

# **LTDI**

## **INFORMATION DIRECTORY**

10<sup>th</sup> Edition, March 1998

**Learning Technology Dissemination Initiative**

**Edited by Phil Barker**

**with the help of other members of the 1997/98 LTDI team**

*A directory of initiatives, organisations, individuals  
and resources related to communication and  
information technology used for learning and  
teaching in Scottish Higher Education.*

*The Learning Technology Dissemination Initiative is funded by the Scottish Higher Education Funding Council*

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***Acknowledgements***

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Whilst every effort has been made to ensure the accuracy of the information in this directory, LTDI wishes to emphasise that the contents are subject to change from time to time. LTDI can not accept any liability for any errors which remain. Please notify us of any factual errors, for correction in the next edition; other suggested amendments are also welcome.

**If you would like further copies of this directory, please contact the LTDI.**

A version of this directory, and other LTDI publications are available on the World Wide Web at URL:  
<http://www.icbl.hw.ac.uk/ltidi/ltidi-pub.htm>

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# LTDI INFORMATION DIRECTORY

10th Edition

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# INTRODUCTION

The Learning Technology Dissemination Initiative aims to help Scottish Higher Education Institutions to make teaching and learning more effective by harnessing modern technology.

Learning Technology is the application of technology for the enhancement of teaching, learning and assessment and offers many benefits for staff and students in Higher Education. This directory provides background information and details of resources which has proven to be helpful for those in Higher Education wishing to take advantage of these benefits. It includes information on the all of the projects funded in phases one and two of the Teaching and Learning Technology Programme (TLTP) as well as details of the Computers in Teaching Initiative (CTI), the Information Technology Training Initiative (ITTI), and the Scottish Use of MANs Initiative (UMI). All of these initiatives have been established to provide support for academic staff in Higher Education. In addition the role of the Joint Information Systems Committee (JISC) is described in outline.

This directory has developed from the LTDI Information Handbook. Advice about implementing Learning Technology can be found in the companion LTDI publication "Implementing Learning Technology".

I hope you find the 10<sup>th</sup> edition of this directory continues to be useful, and would be pleased to receive any comments that you have to help us to improve future editions.

Dr Roger Rist  
LTDI Programme Director  
March 1998.



# The Learning Technology Dissemination Initiative



As part of its response to the Committee of Scottish University Principals' Report on "Teaching and Learning in an Expanding Higher Education System" (the MacFarlane Report), the Scottish Higher Education Funding Council (SHEFC) agreed to fund the Learning Technology Dissemination Initiative (LTDI) directed at wider dissemination of materials arising from existing good practice in the Teaching and Learning Technology Programme (TLTP) and the Computers in Teaching Initiative (CTI).

Dr Roger Rist of Heriot-Watt University is the LTDI programme director and is advised by a consultative group of experts drawn from Scottish higher education institutions. In 1996/97 an external evaluation of the LTDI was conducted. In the light of this evaluation indicating strong support from the Scottish HE sector for the work of the LTDI, SHEFC decided to extend the initiative by one year.

## Scope of the Initiative

The rationale for the Learning Technology Dissemination Initiative is to enable teaching staff to identify situations where computer-based learning materials are appropriate, to make them aware of the materials currently available and develop the skills to allow teaching staff to adapt materials for their own courses.

The programme provides a series of workshops including demonstrations of computer-based courseware and case studies of implementations of computer-based materials, a collection of resources, an information service and expert advice on the use of computer-based teaching and learning methods and materials for teaching staff, and an implementation support scheme. These activities address the different levels of knowledge and interest of academic staff and in combination provide a comprehensive programme for the dissemination and implementation of good practice in learning technology. All SHEFC funded institutions are eligible to benefit from the programme.

## Activities for 1997-98

**Conferences:** The LTDI undertook to organise two major conferences in 1998: BALANCE, on the role of Learning Technology in Assessment (8 Jan.); and Value, on the evaluation of learning technology implementations (13 May).

**Workshops and Seminars:** LTDI is working with institutions and departments to provide workshops on many aspects of implementing learning technology.

**Implementation Support Service:** Available to lecturers who wish to use computers in their teaching: this can range from telephone advice on availability of software packages to extensive support throughout the planning, delivery and evaluation of a particular use of learning technology.

**Evaluation Facility:** Provides advice on evaluating the effectiveness of learning technology implementations and promotes the dissemination of good practice.

**Online Information:** Our web site <URL: <http://www.icbl.hw.ac.uk/ltidi/>> is an integrated online resource giving access to much of the material in our publications, background material used in their preparation and information related to our conferences and other activities.

## For further details please contact a member of the LTDI team:

**Roger Rist:** programme director, email [Roger@icbl.hw.ac.uk](mailto:Roger@icbl.hw.ac.uk)

**Nora Mogyey:** co-ordinator, email [Nora@icbl.hw.ac.uk](mailto:Nora@icbl.hw.ac.uk)

**Jen Harvey:** email [Jen@icbl.hw.ac.uk](mailto:Jen@icbl.hw.ac.uk)

**Phil Barker:** email [PhilB@icbl.hw.ac.uk](mailto:PhilB@icbl.hw.ac.uk)

## **LTDI Institutional Contacts**

Institutional contacts assist with LTDI activities within each institution.

### **University of Aberdeen**

Miss Patricia Spence  
Centre for Learning and Professional Development

### **University of Abertay Dundee**

Prof. David A. Ross  
Director, Centre for the Enhancement of Learning  
and Teaching

### **University of Dundee**

Dr Alistair Stewart  
Centre for Medical Education

### **Edinburgh College of Art**

Dr Peter Aspinall  
Dept. of Landscape & Architecture

### **University of Edinburgh**

Dr Jeff Haywood  
The Teaching Learning and Assessment Centre

### **University of Glasgow**

Dr Erica McAteer  
Teaching and Learning Service

### **Glasgow School of Art**

Mr Dougal Cameron  
Director

### **Glasgow Caledonian University**

Prof. Terry Mayes  
Centre for Teaching & Learning Innovation

### **Heriot-Watt University**

Dr Nils Tomes  
Teaching and Learning Technology Service

### **Moray House Institute of Education**

Mr Hugh Perfect  
Senior Assistant Principal

### **Napier University**

Dr Fred Percival  
Educational Development Unit

### **Northern College of Education**

Dr David Northcroft  
Vice Principal

### **University of Paisley**

Mr Robert Rowatt  
Educational Development Unit

### **Queen Margaret College**

Dr Kate Morss  
Director of Teaching and Learning

### **Robert Gordon University**

Mr Robert Newton  
School of Information and Media

### **Royal Scottish Academy of Music and Drama**

Dr Rita McAllister  
Vice Principal

### **St. Andrews College**

Mr Alistair Thomson  
Learning Technology Support Unit

### **University of St. Andrews**

Dr Colin Mason  
Teaching and Learning Development Officer

### **Scottish College of Textiles**

Professor C Maddox  
Principal

### **University of Stirling**

Simon Booth  
Project VARSETILE

### **University of Strathclyde**

Mr Niall Sclater  
Centre for Educational Systems

## Scottish Subject Specialists

This section is intended as a list of local contacts for staff in Scottish Higher Education seeking links with others who have practical experience of using technology in teaching, and who may be in a position to discuss ideas, or offer advice on subject specific issues. **Staff using this list are reminded that the CTI centres (see p9) or LTDI should usually be the first point of contact for general information about availability of materials and their uses.** The people listed here have widely differing backgrounds and levels of experience in the use of technology in teaching; most are actively involved in lecturing and other academic activities.

LTDI would like to express thanks to all those who have agreed to the inclusion of their names in this list, and would welcome any suggestions for additions to it.

### Art, Design and Drama

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0141-330 5574

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## Scottish Subject Specialist

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## **Scottish Subject Specialist**

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# CTI CENTRES



The CTI is a joint initiative of the Higher Education Funding Council for England, the Scottish Higher Education Funding, the Higher Funding Council for Wales, and the Department of Education for Northern Ireland. Its mission is

*"to maintain and enhance the quality of learning and increase the effectiveness of teaching through the application of appropriate learning technologies".*

The CTI offers a UK wide service to higher education through its network of 24 subject-based centres. Specialist staff provide information, support and advice on the best use of computers in teaching and learning. Each centre provides:

- answers to individual queries
- online information (via electronic mailing lists and on the World Wide Web)
- regular newsletters and journals
- subject specific resource guides and software reviews
- workshops – visits – open days – software demonstrations

## ***Co-ordination: the CTI Support Service***

The Support Service co-ordinates the work of the Centres and is the central point of contact for the CTI and activities relating to the use of computers in university teaching.

## **Contact**

For more information contact either the CTI Centre in your subject area, the CTI Support Service or look at the CTI home page on the World Wide Web:

CTI Support Service,  
University of Oxford,  
13 Banbury Road,  
Oxford, OX2 6NN.

Tel.: 01865 273273  
Fax: 01865 273275  
Email: [CTISS@oucs.ox.ac.uk](mailto:CTISS@oucs.ox.ac.uk)  
URL: <http://www.cti.ac.uk/>

## ***General CTI Publications***

Each centre produces subject specific publications, details of which are given in the individual centre entries. CTI Support service produces publications of general interest:

**Active Learning** semi-annual journal which carries refereed articles on the use of computers and information technologies in university teaching. Back issues are available.

**CTI Handbook** *communication and information technologies for teaching and learning in higher education*, with full details on all the CTI centres.

**Annual Report** detailing the activities of the CTI centres.

**Special Publications** reports from conference and symposium proceedings, including: *IT and Dearing: the Implications for HE* (1997); *Teaching, Technology and the 21<sup>st</sup> Century* (1996); *Embedding Technology into Teaching* (1996), and others from 1991-1994.

These, and the subject specific publications produced by each centre are available at no cost to members of staff at Universities funded by SHEFC or the other UK HE funding bodies.

## CTI Subject Centre Directory

### CTI Accounting, Finance & Management

School of Management  
University of East Anglia  
Norwich, NR4 7TJ  
Tel.: 01603 592 312 Fax: 01603 593 343  
CTIAFM@uea.ac.uk  
<http://www.mgt.uea.ac.uk/cti/>  
Ailsa Nicholson

**Resource Directories:**

The Source Book - Computer Based Learning for Business Education: Pub 1993/Update on WWW.  
EzMail - A user oriented directory of electronic mail addresses.

