University Learning & Teaching Award Holders Profile

Jane Bunting,
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Jane Bunting is a Senior Lecturer, her research interests are in paleoecology, wetland science and cultural landscape dynamics. She teaches across a wider range of topics at all levels, including geographic skills and scientific method, environmental change, environmental archaeology, biogeography and ecology, mainly but not entirely focusing on plants, and supervises undergraduate and masters' dissertations across this range. In addition, Jane currently teaches a Free Elective module in Landscape History (withdrawn from 2009-10).

Jane is a Geography, Earth and Environmental Sciences Subject Centre facilitator (www.gees.ac.uk/), and leads at least one workshop on aspects of Higher Education teaching in those disciplines nationally each year. Over the last few years, she has run a number of workshops on Problem-Based Learning (PBL), and how elements of the PBL approach can be used in the GEES classroom. Jane's main research tool is pollen analysis, the most commonly used technique for reconstructing environmental change and past vegetation dynamics, typically taught at first or second year level in most Geography and Archaeology programmes. Teaching microscope skills to large numbers of students involves multiple repeats of classes (microscopes are expensive and students need relatively intensive hands-on support). The skills needed to use the microscopes themselves can get in the way of student understanding of the underlying principles. However, only covering the material by lecture is also unsatisfactory, as students are known to learn better by doing than by listening.

Jane's Innovations in Student Learning project, working jointly with Richard Middleton, is to develop a Virtual Learning Environment for microscope work and pollen analysis – student responses to a trial version earlier this year were very positive and the graduate student demonstrator reported a marked improvement in student confidence and ability to complete tasks assigned in later microscope classes. The team plan to have a completed 'release' version ready for academic year 2009-10.

Keywords: science and scientific literacy, skills transfer, fieldwork, laboratory work, experiential learning, reflective practice, geography and ecology