Editorial

Integrating technology into the curriculum

The third annual conference of the Association for Learning Technology, held 16–18 September 1996 at Glasgow – where it was jointly hosted by Glasgow, Glasgow Caledonian and Strathclyde Universities – provided ample proof that the field has been maturing rapidly. While numbers are not everything, it was very encouraging both that more than 350 delegates registered and that they delivered approximately 200 presentations, including software demonstrations and poster sessions. For ALT to have reached numbers comparable to long-established professional associations in the comparatively short period of its existence is a remarkable achievement.

Numbers have a downside, of course, especially as many delegates (and their sponsoring institutions) want to appear on the programme as well as wander from session to session. The inevitably large number of parallel events produced a wealth of activity but also the need for delegates to make difficult choices of which sessions to attend. None the less, the large attendance provided a golden opportunity – which, casual observation suggests, was eagerly grasped – for that most intellectually productive of all activities, networking. Perhaps ALTC–96 attracted fewer novices, on the one hand, and fewer institutional 'movers and shakers', on the other, than the organizers had hoped. But the focus on experienced practitioners of learning technology helped to produce an atmosphere of intellectual excitement, capped by Diana Laurillard's magisterial closing keynote address, which reaffirmed the centrality of academic criteria in evaluating the effectiveness of technology-assisted teaching and learning.

Within the conference theme of integrating technology into the curriculum, certain categories were sparsely represented among the presentations, papers on dissemination and staff development being especially thin on the ground. Assessment and course structure were slightly more amply served, as (surprisingly enough) were categories more

often associated with committee rooms than with IT labs: institutional strategies and teaching and learning services. As ever, new developments and (much more so) case studies were plentiful. Most numerous of all – in marked contrast to the situation at ALTC–94 – was evaluation, which secured an even larger proportion of the papers accepted for this special number of *ALT-J*. The popularity of that category, so crucial to the successful integration of learning technology into the curriculum, provides strong support for the proposition that ALTC–96 marked the coming-of-age of learning technology as a field. Evaluation, at the conference as elsewhere, often involves cost-benefit analysis, and few if any presentations at ALTC–96 subscribed to the 'IT as panacea for cost pressures' school of thought. A realistic optimism focused on quality, rather than a euphoria focused on pricing, characterized the keynote addresses of Strathclyde's John Spence, who emphasized the pedagogical potential of Scottish, UK and world networks, and of Glasgow's Graeme Davies, who stressed the value, for improved teaching and learning, of the courseware produced by the UK's Teaching and Learning Technology Programme (TLTP). Thus the conference contributed to the rapid decline of belief in the monetary efficiency of IT, an approach very popular only a few years ago but now comprehensively rejected, notably in the evidence submitted to the Commission of Inquiry into Higher Education headed by Sir Ron Dearing.

If ALTC–96 suggests that learning technology is increasingly both a mature and a shrewd field, how does it relate to the focal point of late twentieth-century higher-education anxiety: (assessed) research quality? The number of papers submitted for this special number of *ALT-J* was small in comparison with the wealth of interesting papers presented at the conference. Among the many reasons for this discrepancy may be the marginal position that research and publication in learning technology occupies in the UK (from which the bulk of participants and paper-givers were drawn), particularly with respect to the funding councils' 1996 Research Assessment Exercise. Admittedly, the councils attempted to persuade assessment panels to look kindly on courseware development, especially within TLTP. Yet it would seem that at best this concession made involvement in courseware production an allowable excuse for a failure to produce four high-quality publications based on 'conventional' research. The funding councils' encouragement to research in teaching and learning was even more gentle than the nudge given to courseware development, and was perhaps even less effective – especially since individuals had to allocate all their publications either to their 'home' discipline or to education *per se*. Without a change of heart, research and development in learning technology may decelerate as individuals turn increasingly to research activities unambiguously prized by the Research Assessment Exercise. This is a threat not just to the field and its practitioners but to the teaching and learning goals of the funding councils themselves. Perhaps the Dearing Commission will produce recommendations that will prompt the funding councils and other interested parties to increase their esteem for educational-technology development and the research associated with it.

As this special number of *ALT-J* demonstrates, the range and depth of current research in learning technology support such a change of policy. Of the papers published in this issue, two fall under the heading of new developments. The continued scope for innovative new technology, and its imaginative use in education, is nowhere better demonstrated than in the description of the Origami project by Harding *et al*. It will take some time for the

potential of this technology to be assessed, but it is refreshing to be reminded that the development of technological tools is still an astonishingly active area. The World Wide Web was a new tool not so long ago, but it is now in routine use in the world of teaching and learning. The large number of papers at the conference which were concerned with this medium are represented here by the contribution by Meadows *et al*. The scope for international collaboration between teachers and students and the effectiveness of exercises such as this in broadening students' learning experiences are very apparent.

Course structure and assessment are essential parts of any strategy which aims to integrate technology into the curriculum, and these topics are represented by the papers of Brailsford *et al*, and Callear and King. The former gives us much to think about in describing the experiences of using the concept of discourse to support the learning which takes place within a course. The latter reflects on experience gained with computer-based testing in a variety of guises. The paper by Martin addresses the institutional background by describing the use of a general IT awareness course to provide students with generic skills which will prepare them for degree programmes.

We remarked above that the emphasis on evaluation of educational effectiveness which was evident at the conference is indicative of the fact that learning technology has come of age. This is confirmed in the six papers in this area which have been accepted for this issue of the journal. Three of these – by Draper, Gunn and Mitchell – address general, wide-ranging issues. There are challenges here to our traditional way of viewing evaluation and how it should be conducted. The remaining three papers – by Issroff *et al*, Scanlon *et al* and Whitelegg *et al* – provide stimulating case studies of evaluation in action.

Thus this special number of the journal, like the conference from which it derives, reveals learning technology as a field which, despite some lack of recognition from the research establishment, is characterized by growing self-confidence, increased achievement and widening impact on teaching and learning in higher education. Over to ALTC–97 in Wolverhampton.

Adrian Bowman, Rick Trainor, Gabriel Jacobs