**Journal:** ACCOUNT (termly)

**Other:** Selected Proceedings of the sixth Annual CTI-AFM Conference.

### CTI Art & Design

Faculty of Art, Design & Humanities  
University of Brighton  
Grand Parade  
Brighton, BN2 2JY  
Tel.: 01273 643 119 Fax: 01273 643 119  
CTIAD@brighton.ac.uk  
<http://www.bton.ac.uk/ctiad/>  
Sue Gollifer

**Journal:** Outline, published twice a year.

**News-sheet:** three issues per year, information about workshops and diary of events.

### CTI Biology

Donnan Laboratories  
University of Liverpool  
Crown Street  
Liverpool, L69 7ZD  
Tel.: 0151 794 5118 Fax: 0151 794 4401  
CTIBiol@liverpool.ac.uk  
<http://www.liv.ac.uk/ctibiol.html>  
Christina Smart

**Resource Directory:** Now via WWW.

**Resources Guides:** workshop abstracts and software reviews for individual subject areas, available from via WWW or on request from the centre.

**Newsletter:** Life Sciences Educational Computing, 3 issues per year.

### CTI Centre for the Built Environment

University of Wales, Cardiff  
PO Box 919  
Bute Building  
King Edward VII Avenue  
Cardiff, CF1 3TW  
Tel.: 01222 874600 Fax: 01222 874601  
CTICBE@cardiff.ac.uk  
<http://ctiweb.cf.ac.uk/>  
Carole Baker

**Resource guides:** five separate guides cover Architecture, Planning, Building Construction and Property Management and General software relevant to all Built Environment discipline areas.

**Newsletter:** Habitat, distributed twice a year.

**News sheet:** produced three times a year.

### CTI Chemistry

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Roger Gladwin

**Resource Directory:** Catalogue of Chemistry Software for Teaching, available via WWW.

**Journal:** Software Reviews published spring & autumn

**Newsletter:** CacheFile: published winter & summer

### CTI Computing

Faculty of Informatics  
University of Ulster at Jordanstown  
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Tel.: 01232 368 020 Fax: 01232 368 206  
CTIComp@ulst.ac.uk  
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Sylvia Alexander

**Software Catalogue:** published Aug. 90.

**News sheet:** published termly.

**Journal:** Monitor published biannually.

**Other:** Proceedings of second All Ireland Conference on the Teaching of Computing.

### CTI Economics

Institute for Learning and Research Technology  
University of Bristol  
8 Woodland Road  
Bristol, BS8 1TN  
Tel.: 0117 928 8278 Fax: 0117 928 8473  
CTICCE@bristol.ac.uk  
<http://www.ilrt.bristol.ac.uk/ctiecon/>  
Phil Hobbs

**Resource Directories:** Catalogue of Economics Software List  
pub 1/94, Now via WWW; Government Sources of  
Business & Economic Info on the Internet

**Guide Books:** Resources for Economists on the Internet by Bill  
Goffe, (edited by CCE); A Guide to UK based Networked  
Information Resources for Social Scientists

**Journal:** Computers in Higher Education Review (CHEER)

**Newsletter:** CTI-Economics and CHEER newsletter.

**Conference:** annual conference organised with the CALECO  
research group

### CTI Engineering

Faculty of Engineering  
Queen Mary and Westfield College  
University of London  
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Tel.: 0171 975 5528 Fax: 0181 981 0259  
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<http://www.ctieng.qmw.ac.uk/CTIEng.html>  
Sian Hawthorne

**Resource Directory:** Software for Engineering Education,  
published 1991, now available via WWW.

**Newsletter:** Software for Engineering Education published  
quarterly.

**Other:** Proceedings of a Conference on Computer Aided  
Learning in Education: Conference Proceedings.

### CTI Geography, Geology & Meteorology

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<http://www.geog.le.ac.uk/cti/>  
John Castleford

**Resource Directory:** Catalogue of Geographical Courseware:  
published 5/95, available online.

**Journal:** Geocal published Dec & Jun.

**Newsletter:** published Quarterly.

**Resource packs:** information on selected topics.

### CTI Centre for History, Archaeology & Art History

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Glasgow, G12 8QQ  
Tel.: 0141 330 4942 Fax: 0141 330 5518  
CTICH@glasgow.ac.uk  
<http://www.arts.gla.ac.uk/www/ctich/>  
Jim Everett

**Software Catalogue:** Handlist of Electronic Resources for  
Teachers of History, Archaeology and Art History.

**Leaflets:** CTI History, Archaeology and Art History  
Information Leaflet; Computers in History; Computers in  
Archaeology; Art History on the Internet; Enhancing  
Teaching Quality with Computers.

**Newsletter:** Craft published termly.

### CTI Human Services

Department of Social Work Studies  
University of Southampton  
Southampton, SO17 1BJ  
Tel.: 01703 593 536 Fax: 01703 592 779  
CTIHums@chst.soton.ac.uk  
<http://www.soton.ac.uk/~chst/>  
Ann Wilkinson/David Colombi

**Resource Directory:** Published Feb. 1996, updates on web:  
printouts can be provided to those who do not have web  
access at a cost of £10.

**Journal:** New Technology in the Human Services, published in  
volumes of four issues. Subscription only.

**Newsletter** of the Centre for Human Services published three  
times per year. Free to teachers in the Applied Social  
Services in UK HE.

**Information packs:** information sheets on a range of topics.

**Discussion List:** cti-soc-work-uk@mailbase.ac.uk

### CTI Centre for Land Use & Environmental Sciences

MacRobert Building  
University of Aberdeen  
Aberdeen, AB24 5UA  
Tel.: 01224 273 754 Fax: 01224 273 752  
CTICLUES@aberdeen.ac.uk  
<http://www.clues.abdn.ac.uk:8080/>  
Jacqui Nicol

**Resource Directory:** Directory of Resources for CBL in Land  
Use and Environmental Sciences, Last published in hard  
copy July 1997, web version updated monthly. Now  
includes a gateway to web sites for teaching and learning in  
Land Use and Environmental Sciences. URL:  
<http://www.clues.abdn.ac.uk:8080/directory/content.html>

**Newsletter** published termly.

**Other Publications:** Setting effective objective tests – a guide  
to creating effective objective paper- and computer-based  
tests.

**CTI Law**

University of Warwick  
Coventry, CV4 7AL  
Tel.: 01203 524 294 Fax: 01203 524 105  
CTILaw@warwick.ac.uk  
<http://www.law.warwick.ac.uk/>  
Dave Chadwick

**Resource Guide:** available on CD-ROM and the Internet.  
**Journal:** Law Technology Journal published May, August and November  
**Conference proceedings:** BILETA Conference Proceedings: for 1995, 96, 97 (available online).  
**Reports:** first and second BILETA reports into IT in UK Law Schools (available online).  
**Online publications:** electronic law journals, via the WWW <http://elj.warwick.ac.uk/>

**CTI Library & Information Studies**

Dept. of Information & Library Studies  
Loughborough University  
Loughborough, LE11 3TU  
Tel.: 01509 223 057 Fax: 01509 223 053  
CTILIS@lboro.ac.uk  
<http://info.lboro.ac.uk/departments/dils/cti/cti.html>  
Tracy Hopkins

**Resources Guide:** CTILIS Resources Guide, Seventh Edition due May 1998.  
**Journal:** INFOCUS published three times a year.  
**Themed publications:** on a variety of topics.

**CTI Mathematics**

School of Mathematics and Statistics  
University of Birmingham  
Edgbaston  
Birmingham, B15 2TT  
Tel.: 0121 414 7095 Fax: 0121 414 3389  
CTIMath@bham.ac.uk  
<http://www.bham.ac.uk/ctimath/>  
Pam Bishop

**Resource Directory:** Maths&Stats: Guide to Software for Teaching, last published May 95  
**Newsletter:** Maths&Stats published quarterly jointly with CTI Statistics.

**CTI Medicine**

University of Bristol  
Institute for Learning and Research Technology  
8 Woodland Rd  
Bristol, BS8 1TN  
Tel.: 0117 928 7492 Fax: 0117 925 8473  
CTICM@bristol.ac.uk  
<http://www.ilt.bristol.ac.uk/cticm/>  
Dr Andrew Sithers

**Resource Directory:** Guide to Software and Resources for Computer Based Learning in Medicine, Dentistry, Pharmacy and Veterinary Science. Published 1996  
**Newsletter:** CTICM Update published May and November.  
**Conference Proceedings:** Proceedings of the Learning Technology in Medical Evaluation Conference 1997 – Internets and Intranets: global and local delivery of high quality learning materials.

**CTI Centre for Modern Languages**

The Language Institute  
University of Hull  
Cottingham Road  
Hull, HU6 7RX  
Tel.: 01482 465 872 Fax: 01482 473 816  
CTI.Lang@hull.ac.uk  
<http://www.hull.ac.uk/cti/>  
June Thompson

**Resource directory:** ReCALL Software Guide. (online)  
**Journal:** ReCALL: published May & Nov.  
**Newsletter:** ReCALL Newsletter: published three times a year

**CTI Music**

Department of Music  
Lancaster University  
Lancaster, LA1 4YW  
Tel.: 01524 593 776 Fax: 01524 593 939  
CTImusic@lancaster.ac.uk  
<http://www.lancs.ac.uk/users/music/research/CTI.html>  
Lisa Whistlecroft

**Journal:** Musicus: Annual  
**Newsletter:** CTImusic News: Biannual

### CTI Centre for Nursing & Midwifery

The University of Sheffield  
Sheffield, S10 2TN  
Tel.: 0114 272 8211 Fax: 0114 272 9340  
<http://www.shef.ac.uk/uni/projects/ctinm/index.html>  
CTINM@sheffield.ac.uk  
Miss Gail Hible - Centre Co-ordinator

**Newsletter:** published three times a year in February, June and October, ISSN 1361 021 X.

**Conference Proceedings:** Computers in Nursing and Midwifery Education – The Vision (June 1996) ISBN: 0 9528471 0 8

### CTI Physics

Department of Physics  
University of Surrey  
Guildford, GU2 5XH  
Tel.: 01483 259 329 Fax: 01483 259 501  
CTIPhys@surrey.ac.uk  
<http://www.ph.surrey.ac.uk/cti/>  
Margaret Millington

