

2: Where do we go from here? Postscript and further information.

Editor's postscript

Hopefully you will have found the contents of Implementing Learning Technology interesting and useful and you will want to go further - to embark on a new implementation, to review existing usage of learning technology or to plan an evaluation of the use of technology in teaching. So, where do we go from here?

Based on the principal that we learn best from our mistakes - or at least from active participation - the best place to start is probably to get involved in the process of planing and implementing technology into your own teaching. It would be unrealistic to suggest that this is an easy task, but teaching rarely is. However integrating technology can be very rewarding - for both you and your students - and need not be as daunting as it might appear at first sight. In general the technical expertise required to use existing learning technology in your teaching is relatively low and there is a wealth of useful material available.

This publication is not the place to list the subject/domain specific learning technology materials. However there is a lot of courseware available, much of which has great potential value in teaching and learning. In addition to commercial software, a great deal of material has been produced under public funding in the UK. Most of this material is available to UK higher education institutions at very low cost. Further information on these projects and initiatives is included in the LTDI Information Directory, as are details of the subject specific CTI Centres - good sources of advice on the availability of public sector and commercial learning technology materials.

Of course another place to go to next is to LTDI. We offer a range of services, including implementation help, all of which are free to Scottish HEIs

The remainder of this chapter lists some resources that may be useful to you in the process of implementing learning technology into your teaching and evaluating the efficacy of your implementations. The first section is an annotated bibliography of a selection of reports, articles and books. The second section lists some of the most relevant journals in this area. Useful World Wide Web URLs are listed in the LTDI Information Directory and are available from the LTDI Web site at <http://icbl.hw.ac.uk/ltidi/>.

An annotated bibliography

CTI (1992) 'Computers in University Teaching - Core Tools for Core Activities. A report from the computers in teaching initiative.' CTISS Publications.

Concise report looking ahead to Higher Education in 2000 and the likely role for technology. Illustrated with analysis of current position subject by subject.

CSUP (1992) 'Teaching and Learning in an Expanding Higher Education System - report of a working party of the committee of Scottish University principals'. Known as "The MacFarlane Report"

Significant report which has been the catalyst for much change and more debate about the role for technology in teaching and learning, particularly within Scotland. A clear insight into the challenges facing higher education in Scotland and the role of technology in meeting them.

Crook, Charles (1994) 'Computers and the collaborative experience of learning' Routledge, London

An interesting text on the use of technology in teaching which draws on cognitive psychology, discusses educational technology from a socio-cultural perspective & concludes on the importance of collaborative experience in the teaching and learning process.

Darby J (1992) 'Computers in teaching and learning in U.K. higher education' Computers Educ, 19,1/2,1-8.

This paper reviews the diversity of approaches to using learning technology, drawing on information from UK and beyond.

Davies P, & Brailsford T, (1994) 'New Frontiers of Learning : Guidelines for Multimedia Courseware Developers in Higher Education', UCoSDA, ITTI.

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- One of the ITTI products, others are also useful. The ITTI catalogue is reproduced in the LTDI Information Directory.*
- Draper, S W, Brown, M I, Edgerton, E, Henderson, F P, McAteer, Smith, E D, and Watt, H D (1994) 'Observing and Measuring the Performance of Educational Technology TILT Project', University of Glasgow
Reflects on the first 15 months of the institutional TLTP project at the University of Glasgow, in particular on how to evaluate the educational effectiveness of using learning technology. A detailed account of the TILT evaluation method - see chapters 11 & 12.
- Edwards J D (1993) 'Benefits, Uses, Potential and Pitfalls of CBL', University of Bristol.
- Husat Research Institute (1994) 'The do and don't of video conferencing in higher education.'
Focus on the hardware necessary, but part 2 discusses ways to get started and highlights likely problems.
- Joint Information Systems Committee (1995) 'Exploiting Information Systems in Higher Education : An Issues Paper'
Reviews existing and likely developments in information systems over the next ten years.
- Kulik J.A, Kulik C.C, & Cohen P.A. (1980) 'Effectiveness of Computer Based College Teaching: A meta analysis of findings'; Review of Educational Research, 50, 4, 525-544.
Meta analysis of 59 evaluations of computer based teaching. Demonstrates a small but significant increase in student achievement.
- Kulik C.C, & Kulik J.A, (1991) 'Effectiveness of Computer Based Instruction: An updated analysis'; Computers in Human Behaviour, 7,75-94.
Meta analysis of findings from 254 studies into effectiveness of computer based instruction. Demonstrates positive effect on student performance. One of the best surveys of evaluation.
- Laurillard D (1993) 'Rethinking University Teaching - a framework for the effective use of educational technology', Routledge, London & New York.
An important and widely referenced book on the role of technology in Higher education teaching and learning processes.
- LTDI (1996) 'LTDI Information Directory', LTDI, ICBL, Heriot-Watt University, Edinburgh.
A directory of the main UK public sector initiatives and projects related to information technology and teaching in the higher education sector.
- MacFarlane, Alistair G J (1994) 'Future patterns of teaching and learning'
Insights into the changing patterns of teaching and learning and the role of technology in offering flexible and highly supportive learning environments to extend participation in higher education.
- Mayes, T(1993) 'Commentary: Impact of cognitive theory on the practice of courseware authoring' Journal of computer assisted learning. Vol 9 pp 222-228
- Romiszowski, A.J. (1988) 'The Selection and Use of Instructional Media' Kogan Page, London
- Smith, C. and Mayes, T, (1995) 'Telematics Applications for Education and Training USABILITY GUIDE, Version 2, DGXIII 3/c', Commission of the European Communities, Brussels
- Tessmer, M and Harris, D (1992) 'Analysing the Instructional Setting' Kogan Page, London
- TLTP (1994) 'Copyright Guidelines for the Teaching and Learning Technology Programme'. Copyright Working Party on behalf of the TLTP Advisory Group
Invaluable and comprehensive source of information for courseware developers.
- Whittlestone K, Howe G & Longstaffe A (1993) 'Getting Started with Computer Based Learning'.
A short booklet aimed at absolute newcomers to learning technology.

Relevant journals

- ALT - J*: Association for Learning Technology (ALT), University of Oxford, 13 Banbury Road, Oxford, OX2 6NN (0865 273281)
- Computers and Education*: Centre for Academic Practice, University of Strathclyde, Glasgow, G1 1QE
- Journal of Computer Assisted Learning*: Prof R Lewis, Dept of Psychology, University of Lancaster, Lancaster LA1 4YF
- Education & Training Technology International*: Association for educational & training technology, Centre for Continuing Education, The City University, Northampton Square, London EC1V 0HB (071 253 4399 x3276)
- Active Learning* CTISS, University of Oxford, 13 Banbury Road, Oxford, OX2 6NN (previously titled *CTISS File*)
- British Journal of Educational Technology*, National Council for Educational Technology, Milburn Hill Road, University Science Park, Coventry, CV4 7JJ