

## **Special Issue Editorial: Designing and Developing for the Disciplines**

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### **Abstract:**

This is a brief editorial introducing this special issue on designing and developing for the disciplines. The papers were all presented at the Shock of the Old 3 Conference, held at the University of Oxford on the 23rd July 2003, and run by the Learning Technologies Group, Oxford.

**Keywords:** E-learning, disciplines, subject specific, tool development.

**Interactive Resources:** See the Shock of the Old 3 conference website<sup>1</sup>.

### **Commentaries:**

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<sup>1</sup> *Shock of the Old 3 Conference, University of Oxford 23rd July 2003:*  
<http://www.oucs.ox.ac.uk/ltg/events/shock2003/index.shtml>

## 1. Editorial

In 1959, C. P. Snow in his study *The Two Cultures and the Scientific Revolution*, outlined a polarisation of the 'intellectual life' into two extremes – literature at the one end, and science at the other. Snow's arguments and conclusions seem to many to reflect the growing chasm of attitudes, understanding, and funding which we witness also in education when it comes to the differences in the disciplines. E-learning, and the development and application of tools for use in teaching and learning, has highlighted this even further. The Teaching and Learning Technologies Programme of the 1990s concentrated most of its funding on the sciences and social sciences, leaving the arts and humanities in a poor third position; whereas the digitization programmes launched by the major research libraries around the globe have concentrated on rare and unique collections, which seem targeted predominantly at the historian. Even when it comes to the use of off-the-shelf packages, or generic approaches to e-learning it appears that there are noticeable differences in what the disciplines seem to use<sup>2</sup>.

But is this true, or are we simply perpetuating a myth? The ubiquitous nature of the Virtual Learning Environment (VLE) (or Learning Management System in the US) seems to imply that some applications have a universal appeal, and one would be hard-pushed to notice any discernable differences between the disciplines and their use of such blunt student support systems.

In 2003, therefore, the Learning Technologies Group at the University of Oxford attempted to look at these issues head-on in the third of its annual conferences entitled 'The Shock of the Old'. The 2003 conference specifically set out to discuss:

- What kinds of technologies are best suited to teaching and learning in the sciences, humanities, arts, social sciences?
- Are truly generic or completely non-disciplinary materials possible (or desirable)?
- In seeking to make generic tools might we be imposing the methodologies of one discipline onto another?

<sup>2</sup> See the conclusions of the ASTER Project: *Assisting Small Group Teaching through Electronic Resources, which looked specifically at the use of different types of e-learning applications in the humanities, social sciences, and physical sciences.* <http://cti-psy.york.ac.uk/aster/>

- How can discipline- or subject-specific materials be adapted for different disciplines or subjects?
- What differences are thus exposed or created in the underlying teaching (and research) practices?
- Conversely, can disciplinary differences expose methodological assumptions in the technologies?
- Do disciplinary differences affect the ways new technologies are best integrated into teaching practice?
- Are proprietary solutions and "corporatization" of learning technologies shaping the way subjects are taught? If so, is this leading to increased or decreased choice and flexibility?

Presented here are some of the papers from that conference. The opening plenary paper from the conference (Conole) presents an analysis of the emerging new discipline, learning technology. After that we begin with the users' perspective when Timmis, *et al.* present the results of the SOLE project looking student feedback related to their online learning experiences from a range of disciplines, Manton, *et al.* shift the discussion to the perspective of the developer being asked to build projects, quickly and efficiently, yet across a range of disciplines. Thomas and Milligan argue that in the design process, flexibility needs to be included to allow teachers to modify resources designed for one discipline so that they can be used in a different subject area. We then conclude with specific example. Sieber, *et al.* describe their project to create learning objects for use in identified disciplines, and Nixon and Price describe an academic project focusing on archaeology, but raise the question that even when you design your project for re-use by other academics, why is it that the uptake is always so low? Wherever possible the papers point to online demonstrations of the projects described.

As a group then the papers raise a number of issues. From the developer's perspective they raise the problems of trying to streamline the process of creating material across disciplines, and how to build-in flexibility to allow for reuse. They confront the problem of the specific requirements of individual disciplines and how they can restrain flexibility. We also come across the 'not invented here' syndrome, and the all-too human resistance to reuse. And finally we are presented with the learners' perspective drawing from a range of disciplines.