**Resource Guide:** available online.

**Newsletter:** Computers in Physics Education published three times a year.

### CTI Psychology

Department of Psychology  
University of York  
Heslington  
York, YO1 5DD  
CTIPsych@york.ac.uk  
Tel.: 01904 433156 Fax: 01904 433181  
<http://www.york.ac.uk/inst/ctipsych/>  
Annie Trapp

**Resource Directory:** CTI Directory of Psychology Software - Fourth edition (May 1996). Online version on the Web.

**Newsletter:** Psychology Software News, 3 issues a year, reviews of software published on the Web.

**Conference:** Computers in Psychology (CiP), abstracts published the Web.

**Resource packs** on specific topics, for example, experiment generators

**Two mailbase lists:** cti-psychology@mailbase.ac.uk and psych-expts@mailbase.ac.uk

**Open days** at the Centre for Psychology lecturers

**Software archive** (150+ packages)

### CTI SocInfo: CTI Centre for Sociology & the Policy Sciences

Politics and Social Policy  
University of Stirling  
Stirling, FK9 4LA  
Tel.: 01786 467 703 Fax: 01786 467 689  
CTISoc@stirling.ac.uk  
<http://www.stir.ac.uk/socinfo>  
Millsom Henry

**Resource Directory:** SocInfo Guide to IT Resources, published 1997.

**Journal:** SocInfo Journal published annually.

**Newsletter:** CTI SocInfo Newsletter: 3 times a year

### CTI Statistics

Dept of Statistics  
Mathematics Building  
University of Glasgow  
Glasgow, G12 8QW  
Tel.: 0141 330 4873 Fax: 0141 330 4814  
CTIStat@gla.ac.uk  
<http://www.stats.gla.ac.uk/cti/>  
Adrian Bowman

**Resource Directory:** Maths&Stats: Guide to Software for Teaching, last published May 95

**Newsletter:** Maths&Stats, published quarterly with CTI Maths

### CTI Textual Studies

Humanities Computing Unit  
University of Oxford  
13 Banbury Road  
Oxford, OX2 6NN  
Tel.: 01865 283 282 Fax: 01865 273 275  
ctitext@oucs.ox.ac.uk  
<http://info.ox.ac.uk/ctitext/>  
Mike Fraser / Sarah Porter

**Resources Guide** last published online August 1997

**Journal:** Computers & Texts published quarterly

**Books:** Victorian Periodicals Hypertext Project(1994);

Computers & Teaching in the Humanities (1996);

Literary and Linguistic Computing (special issue) on Film

and Performance (Nov 1997)

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## The Use of MANs Initiative

Scotland has four Metropolitan Area Networks (MANs) based on 155 Mbps ATM, and the MANs are connected together at the same bandwidth. All of the 21 Universities and Higher Education Colleges in Scotland are connected to one of the MANs, and the ATM backbone extends throughout the campuses. Where necessary there are ATM links direct to individual servers or workstations, although most users access the network by Ethernet LANs. In 1995 the Scottish Higher Education Funding Council (SHEFC) started the Use of MANs Initiative (UMI) to experiment with ways of using this very high connectivity.

### ***Things only MANs can do***

The Scottish MANs make it possible for teaching materials to be made available via the World Wide Web – one set of materials can reside on a single server and from there be accessed by students throughout Scotland. Multimedia materials featuring film clips, audio material, animations and Java applets are made available in this way. Whereas CD ROM based materials need to be kept up to date, server based materials ensure that the latest version is always available online. Distance Learning and self-paced learning are made easier by the reliable network and the ease with which teaching materials can be made available.

The high bandwidth network offers an excellent quality of service (QoS), so that users find the network to be reliable. This is an important factor during teaching sessions.

Some research opportunities are available to MAN users – for example workstation clusters connected to a MAN can use Load Sharing Software to carry out parallel computations and provide complementary facilities to those provided by national Supercomputing Centres. Visualisation packages can run on powerful computers but be accessed across the network, allowing users to analyse large and complex data sets. Any graphics can be viewed on their own workstations.

Departments can share expensive computing facilities by accessing them and sending data to them across the MAN.

### **Videoconference rooms**

UMI funded the installation of very high quality ATM-based videoconference rooms at each HEI in Scotland. The sound in these rooms is CD quality and the video is near-TV quality. Audio is 'mixed', which means that sound can be heard simultaneously from all sites in a multi-site conference; this adds greatly to the feeling of ease during a conference. There is a gateway to ISDN videoconferencing so that the Scottish rooms can be used to communicate with sites throughout the world. There is a gateway to MBone videoconferencing.

Videoconference sessions are used as part of MAN based courses, with no thought of phone charges. Courses are given by collaboration between different Universities and Colleges, with students at one centre taking courses provided by a different centre.

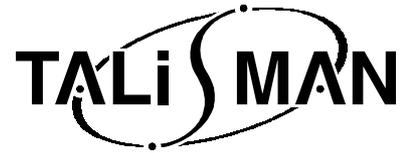
### ***UMI projects***

UMI has funded about 40 projects to explore ways of using the Scottish MANs. Several projects have produced high quality teaching materials, one investigated parallel processing using workstation clusters; 3 projects focused on staff development and training in the use of MANs. UMI also funded ATM based videoconferencing studios at Universities and Colleges throughout Scotland. Desktop videoconferencing is also used. A further 33 projects carried out infrastructure improvements, and installed hardware such as high performance servers at sites throughout Scotland.

### ***Further information about UMI***

The following pages contain details of the UMI projects. More information about UMI is available at the UMI web site URL: <http://www.use-of-mans.ac.uk/>, which contains links to projects' home pages, information about videoconferencing, and other information for MAN users.

## **Teaching And Learning in Scottish Metropolitan Networks**



The Scottish MANs offer new opportunities in the way we undertake teaching, research and administration. If the potential of the MANs is to be fully exploited then HE staff must be aware of their existence and capability, and enabled to exploit this potential.

TALiSMAN is a unit that was established in September 1996 to support Teaching and Learning in Scottish Metropolitan Area Networks with funding from the Scottish Higher Education Funding Council. TALiSMAN aims to:

- deliver high quality training to enable effective and efficient use of the Metropolitan Area Network (MAN) technology by the academic community in Scottish Higher Education Institutions (HEIs),
- enable Scottish Higher Education to apply and exploit the facilities of the Metropolitan Area Networks in teaching learning research and administration
- enable and promote the integration of networking technology and network based learning methods into teaching and learning.

### **Core Training Programme 1997-98**

Training will be targeted as appropriate at different groups of staff including academic, academic related and research staff. The programme for 1997-98 includes:

- Awareness Days,
- Training workshops,
- Specialist conferences and UMI seminars,
- Online courses,
- Train the Trainer sessions,
- TALiSMAN Online.

### **Training Focus**

Training will build on that delivered in 1996-97 and address three key themes:

#### ***Video conferencing***

This series of events will address the use of MAN video conferencing in teaching and learning. Supported by the TALiSMAN video conferencing suite, the programme includes:

- a specialist conference,
- two workshops,
- a roadshow,
- an online course.

#### ***Online Courses***

Following a successful pilot, the TALiSMAN online course will be offered with a subject focus. Customised versions of *Using the Web in Teaching and Learning* will be (or have been) offered in eight subject areas:

- engineering, statistics, biomedicine, and social sciences (1997);
- environmental science, arts and humanities, business studies and education (1998).

#### ***TALiSMAN Online***

TALiSMAN Online was launched in December 1997. This online training and study centre supports the TALiSMAN online courses and TALiSMAN's range of electronic distance, open and flexible learning materials.

Registered participants are able to access, and encouraged to use, a range of support facilities including online tutorial support, discussion forums and an email help desk.

## **Training Methods**

TALiSMAN is committed to using the most appropriate training methods to meet the needs of the participants and demonstrate the potential of the MANs, for example: computer conferencing systems, interactive electronic materials.

## **Training Materials**

TALiSMAN will produce and make available exemplar training materials including: self study materials, materials to support institutional training teams, examples of current practice in network based interactive materials, guidelines for academic and academic related staff.

## **Costs**

There is no charge to SHEFC funded institutions for participating in any of the training programme events.

## **The Team**

<b>Project Co-ordinator</b>	Carol Higgison
<b>Training Officers</b>	William Allen Dr Tom Kane Dr Colin Milligan Brian Shields
<b>Technical Officer</b>	Dr Paul Rattray
<b>Admin</b>	Wilma Brown Lesley Harkins

## **Contact Details**

If you would like further information please contact any member of the team at:

TALiSMAN,  
ICBL,  
Heriot-Watt University,  
Edinburgh EH14 4AS.

Tel.: 0131 451 3280.  
Fax: 0131 451 3283.  
Email TALiSMAN@icbl.hw.ac.uk  
URL: <http://www.talisman.hw.ac.uk/>

## **UMI Project Descriptions**

UMI funded about 70 projects to experiment with ways of using the MANs, to improve hardware and infrastructure, and to contribute to staff development and training. Details about the 40 projects which investigated ways of using the MANs, or carried out staff development and training, are listed here.

### **Format of the Entries**

#### **Acronym: Full Name**

Description of project.

Availability of material produced

Contact name

home page URL

Department

Plugins or other applications required

Institute

Address

email address

Tel.:

Fax:

## ***Projects that Developed Applications or Services Using the MANs***

### **Medical MAN**

Medical MAN links microcomputer clusters in four teaching hospitals within the city of Glasgow with microcomputer clusters within the University of Glasgow, enabling medical students to access and use the network from any of these sites. A Clinical Medicine Planning Unit server was installed, connecting the Faculty of Medicine with the University network and so to Medical MAN, ClydeNET and the Internet. A study guide was developed for the new medical curriculum for session 1996/97.

Ms A M Howarth  
University of Glasgow  
Kelvin Building

<http://www.gla.ac.uk/Acad/MedEdUnit/>

Glasgow, G12 8QQ

A.M.Howarth@clinmed.gla.ac.uk

Tel.: 0141 339 8855 x2638 Fax 0141 330 4883

### **Webserver provision**

This project set up and maintained the ClydeNet server which is available for use by all UMI projects in the ClydeNet area.

