ideas and Resources for University Educators

Created by Kerri-Lee Harris, Kerri-Lee Krause, Dawn Gleeson, Mary Peat, Charlotte Taylor and Robin Garnett (2007)

http://www.bioassess.edu.au/

The website provides an overview of the current status of assessment in higher education and in particular, focuses on the challenges faced by those teaching in the biological sciences. The site, which has been developed by the Centre for the Study of Higher Education at the University of Melbourne (in collaboration with the University of Sydney) focuses on current issues and trends in assessment in the biological sciences and aims to provide a stimulus for enhancing assessment practices across the discipline. The resource has been developed in consultation with staff and recent graduates from across eight Australian universities and has a basic and easily navigable structure centred on six themes: learning outcomes in the biological sciences; principles of assessment; assessment types; key issues; curriculum matters and examples of practice.

The section on learning outcomes gives a brief overview of the skills considered to be the most important for undergraduates to acquire and develop during the course of their studies. Not surprisingly this covers generic skills such as communication, team working and critical thinking. The section also includes information on the types of key knowledge students studying biological sciences in Australia are expected to acquire throughout their degree; for example, an understanding of taxonomy and levels of biological organisation, knowledge of the theory of evolution, comprehension of the rapidly-changing nature of science and scientific knowledge, along with more specific skills, such as quantitative analysis and key practical skills. Although this information has been collated across a series of Australian institutions there are parallels with UK curricula.

'Principles of assessment' is a short section devoted to summarising the main functions of assessment and provides a basic explanation of the most common terms associated with assessment and feedback. 'Assessment types' identifies eleven categories considered to represent the most commonly associated approaches to assessment in the biological sciences and as such I found it be to the most useful section within the site. The categories identified include: exams, group work, online assessment, peer- and self-assessment, portfolios, reflective journals, practicals, presentations, research projects, tests/quizzes and written assignments. For each category there is an explanation of the assessment type, along with information about approaches used, issues and tips, along with an overview of how the assessment type reflects authentic practice in the biological sciences. A list of case studies for each assessment category can be accessed through this section (or alternatively they can be found in the separate 'examples of practice' on the left hand navigation bar) and can be downloaded in pdf format. The 79 case studies vary in length and I felt that some were a little too sparse in detail; however, in general, the majority include clear information on the assessment issue being addressed and on the effectiveness of the approach(es) adopted. The inclusion of author details means that it is possible to follow-up case studies of particular interest. I especially liked the fact that many of the case studies include plans for future developments and (basic) evaluation data so that there is some demonstrable measure of the impact of a particular approach(es) to an assessment issue.

The website authors identify a number of 'key issues' associated with assessment in the biological sciences including addressing plagiarism, providing feedback and engaging large class sizes through assessment. Each key issue is dealt with in detail and has accompanying and useful examples of practice. 'Curriculum matters' covers general aspects of assessment, such as coping with resource constraints, planning curricula and teaching-research links and like the other sections it has quick links to relevant case studies.

Overall the website is a 'no frills' but comprehensive resource for those involved in assessment in the biological sciences and the fact that it has been developed in Australia in no way detracts from its relevance to UK colleagues. Moreover, the website clearly articulates the assessment challenges faced within the disciplinary area but recognises that many of these are not unique to the discipline, thus making this a resource of value to a broad audience. Although there are a multitude of web resources on assessment this site neatly brings together both a generic and discipline-specific focus on assessment; this, coupled with the diverse suite of case studies makes this a resource that is likely to give pause for thought and as such, I would certainly recommend colleagues to bookmark this site.

Reviewed by Dr Anne Crook

Teaching Enhancement Manager and Innovation Manager CETL- Applied Undergraduate Research Skills (CETL-AURS)
Centre for the Development of Teaching & Learning (CDoTL)
Room 3 HumSS Building
University of Reading
Reading
RG6 6AA
UK