Mrs L M McCormick  
Computing Service Dept  
University of Glasgow  
James Watt North Building  
Glasgow, G12 8QQ

<http://www.clyde.net.uk/>

l.m.l.mccormick@compserv.gla.ac.uk

Tel.: 0141 330 4860 Fax: 0141 330 4808

### **Web services Supporting ClydeNet web activities**

This project appointed a web officer to support all UMI projects in the ClydeNet area. The officer gave advice on web design, helped projects to set up web sites, hosted web information on the ClydeNet server, and carried out a liaison role between ClydeNet users of the web.

Ms L M McCormick  
Computing Service Dept  
University of Glasgow  
James Watt North Building  
Glasgow, G12 8QQ

<http://www.clyde.net.uk/>

l.m.l.mccormick@compserv.gla.ac.uk

Tel.: 0141 330 4860 Fax: 0141 330 4808

### **CVU: Clyde Virtual University**

CVU delivers Internet-based multimedia learning materials to students at institutions connected to the ClydeNet MAN. CVU is a collaborative project between Strathclyde University (the lead institution), The University of Glasgow, Glasgow Caledonian University, Paisley University and Glasgow School of Art. CVU1 created a successful online educational environment and CVU2 aims to extend these facilities to include videoconferencing and shared workspace technology.

Access is limited to users in the ClydeNET Metropolitan Area Network. Access from outside this area can be discussed with Niall Sclater.

Mr N Sclater  
Centre for Educational Systems  
University of Strathclyde  
40 George Street  
Glasgow, G1 1QE

<http://www.cvu.strath.ac.uk/>

Requires: Netscape 2.0 or better. Plugins used by some modules are: Shockwave and QuickTime

n.sclater@strath.ac.uk  
Tel.: 0141 548 3496, Fax: 0141 553 4121

### Broadband Link with partner school

This ongoing project has investigated the use of videoconferencing to liaise with a partner school over placement management; to support student teachers on school placements and to conduct in-service training of staff at a distance.

Mr A Thomson  
St Andrew's College  
Duntocher Road  
Bearsden  
Glasgow, G61 4QA  
a.thomson@stac.ac.uk  
Tel.: 0141 943 3462 Fax: 0141 943 0106

<http://www.stac.ac.uk>

### PICS: Image Data Archive

Researchers in psychology and machine vision require carefully controlled sets of images, e.g. faces with uniform lighting and background. PICS holds an archive of such collections of images, including faces, natural scenes, textures and children's drawings. The range is gradually expanding as donations are received: if you have something to offer, please contact Peter Hancock.

Access is free. Some image collections may be restricted, requiring permission from the owner for full download.

Dr P J B Hancock  
Department of Psychology  
University of Stirling  
Stirling, FK9 4LA  
p.j.b.hancock@psych.stir.ac.uk  
Tel.: 01786 467675 Fax: 01786 467641

<http://pics.psych.stir.ac.uk/>

### IDIOMS: Intelligent Discovery of Information On MANs in Scotland

The IDIOMS project developed and disseminated software to support automatic, adaptive cataloguing, searching and notification about information resources and services on the Scottish MANs. A Harvest indexing service has been set up for all Scottish HEIs linked by the MANs. Resource discovery software was further developed and disseminated to keep MAN users well informed about the information and services available.

The IDIOMS index is available for anyone to use.  
ELF software is freely available at <http://mans.cee.hw.ac.uk/Elf/>

Dr H Taylor  
Dept of Computing and Electrical Engineering  
Heriot-Watt University  
Edinburgh, EH14 4AS  
hamish@cee.hw.ac.uk  
Tel.: 0131 449 5111 Fax: 0131 451 3327

<http://www.cee.hw.ac.uk/HCI/idioms>

### C-Web: Delivering software and information over the Web: A Courseware Web

The C-web project supported the TLTP home pages, providing access to the catalogue of products and building a list of downloadable outputs from the programme. A method was developed for delivery and remote installation of some of the PC based software; the method was demonstrated for two of the projects.

Dr P McAndrew  
Institute for Computer Based Learning  
Heriot-Watt University  
Edinburgh, EH14 4AS

<http://www.icbl.hw.ac.uk/c-web>

For remote installation demonstration use cwebber.exe (PC only) which is available from the C-Web pages.

## Use of MANS Initiative Project Descriptions

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patrick@icbl.hw.ac.uk  
Tel.: 0131 451 3286 Fax: 0131 451 3283

### PEARL: Providing Ethnological Archives for Research and Learning

The academic journal 'Scottish Studies', the magazine 'Tocher', and the cassette and CD series 'Scottish Tradition' (reflecting the contents of the tape archives) are continuing to keep the School of Scottish Studies well known throughout the world. PEARL uses World Wide Web and RealAudio<sup>®</sup> technologies to provide access to selected articles from 'Tocher', including real-time playback and control of the audio archive item(s) from which the content of these articles is transcribed.

The materials are accessible throughout the Scottish Higher Education community. Access by other communities may be possible by negotiation with Dr Mackay.

Dr M MacKay <http://www.pearl.arts.ed.ac.uk/>  
School of Scottish Studies Requires: RealAudio  
University of Edinburgh  
Old College  
South Bridge  
Edinburgh, EH8 9YL  
Scottish.Studies@ed.ac.uk  
Tel.: 0131 650 4167 Fax: 0131 650 4163

### Arts Server

This project was set up to provide a web server in the Edinburgh College of Art. The college has established three computer laboratories of up to 20 work stations per laboratory, connected to the internal college network, the MAN, JANET, SuperJANET and the Internet. These facilities are used by students, researchers and staff for both class teaching and open access work.

Mr K Collins <http://www.eca.ac.uk>  
Edinburgh College of Art  
Lauriston Place  
Edinburgh, EH3 9DF  
Tel.: 0131 221 6000 Fax: 0131 221 6001  
artkjc@clust.hw.ac.uk

### Philosophy Web Server

The development of an interactive Web Server Application was proposed to support Philosophy Department teaching and to promote Philosophy Department liaison with, and recruitment from, neighbouring schools and further education colleges. The system enables students to add questions and comments to web pages which are publicly available, and to engage in on-going discussions with lecturers. The system also forms a basis for distance learning.

Dr R A Young <http://www.dundee.ac.uk>  
Dept of Philosophy Requires: If future developments are carried out a planned,  
University of Dundee it will be necessary to have Real-Audio plug-ins and to be  
Dundee, DD1 4HN Java-enabled if the user is to obtain full benefit from the  
r.a.young@dundee.ac.uk site  
Tel.: 01382 344 539 Fax: 01382 224140

### Mathematics Web Server and Hypertext Tutorials

This project developed hypertext pages of use to staff and students in mathematics-related subjects at Dundee, St Andrews and Abertay Universities. The main features of this project include a numerical analysis web site and interactive tutorials for widely-used software packages (Matlab, Maple and LaTeX).

Dr D J Higham <http://www.mcs.dundee.ac.uk:8080/~www/>  
Dept of Mathematics

University of Strathclyde  
Livingstone Tower  
26 Richmond Street  
Glasgow, G1 1XH  
Tel.: 0141 548 3716 Fax: 0141 552 8657

### Tutor at a Distance

The department of Accountancy and Business Finance, Dundee University, and the department of Management, St Andrews University, carried out an investigation into the ways that CAL/CBL can make more efficient use of staff resources. For example, through the use of CAL packages, tutorial sessions at Dundee University were monitored by a tutor in St Andrews who was able to respond in real-time to student queries.

Dr C D Green <http://www.dundee.ac.uk>  
Dept of Accountancy and Management  
University of Dundee  
Dundee, DD1 4HN  
c.d.green@dundee.ac.uk  
Tel.: 01382 344 759 Fax: 01382 224 419

### CBL for computing courses

CBL packages have been produced for applied computing courses, and are running on the WWW. The CBL material both augments (in the sense that students can use it at any time) and substitutes (in the sense that one or two lectures per week have been replaced with CBL) parts of the courses. An extension of the CBL project to allow interactive tutoring from a remote site is planned for the future.

At present, the package is freely available on the Internet and registration is not required.

Dr G Rowe <http://www.computing.dundee.ac.uk>  
Dept of Mathematics and Computer Science  
University of Dundee  
Dundee, DD1 4HN  
growe@mic.dundee.ac.uk  
Tel.: 01382 344 415

### Walmsley Collection of Human Embryo Slides

The Walmsley Collection at the University of St. Andrews' School of Biological and Medical Sciences consists of 40 sectioned human embryos, ranging from 3mm (approx. 27 days) to 50mm (9 weeks). The database allows researchers to find out whether the collection contains specimens that will be of use to them. The Department also stores sections from the collection as high-resolution computer images which can be made available via the Internet to other researchers.

The Human Embryo Database is freely available. Access to other materials may be possible by negotiation with the project leader.

Dr J F Aiton <http://embryos.st-andrews.ac.uk/>  
School of Biological and Medical Sciences  
University of St Andrews  
Bute Medical Buildings  
St Andrews, KY16 9TS  
jfa@st-andrews.ac.uk  
Tel.: 01334 463 543 Fax: 01334 463600  
Requires: QuickTime movie player.

### CLUES Consortium for the Provision of Digital Images on Demand

A large body of teaching materials were developed and made available on a video clip server. Applications include multimedia databases of video clips and still images with supporting instructional text explaining

## Use of MANS Initiative Project Descriptions

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procedures, processes, microscopic specimens and animal behaviour; a digital video interactive interview case study; computer-aided assessment multimedia question banks; and access to a remote image database.

Most applications do not require a password, however a few applications are password protected.

Dr S B Heath  
Centre for CBL  
University of Aberdeen  
MacRobert Building  
Aberdeen, AB24 5UA  
clues@aberdeen.ac.uk  
Tel.: 01224 273 755 Fax: 01224 273 752

<http://umi.eee.rgu.ac.uk/>  
Requires: MPEG viewer for video clips

## Distance learning resources

This project was intended to complement existing facilities so as to extend the support capacity and means of access to Distance Learning materials to students and academic staff. The new support environment allows access to resources in the form of online learning materials, programme support, programme management, case databases, research methods and assessment methods. These resources are offered throughout the Paisley campus and to other institutions within the Metropolitan Area Network.

A key-based encrypted "on-demand/payment" system will be implemented to access course content. Contact Mr K Ramsay to discuss access to materials.

Mr K Ramsay  
Distance Learning and International Programme  
University of Paisley  
International Office  
Paisley, PA1 2BE  
kirk.ramsay@paisley.ac.uk  
Tel.: 0141 848 3833 Fax: 0141 848 3947

<http://www.paisley.ac.uk>

## FAB: Functional Anatomy and Biomechanics

The ClydeNET Functional Anatomy and Biomechanics (FAB) project is a collaboration between the four Universities in the ClydeNET area. The project has produced a series of World Wide Web tutorials combined with a comprehensive glossary covering the anatomy and biomechanics of the human lower limb. It is hoped that in future it will be possible to extend this to cover other aspects of human form and function of relevance to the clinical and scientific communities.

These materials are freely available to members of the Scottish Higher Education community but it would be helpful if teachers planning to make use of the materials let Professor Payne know that they were doing so.

Prof. A Payne  
Laboratory of Human Anatomy  
University of Glasgow  
IBLS  
Glasgow, G12 8QQ  
A.Payne@bio.gla.ac.uk  
Tel.: 0141 339 8855 x5871 Fax: 0141 330 4299

<http://www.anatomy.gla.ac.uk/fab>  
Requires: QuickTime  
(from Netscape)

## NETMUSE: Net based Music Education

NetMuse is formed from a consortium of all the degree-awarding music departments in Scotland to develop networked multimedia packages in support of HE Music. Special features include CD quality audio-serving with streaming to the desktop and massive graphics.

Guest materials are available, but copyright negotiations have restricted the use of the full materials to the five Scottish Universities who offer degrees in Music. If you wish to discuss access, please contact Dr Arnold.

Dr S Arnold  
Music  
University of Glasgow  
14 University Gardens

<http://netmuse.gla.ac.uk>

Glasgow, G12 8QH  
stephen@music.gla.ac.uk  
Tel.: 0141 330 5509 Fax: 0141 307 8018

### **IMPACT: High Performance Parallel Computing using ClydeNET**

The major objective of the project was to exploit the ClydeNET MAN to demonstrate the ability to create an affordable high performance computing environment using low cost workstations. Groups from the Universities of Glasgow and Strathclyde purchased equipment and software to provide a high performance computing capability for both campuses, utilising existing and planned workstations. The approach was through the direct connection of workstation clusters on to the ClydeNET MAN using ATM technology.

Please contact Professor Richards if you wish to discuss access to the materials.

Prof. B E Richards  
Dept of Aerospace Engineering  
University of Glasgow  
James Watt South Building  
Glasgow, G12 8QQ  
B.Richards@aero.gla.ac.uk  
Tel.: 0141 330 4304 Fax: 0141 330 5560

<http://www.aero.gla.ac.uk/Research/CFD/Computing/IMP>  
ACT

### **TASCMAD: Training and Support for Communication using Multimedia Applications from the Desktop**

This project carried out awareness events and training days, explaining the potential for MBone videoconferencing. They visited sites and investigated the problems that would be involved in setting up MBone facilities.

Mr J Mullin  
Multimedia Communications Group  
University of Glasgow  
62 Hillhead Street  
Glasgow, G12 8QB  
jim@mcg.gla.ac.uk  
Tel.: 0141 330 5424 Fax: 0141 339 8889

<http://www.mcg.gla.ac.uk/>

### **Co-working for course design and project supervision**

A co-operative working environment was established between the Department of Design, Manufacture and Engineering Management on one campus and the Division of Design and Technology on another. Students used a shared workspace in a design exercise, and the shared workspace was used to augment a class in illustration and presentation.

Dr Ion will be happy to discuss the findings of this project. A further project is under way, in which the system is used as part of a taught course.

Mr W J Ion  
Product Design Engineering  
University of Strathclyde  
James Weir Building  
75 Montrose Street  
Glasgow, G1 1XJ  
w.j.ion@strath.ac.uk  
Tel.: 0141 552 4400 x3699 Fax: 0141 552 7986

<http://www.cad.strath.ac.uk/~bill/man/homepage.html>

### **OMNIBUS Business information resource**

There is a significant overlap in the course content of the three business studies departments of the Universities of Edinburgh, Heriot-Watt and Napier, particularly in the early parts of degree schemes. A joint multimedia library now facilitates the collaboration of these departments to provide more effective and efficient teaching and learning, and also gives the opportunity to reach a wider student audience. The facility is sited and managed from the University of Edinburgh.

Contact Dr Ashley Lloyd to discuss access to materials.

Dr A Lloyd

<http://omni.bus.ed.ac.uk/opsman/resources/>

Department of Business Studies

University of Edinburgh

William Robertson Bldg,

50 George Square

Edinburgh EH8 9YJ

Ashley.Lloyd@ed.ac.uk

Tel.: 0131 650 3817 Fax: 0131 668 3053

### **MARBLE: MAN Accessible Resource Based Learning Exemplars**

The MARBLE project developed resource-based learning materials on the Web which stand as exemplars for staff who want to develop similar teaching resources. Some of the materials have been delivered to students as integral parts of courses at more than one university. A substantial body of material was developed and made available.

Two projects (Computers in Teaching and Learning, Geotechnical Engineering) have restrictions on access by visitors. To minimise this problem, as the project team was unanimously of the view that such restriction is undesirable in principle, "guest pages"

Dr J Haywood

<http://www.marble.ac.uk/marble/>

TLA Centre

Requires: QuickTime required for some films

University of Edinburgh

34 Buccleuch Place

Edinburgh, EH8 9JS

jeff.haywood@ed.ac.uk

Tel.: 0131 650 4131 Fax: 0131 650 6956

### **CLICK & LISTEN: Teaching the phonetics and phonology of Scots and Scottish English**

The project concentrates on the phonetics and phonology of Scots and Scottish English, the languages most widely spoken and written in Scotland today. The package provides users with access to a large database of speech recordings, covering basic phonetics, the sound structure of Scots and Scottish English, dialect samples, and examples of Scottish literature. The project is aimed at students of Scots and English Language, Speech and Language Therapy, Drama, and those undergoing Teacher Training.

Materials are freely available to the Scottish HE community, but please let the project leader know if you decide to use it. Access outside this community may be possible by negotiation with the project leader.

Dr J Beck

<http://wheecher.arts.ed.ac.uk/public/welcome.htm>

Department of Speech and Language Sciences

Requires: JavaScript required for some modules  
(from Netscape 3.0)

Queen Margaret College

Clerwood Terrace

Edinburgh, EH12 8TS

e.rooney@ed.ac.uk

Tel.: 0131 650 4385 Fax: 0131 650 6883

## ACSL: Advancing Computer Supported Learning

The joint aim of the two Universities involved in this project, the Universities of St Andrews and Dundee, was to collaborate and share experience on the use of networked digital audio-visual technologies (AV) and the WWW in Computer Science education.

As a result of this project, AV seminars have been delivered simultaneously to sites on either side of the River Tay, and a stable ATM teaching laboratory is now running on a routine daily basis for scheduled student use.

This project was a practical experiment; the results of the experiment are given in the report which is accessible via the project's home page.

Mr C Allison  
Dept of Computer Science  
University of St Andrews  
North Haugh  
St Andrews, KY16 9SX  
colin@dcs.st-andrews.ac.uk  
Tel.: 01334 463 239

<http://www.dcs.st-and.ac.uk/CompSci/UMI>

## Web cache server

A WWW caching server was established to enable more effective use of both local and JANET resources by storing commonly used Web pages locally and thus delivering them faster. The additional advantage of this is a reduction in the amount of bandwidth consumed by Web traffic. The main purpose of the cache is to service local requests, but co-operative links with other caches will provide more effective retrieval of Web pages nationally and further reduce the load on international JANET connections.

Mr S L Gardner  
Information Services  
University of Abertay Dundee  
Kydd Building  
Bell Street  
Dundee, DD1 1HG  
infoservices@abertay-dundee.ac.uk  
Tel.: 01382 308800 Fax: 01382 308880

<http://www.abertay-dundee.ac.uk>

## Computing provision for students

This project has provided significant improvements to access to computing facilities for students. A 40 seat computer cluster with 24 hour access is now available for use, and access to the local network and MAN related services has been improved. The project has also allowed good progress to be made in tackling the problems surrounding the networking and support of computers in student study-bedrooms.

Dr M Bain  
Dept of IT Services  
University of St Andrews  
The John Honey Building  
North Haugh  
St Andrews, KY16 9SX  
m.bain@st-andrews.ac.uk  
Tel.: 01334 462 760 Fax: 01334 462759

<http://www.st-andrews.ac.uk>

## Network management system

This project was a joint collaboration between the Universities of St Andrews, Dundee and Abertay Dundee, and Northern College (Dundee). As a result of this project, a common network management system has been implemented which provides comprehensive management tools for the FaTMAN and for the members' campus networks. The network management software used offers distributed network management with automatic fallback in the event of failure of the primary NMS server.

Mr B Mitchell

<http://www.st-andrews.ac.uk>

## Use of MANS Initiative Project Descriptions

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Dept of IT Services  
University of St Andrews  
The John Honey Building  
North Haugh  
St Andrews, KY16 9SX  
B.Mitchell@st-andrews.ac.uk  
Tel.: 01334 462 765 Fax: 01334 462765

### CAL into Mainstream Teaching: Preparing for FaTMAN - Bringing computer-assisted learning into mainstream teaching

Selected members of academic staff receive training and access to some of the equipment needed to integrate learning technologies into their teaching. If schools and departments are to move forward in their use of learning technologies, they will need to rely for the most part on their own staff rather than external resources. A self-help group, the Web Teaching Forum, has been formed to help staff learn (often from each other) how to effectively use these new tools and techniques.

Reports on project progress are available at the project's home page.

Dr H Allen <http://www.st-and.ac.uk/ITS/CAL/umiproject.html>  
IT Services  
University of St Andrews  
The John Honey Building  
North Haugh  
St Andrews, KY16 9SX  
H.Allen@st-andrews.ac.uk  
Tel.: 01334 462 764 Fax: 01334 462 759

### Common Helpdesk

A common helpdesk system was introduced which allows the participating institutions (the Universities of Dundee (lead institution), Abertay Dundee and St Andrews) to make more effective use of support staff expertise, and facilitates the continuous improvement of the quality of end user support.

Mr R Murphy <http://www.dundee.ac.uk>  
Information Technology Services  
University of Dundee  
Park Place  
Dundee, DD1 4HN  
r.s.d.murphy@dundee.ac.uk  
Tel.: 01382 344 444

### Child Health Medi-CAL

This phase 2 project is developing materials to deliver a core medical curriculum in Paediatric medicine. 30 example patients are being developed by a consortium with members from hospitals all over Scotland.

Dr N Hamilton <http://w3.abdn.ac.uk/umi2/>  
Medical School  
University of Aberdeen  
Polwarth Building  
Aberdeen, AB25 2ZD  
mil001@aberdn.ac.uk  
Tel.: 01224 681818  
Requires: JavaScript and MPEG required. If you do not have a MPEG player, you can use VMPEG if you have VGA or SVGA (from Netscape (Version 2 and 3) or Internet Explorer (Version 3))

### National Learning Network for Remote Sensing

Remote sensing is taught in many degrees in geography, environmental sciences, engineering and physics in Scottish HEIs, but teaching staff have until now tended to work in isolation with relatively limited resources.

This project aims to overcome these problems and strengthen both the teaching and student communities in this subject, and share expertise and knowledge between institutions.

Material will be made available to consortium members for evaluation and modification in three release phases. Any staff member of a Scottish University can become a consortium member and be given passwords etc for access.

Dr I MacLaren  
Dept. of Electronic Engineering and Physics  
University of Paisley  
High Street  
Paisley, PA1 2BE  
Iain.MacLaren@paisley.ac.uk  
Tel.: 0141 848 3608 Fax: 0141 848 3616

<http://euromet.paisley.ac.uk/nln/welcome.htm>

Requires: RealAudio player  
(from <http://www.real.com>)

### **MANTCHI: MAN-based Tutoring in Computer Human Interaction**

Departments in the Glasgow Caledonian University, the University of Glasgow, Heriot-Watt University and Napier University are collaborating to develop and deliver courses over the MAN in Computer Human Interaction. Each participating Department has offered courses or parts of courses which will be available for students at all four Universities.

Mr J Newman  
Dept of Computing  
Glasgow Caledonian University  
70 Cowcaddens Road  
Glasgow, G4 0BA  
j.newman@gcal.ac.uk  
Tel.: 0141 331 3280 Fax: 0141 331 3005 or 3277

<http://www.clyde.net.uk/mantchi/>

Requires: No special requirements to access home page at present, but the situation will vary on the materials to support particular tutorial 'atoms' currently being developed.

### **SUMSMAN: Scottish Universities Maths and Statistics across the MANs**

SUMSMAN will provide a core curriculum for mathematics and statistics using computer materials developed under TLTP and other programmes, and also flexible learning study guides. The project will exploit the potential of the MANs to offer an integrated learning programme comprising high quality courseware developed under previously funded initiatives.

Mr T Scott  
Department of Mathematics  
Napier University  
219 Colinton Road  
Edinburgh, EH14 1DJ  
td.scott@napier.ac.uk  
Tel.: 0131 455 4378 Fax: 0131 455 4232

<http://www.maths.ed.ac.uk/>

### **FINESSE: Finance Education in a Scalable Software Environment**

MBone based videoconferencing tools are being used in conjunction with specially developed spreadsheet software to provide a new way of teaching Finance students.

Mr C Allison  
Division of Computer Science  
University of St Andrews  
North Haugh  
St Andrews, KY16 9SS  
colin@dcs.st-and.ac.uk  
Tel.: 01334 463239

<http://tullamore.accountancy.dundee.ac.uk>

## ***Projects for Staff Development***

### **BEGINetnet: Using the MANs for Teaching and Learning**

This project developed a paper based booklet and web based materials explaining the potentials of the MANs for use in Teaching and Learning.

Copies of the BEGINetnet booklet are available from Alastair Thomson, or from the TALiSMAN team.

Mr A Thomson  
St Andrew's College  
Duntocher Road  
Bearsden  
Glasgow, G61 4QA  
a.thomson@stac.ac.uk

<http://www.stac.ac.uk/edu/beginetnet>

Requires: QuickCam required for some modules

Tel.: 0141 943 3462 Fax: 0141 943 0106

### **TALiSMAN: Teaching And Learning in the Scottish MANs**

The TALiSMAN project is providing a wide range of awareness events, training courses delivered both locally, by videoconference, and online courses, and specialist seminars. TALiSMAN has its own videoconference facilities which it uses for training purposes. It is funded until July 1998.

TALiSMAN's activities are designed to help the Scottish Higher Education community. Access by other communities may be possible by negotiation with Dr Rist.

Dr R Rist  
Institute for Computer-based Learning  
Heriot-Watt University  
Edinburgh, EH14 4AS  
roger@icbl.hw.ac.uk

<http://www.talisman.hw.ac.uk/>

Requires: None. You will need a forms compatible browser to make full use of the web site.

Tel.: 0131 451 3287 Fax: 0131 451 3283

### **NetWare Training for Novell users**

Network training materials were produced in-house by adapting a core set of materials developed by the Network Training Initiative.

Mr K Collins  
Edinburgh College of Art  
Lauriston Place  
Edinburgh, EH3 9DF  
artkjc@clust.hw.ac.uk

<http://www.eca.ac.uk>

Tel.: 0131 221 6000 Fax: 0131 221 6001

### **Using the Philosophy Web Server**

It was necessary to train each full-time member of staff in the philosophy department in the relevant skills for maintaining and updating the new system (see entry for Philosophy Web Server in the "applications" section of this directory). The staff were taught through seminars run by the developer of the system and also through IT services on the Internet.

Dr R Young  
Dept of Philosophy  
University of Dundee  
Dundee, DD1 4HN  
r.a.young@dundee.ac.uk

<http://www.dundee.ac.uk>

Tel.: 01382 344 539 Fax: 0131 224 140

**Training staff for distance tutoring.**

Staff training involved visits to TLTP dissemination sites including the Heriot-Watt University and De Montfort University.

Dr C D Green

<http://www.dundee.ac.uk>

Dept of Accountancy and Management

University of Dundee

Dundee, DD1 4HN

[c.d.green@dundee.ac.uk](mailto:c.d.green@dundee.ac.uk)

Tel.: 01382 344 759 Fax: 01382 224 219

# TEACHING AND LEARNING TECHNOLOGY PROGRAMME



The first phase of the Teaching and Learning Technology Programme (TLTP) was launched in February 1992 by the Universities Funding Council. Universities were invited to bid for part of the £7.5 million available each year for projects to make teaching and learning more productive and efficient through the use of modern technology. In August 1992 it was announced that 43 projects were to be funded in 1992-93. In April 1993, the new funding bodies the HEFCE, the HEFCW, the SHEFC and the DENI announced the second phase of the TLTP, funding a further 33 projects, totalling £3.75 million in their first year, 1993-94. Both phases of the programme ran for up to three years.

Approximately one quarter of these projects address institutional issues, particularly staff development, and work towards the creation of an effective and sustained culture change within the host institution, to create an ethos supportive of greater use of technology within the teaching environment. The remaining phase 1 and 2 projects were concerned with the design of subject specific courseware, and most included academics from a consortium of staff from different institutions, ranging in size from two to forty-four members.

The TLT Support Network, which grew from some of the institutional projects, consists of nine centres throughout the UK providing specialist advice and support on the integration of TLTP and other materials into courses within the host institutions and to other institutions located nearby.

At the time of writing (Mar. 1998) the results of bids for funding under the third phase of had just been released. This third phase of funding will support projects *in England and Northern Ireland*, which concentrate on implementation of Learning Technology products. More information on these projects can be found through the TLTP web pages (URL: <http://www.tltp.ac.uk/tltp/>).

## Co-ordination

The TLTP central co-ordination team is based at HEFCE in Bristol, the national co-ordinator is Sarah Turpin.

## Contact

Teaching and Learning Technology Programme  
Northavon House  
Coldharbour Lane  
Bristol, BS16 1QD

Tel.: 0117 931 7454  
Fax: 0117 931 7173  
Email: [tltp@hefce.ac.uk](mailto:tltp@hefce.ac.uk)  
URL: <http://www.tltp.ac.uk/tltp>

## Current TLTP Publications

### TLTP Catalogue

**TLTP Phase 1 and Phase 2 Reports** (May 1993 and Nov 1993) details of the 43 Phase 1 and 33 Phase 2 projects.

**Institutional Case Studies:** a report of six case studies from the institutional Phase 1 projects.

**TLTP Workshop Report: "The Implementation and Distribution of Courseware across a University Campus"**, University of Birmingham, 14 June 1994.

**Copyright Guidelines for the Teaching and Learning Technology Programme**, Autumn 1994.

**Science Case Studies:** A report of six case studies from subject-based consortia projects.

**Dissemination Guidelines.**

**TLTP Newsletters** (quarterly) Issues 1 – 10.

**Enabling the Provision of Open Courseware:** A report of the TLTP Working Group EPOC.

**Draft Guidelines for Information Providers using HTML.**

Should you wish to obtain copies of any of the above publications please contact Jill Frappe of the TLTP co-ordination team at the address above, tel. 0117 931 7216.

## TLT Support Network



The nine centres of the TLT Support Network aim to apply the experience of the Teaching and Learning Technology Programme to support and encourage UK higher education institutions to integrate technology into teaching and learning to enhance the quality of provision. Drawing on the experience of institutional TLTP projects TLTSN staff are particularly well positioned to offer advice on the development and execution of Learning Technology strategy at an institutional level. In addition to running workshops/seminars, and other dissemination activities, each centre will have particular areas of responsibility. These are described briefly below:

### The Support Centres and their Specialist Areas

#### **University of Derby**

- Multimedia,
- Video,
- Learning Centres,
- Staff development.

**Tel.:** 01332 622222 Ext. 1250

**Email:** tltsn@derby.ac.uk

#### **University of Glasgow**

- Study Skills,
- Evaluation,
- Integration

**Tel.:** 0141 330 4844

**Email:** tltsn@gla.ac.uk

#### **Heriot-Watt University**

- TLTP World Wide Web Pages.

**Tel.:** 0131 451 3289

**Email:** tltsn@icbl.hw.ac.uk

#### **University of Leicester**

- Open Learning, Learning Resources,
- Use of WWW in Learning.

**Tel.:** 0116 252 5085

**Email:** tltsn@le.ac.uk

#### **University of Southampton**

- Hypermedia
- Microcosm hypermedia system.

**Tel.:** 01703 593315/595328

**Email:** tltsn@ecs.soton.ac.uk

#### **University of Wales, Bangor**

- Special Needs,
- Minority languages,
- Online Learning.

**Tel.:** 01248 382425

**Email:** tltsn@bangor.ac.uk

#### **University of Nottingham**

- Learning Technology Dissemination,
- Authorware,
- Approaches to Courseware development

**Tel.:** 0115 951 3305

**Email:** tltsn@nottingham.ac.uk

#### **The Queen's University of Belfast**

- TLTP Demo CD-ROM,
- Approaches to CBL Development & courseware Engineering

**Tel.:** 01232 335051

**Email:** tltsn@qub.ac.uk

#### **University of Kent**

- Practical strategies for institutions new to TLT
- Educational advice for those new to TLT in the classroom.

**Tel.:** 01227 827619

**Email:** tltsn@ukc.ac.uk

### Publications

As well as specialist publications from each centre, the Support Network has published a series of Case Studies looking at aspects of managing the implementation of Learning Technology: see the central web page (details below) or contact your local centre for details

### Contact Details

Your first point of contact should normally be with your local Support Network centre, the Support Network is co-ordinated by the TLTP co-ordinator. The central web page, with links to all the centres' pages is at <http://www.tltp.ac.uk/tltsn/index.html>

## ***TLTP Project Descriptions***

### **Current Status of Projects and Materials**

More detailed and up-to-date information is available from the projects (try the project's Web pages where provided), from the TLTP support centres or from the TLTP co-ordinator. Relevant subject specific CTI centres are also good potential sources of information on project courseware and reports (see CTI section of this directory).

### ***Phase One Projects***

Phase one projects have now reached the end of their initial funding, and many projects have moved into a new phase where they are developing business plans and exploring new directions, often in partnership with commercial publishers.

### **Distribution of Material**

#### ***Central Ordering Service***

The TLTP ordering service is a central ordering point for all TLTP projects. Institutions should contact Emma Greenwood, who will take orders for all TLTP packages. In most cases orders will be passed directly to the relevant project staff, who will be required to fulfil the order within a period of fourteen days.

Emma will also be handling the distribution for a small number of projects, as indicated in the project directory entries. In the first instance email or telephone to receive the necessary pre-shipment documentation. All orders will be followed up to ensure a high standard of service.

To contact Emma, either phone on: 0117 931 7157, or email at: e.greenwood@hefce.ac.uk

#### ***Downloadable TLTP Courseware Materials from Courseware Web (C-Web)***

A world wide web site established as part of the Use of MANs Initiative to support the dissemination of TLTP materials. C-Web provides pointers to software available from the web for purchase or download (*this list of pointers is no longer updated*).

### **Format of Entries**

For each project the following details (where available) are given in the directory entries:

#### **Project number, Title (and acronym)**

A brief description of the project

Address and contact details

World Wide Web URL (http:)

Brief details of courseware (e.g. availability, cost, and technical specifications).

## ***TLTP Projects by Academic Discipline***

This list is intended to assist staff in identifying projects which may include materials particularly relevant to specific academic subjects. Any list of this nature is necessarily subjective - we would be happy to receive your suggestions about any alterations or additions to the listing presented. The numbers refer to the TLTP project number.

Accounting 1, 48	Health Sciences 5, 6, 28, 60, 61, 63, 72, 74, 75
Agriculture 5, 29	History 1, 5, 6, 46, 50
Archaeology 9, 34, 46	Information Studies 1, 9, 39
Biological Sciences 1, 5, 6, 12, 13, 16, 23, 24, 28, 29	Law 42
Business and Management 12, 13, 29, 37, 40, 41, 43, 48, 64, 73	Materials Science 69, 71
Chemistry 12, 26, 27, 28, 73	Mathematics (see also Statistics) 1, 5, 12, 15, 17, 20, 21, 22, 27, 28, 41
Computer Science 1, 3, 5, 12, 14, 18, 44, 62	Medicine & Biosciences 1, 5, 6, 9, 24, 28, 31, 32, 60, 63, 74, 75, 76
Earth Sciences 5, 6, 12, 25, 39, 58	Modern Languages 1, 6, 33, 36, 65
Economics 12, 13, 16, 17, 29, 37, 40, 41, 48, 64	Music 1, 38
Education 1, 5, 52, 68	Pharmacy 5, 28, 76
Electronics 12, 14, 18, 19, 20, 44, 55	Physics 1, 5, 12, 21, 22, 27
Engineering 1, 5, 6, 12, 15, 19, 20, 33, 48, 55, 56, 57, 58, 59, 62, 63, 64, 65, 69, 70, 71, 73	Politics 3, 49
English Literature 3, 5, 35	Psychology 1, 3, 13, 30, 43, 61, 73
Environmental Studies 29, 39	Social Sciences 43
Geography 5, 6, 9, 13, 29, 39, 51	Statistics (see also Mathematics) 1, 5, 13, 16, 30, 34, 39, 41, 43, 73, 74
Generic Issues 1, 2, 4, 7, 8, 10, 11, 43, 44, 45, 46, 47, 53, 54, 66, 67, 68	Veterinary Science 75

## **Phase One Projects**

### **1. TEACHING WITH INDEPENDENT LEARNING TECHNOLOGIES (TILT)**

The overall aim of this project was to enable students throughout the University to make greater use of independent learning technologies, and thus improve the productivity of staff, while maintaining and enhancing the quality of students' learning experiences. TILT focused on six areas: numerical data and graphical representation; mathematical models; textual information; multimedia; evaluation and training & dissemination.

Robin Shaw  
TLT Support Network Centre  
Robert Clark Centre  
Glasgow University  
66 Oakfield Avenue, Glasgow G12 8LS  
Tel.: 0141 330 4844  
tltsn@gla.ac.uk

<http://www.elec.gla.ac.uk/TILT/>

Reports, workshops, advice and training, plus 18 learning packages for Biology, Dentistry, Engineering, Languages, Library, Music, Statistics and Study skills.

### **2. INNOVATIVE MULTI DISCIPLINARY PROGRAMME FOR ADVANCE COMPUTER BASED TEACHING (IMPACT)**

The project aimed to foster and enhance staff skills and professional development in order to increase staff understanding of the generation, delivery and evaluation of computer based materials supporting teaching and assessment. 24 prototype modules have been developed by staff within a wide variety of departments.

Mary Cuttle  
Learning Technology Centre  
Heriot-Watt University  
Edinburgh, EH14 4AS  
Tel.: 0131 451 3289  
Impact@icbl.hw.ac.uk

<http://www.icbl.hw.ac.uk/impact/>

Reports published on:  
Evaluation of the initial training programme  
Courseware development  
IMPACT Case Study  
Catalogue of Prototype courseware  
IMPACT Training Manual  
Evaluation of the IMPACT initiative

7 modules are available by ftp via the Web page, or from TLTP Central Ordering see p33

### **3. THE HYPERTEXT CAMPUS PROJECT**

This project worked to aid the development of the University's overall IT strategy, which involves support for hypertext as well as for other more fundamental areas of learning technology. It sought to foster widespread acceptance of the use of hypertext and related technologies. The project provided training, guidance, advice and other support in the creation and use of teaching and learning materials, focusing on computer science, languages, law and careers advice. This project has ended.

Gwen van der Velden,  
TLT Support Network Centre,  
Computing Laboratory  
University of Kent,  
Canterbury, Kent CT2 7NZ  
Tel.: 0122 827 619 Fax: 0122 762 811  
tltsn@ukc.ac.uk

<http://www.ukc.ac.uk/HSU/>

#### 4. TEACHING AND LEARNING THROUGH TECHNOLOGY

The project formed an integral part of the University's programme of development of student centred teaching and learning materials, including the use of CBL and multimedia. It covered: the development and porting of a wide variety of CBL/multimedia courseware so that they are immediately available at Leeds and readily transportable elsewhere; staff training and provision of study skills packages and information and advisory packages. The TLTP project has been succeeded by a continuation project which aims to exploit the opportunities presented by developments in the WWW.

Dr G Heaton Smith  
CBL Support Unit, University Computing Service  
The University  
Leeds LS2 9JT  
Tel.: 0113 233 5842  
G.H.Smith@leeds.ac.uk

<http://cblmsu.leeds.ac.uk/www/projects/cblmsupr.html>

#### 5. CROSS DISCIPLINE IMPLEMENTATION OF CAL INTO MAINSTREAM TEACHING

This programme focused on courseware delivery across a broad range of disciplines including arts, education, law and social sciences, science, engineering and medicine.

Modules include: teaching of old English; classical Greek; essay writing; knowledge about language; curriculum vitae writing; documentary photography; Spanish language; basic physics for architects; computers in business; diagnostic mathematical test; an introduction to the theodolite; experiments in fluid mechanics; environmental assessment; diagnostic tests in materials engineering; 3D chemical shapes; artificial intelligence; ACSL simulation language; microscopy; perturbation theory; colour- perception and measurement; identification of feedstuffs; fundamentals of food processing; learning about lipids; microbe; rates of change; renal physiology; introduction to statistics; nutrition- vitamin A; nursing studies; human morphology; anaesthesia; sleep in the elderly; cardiocograph tutor; physiotherapy; child health and histopathology.

Most modules provide between 1 and 10 hours tuition.

The CAL Group  
University of Nottingham  
University Park  
Nottingham, NG7 2RD  
Tel.: 0115 951 3305  
Calgroup@nottingham.ac.uk

<http://www.ccc.nottingham.ac.uk/cal/>

For PC

Projects available on CD - For UK HEIs £15 per project or £60 for all projects.

#### 6. A CAMPUS WIDE STRUCTURE FOR MULTIMEDIA LEARNING (SCHOLAR)

The aim of Scholar was to shift the culture of the university towards technology facilitated learning. To achieve this the project worked to alter the mode and style of teaching and learning in the university in such a way that staff and students used multimedia and hypermedia materials as an integral part of their academic programmes. The project is making extensive use of Microcosm - an open hypermedia product developed at the University - to provide a flexible, resource-based, cross platform, multimedia learning environment through which academic staff can readily create, re-use and customise learning materials to suit their own teaching requirements. A major outcome of this initiative will be to create a powerful enabling infrastructure and mechanism for the efficient and flexible production and utilisation of high quality learning materials in ways which most effectively and productively meet the changing needs of staff and students. The Scholar Project was directed by both the developers of Microcosm and the providers of academic staff development. Under this we are developing effective models of provision which will have a permanent impact on teaching and learning within the University. The project offers a model for other institutions supported by evidence of deliverables and clear indicators of gains in the quality of the learning experience and student performance.

Su White  
Interactive Learning Centre  
University of Southampton  
Southampton, SO17 1BJ  
Tel.: 01703 594 471  
saw@ecs.soton.ac.uk

<http://ilc.tsms.soton.ac.uk/projects/mcm.stm>

See website for a list of Scholar-supported projects; copies of material available from Ms Erica Ferry, tel.: 01703 593 315, email: elf@ecs.soton.ac.uk.

## 7. IT IN TEACHING AND LEARNING: A STAFF DEVELOPMENT PACK

This was a joint programme underpinning the use of subject based IT in academic teaching by delivering a staff development pack to equip staff to select and use the IT tools necessary to enhance their course development, delivery and management.

<http://www.dur.ac.uk/ITService/TLTP/>

Includes software examples, paper based materials and VHS video. One pack available to each University at a cost of £50 (+VAT), all enquiries to TLTP Central Ordering Service, see page 33

## 8. PASS- PERSONALISED ADVICE ON STUDY SKILLS

Three pieces of software have been developed to identify and provide help to students who have study skills and strategies weaknesses. The advice offered is profile driven, so that targeted help can be given to students in relation to their own particular areas of difficulty as diagnosed by the questionnaire.

Anne Deane  
Centre for Research on Learning and Instruction  
University of Edinburgh  
10/12 Buccleuch Place  
Edinburgh EH8 9JT  
Tel.: 0131 650 4323, Fax: 0131 667 4335  
Anne.Deane@ed.ac.uk

<http://129.215.172.45/>

Available at cost price of £50. Extended support or technical help can be purchased separately.  
Apple Macintosh platform, needs HyperCard 2.2 or better.  
There is a version available on the WWW for £50 for a five-machine subscription for one year.

## 9. STUDENTS' AND TEACHERS' INTEGRATED LEARNING ENVIRONMENT (STILE)

The project developed a flexible, federal and integrated resource base that supports a wide range of approaches to teaching and learning across the curriculum and provides the means for students and teachers to locate resources relevant to their current needs in an efficient way. Since 1995 the resource base has been available over the World Wide Web and the support software is available for downloading.

Clive Ruggles  
School of Archaeological Studies  
University of Leicester  
Leicester LE1 7RH  
Tel.: 0116 252 5085, Fax: 0116 252 2198  
STILE@le.ac.uk

<http://indigo.stile.le.ac.uk>

The resource base can be found freely via WWW, subject to access restrictions imposed by resource providers. The support software can be downloaded from the web, or from the TLTP Central Ordering Service, see page 33. A full set of documentation is available.

## 10. COURSEWARE FOR LEARNING AND STUDY SKILLS (CLASS)

The programme addressed what can be a major barrier to effective learning, namely students' lack of effective learning and studies skills. The project created courseware module skills to train students to be effective learners. Modules available in report writing and introductory study skills (reading/writing/time management/effective learning/ auto monitoring). This project has now ended.

Prof. Ray McAleese  
Heriot-Watt University  
Edinburgh EH14 4AS  
r.mcaleese@hw.ac.uk  
Tel.: 0131 451 3472 Fax: 0131 451 3473

<http://www.icbl.hw.ac.uk/~granum/class>

Courseware for PC with Windows.

## 11. ASSESSMENT AND LEARNING THROUGH TECHNOLOGY FOR EFFICIENCY AND RIGOUR (ALTER)

The project, which was completed in 1995, aimed to provide guidelines for new technological and other techniques for (a) assessing coursework, (b) increasing the efficiency and quality of procedures for processing examinations and their results, and (c) improving the quality of preparation of records of achievement.

Prof. Jean Burgan  
UCoSDA, Ingram House  
65 Wilkinson Street  
Sheffield S10 2GJ  
Tel.: 0114 222 1337, Fax: 0114 222 1333  
UCoSDA@sheffield.ac.uk

<http://www.shef.ac.uk/uni/services/ucosda/tltp.html>

Reports published on:  
Handbook for External Examiners in HE (May 93)  
Quality & IT in assessment procedures (Oct 93)  
Using Technology to assess student learning (Dec 93)  
Workshop on assessment of learning in HE (Nov 93)  
Recording achievement  
Improving examiners meetings (video package)

Copies available from Sylvia Hardwick, UCoSDA, Tel.: 0114 222 1331 email: [s.hardwick@sheffield.ac.uk](mailto:s.hardwick@sheffield.ac.uk)

## 12. UK MATHEMATICS CONSORTIUM (Mathwise)

Mathwise is an integrated learning environment for teaching mathematics. It comprises 48 mathematical and application modules, reference material, assessment and resource tools which are integrated by a courseware manager which handles cross referencing between the different components of the system. Mathwise covers most of the mathematical topics taught in pre-university and first year university together with a number of key topics in second-year university courses in Science and Engineering.

Distributed on a CD-ROM the software can be accessed directly for stand-alone use or loaded onto a server to operate over a network. Within a network environment Mathwise is designed to be configurable to individual site requirements and has the capability to incorporate additional local components such as worksheets.

Academic use of Mathwise is supported by the Mathwise User Group (MWUG). This group will be holding a series of workshops around the country in 1998, to provide prospective users with an opportunity to use Mathwise in a hands-on session. Further details are available from <http://www.bham.ac.uk/ctimath/mwug/mwug.htm>

Julia Meek  
MATHWISE Project Co-ordinator  
School of Mathematics and Statistics  
University of Birmingham  
Birmingham, B15 2TT  
Tel.: 0121 414 4800, Fax: 0121 414 3389  
[mathwise@bham.ac.uk](mailto:mathwise@bham.ac.uk)

<http://www.bham.ac.uk/ctimath/mathwise/mathwise.htm>

An individual copy of the Mathwise TLTP CD is available to staff at UKHE institutions, price £60.00 (including p&p). Copies can be obtained from: Mathwise Response Centre, The Numerical Algorithms Group Ltd, Wilkinson House, Jordan Hill Road Oxford, OX2 8DR; tel. 01865 311 323; fax 01865 311 324; URL <http://www.nag.co.uk>

## 13. STATISTICS CONSORTIUM (STEPS)

The STEPS Project has developed context-based learning materials for the computer in the form of practical problems for student investigation. The problem contexts are: Biology, Geography, Psychology and Business. The intended use of the material is to reinforce and support learning - not to replace lectures. Study time varies, but generally the modules contain between one to three hours of study. The STEPS material can be obtained freely by ftp and currently there are 38 modules publicly available (37 for the PC, one for the MAC).

Prof. A Bowman  
Department of Statistics, Mathematics Building,  
University Gardens, University of Glasgow,  
Glasgow G12 8QW  
Tel.: 0141 330 4046, Fax: 0141 330 4814  
[adrian@stats.gla.ac.uk](mailto:adrian@stats.gla.ac.uk)

<http://www.stats.gla.ac.uk/steps/home.html>

Information about and access details to the STEPS modules can be found at the WWW address. All modules are distributed free by ftp as soon as they are released; or from the TLTP Central Ordering Service, see page 33

## 14. COURSEWARE TO SUPPORT THE TEACHING OF PROGRAMMING (CEILIDH)

This project makes existing courseware that supports the automated assessment of computer programs widely available throughout higher education and is developing an enhanced system. Languages include Java C++, Pascal, Fortran and SML.

Dr Colin A Higgins  
Dept of Computer Science  
University of Nottingham  
University Park  
Nottingham, NG7 2RD  
Tel.: 0115 951 4213, Fax: 0115 951 4254  
ltr@cs.nott.ac.uk

<http://www.cs.nott.ac.uk/~ceilidh/>  
Earlier version available by ftp, latest version available  
Autumn '98.

## 15. CBL MODULES FOR THE REMEDIAL TEACHING OF MATHEMATICS TO SCIENTISTS AND ENGINEERS

The Project has created flexible learning modules in A-level mathematics, for use by first-year university science and engineering students who need to revise or top-up their maths knowledge in preparation for their courses.

Metric (formerly Transitional Mathematics Project) at Imperial College, London: These modules use the computer mathematics software Mathematica as a medium for the exploration of mathematical ideas, guided by the paper documents "Instructions for Experiments" and "Background and Follow-up Reading". Intended uses include supervised tutorials, self-study, lecture illustrations, and resource materials for local adaptation.

Transmath at Leeds is a computer-based mathematics tutor designed to strengthen and consolidate the basic mathematical knowledge of students commencing numerate degree courses and incorporates a diagnostic test. 12 modules are currently available. Most of these modules do not require Mathematica.

Dr Daniel Moore,  
Mathematics Department,  
Imperial College,  
180 Queen's Gate,  
London SW7 2BZ.  
Tel.: 0171 594 8510, Fax: 0171 594 8517  
dan.moore@ic.ac.uk

<http://metric.ma.ic.ac.uk>  
Book is sold and software distributed free but for HE staff  
there is a special deal – details on the web site.  
Requires Mathematica (version 2.0 minimum).

*And*

Dr Amanda Kelly  
Dept of Applied Mathematical Studies,  
The University of Leeds,  
Leeds, LS2 9JT  
Tel.: 0113 233 5174  
a.d.kelly@leeds.ac.uk

<http://caliban.leeds.ac.uk/>  
Ver 1.3 containing 16 modules covering 9 topic areas.  
Available by ftp from caliban.leeds.ac.uk (IP  
129.11.36.19) UK HE email [simon@amsta.leeds.ac.uk](mailto:simon@amsta.leeds.ac.uk) for  
the password.

## 16. STATISTICS FOR BIOSCIENTISTS (QUERCUS)

Teaching materials designed to help students use a statistical package (Minitab) to analyse experimental data and write reports on their work. There are modules covering most of the topics discussed in an elementary statistics course: variable types; Introduction to Minitab; graphical displays; measuring location; measuring variability; sampling distributions; confidence intervals; significance tests; correlation; regression; residuals and transformations; Analysis Of Variance.

Accompanying each Workbook are "Exercise Book" modules. These provide the students with practice exercises and self-assessment tests. Use of quercus software is free of charge to institutions of higher education. The Quercus project was completed June 1997. Quercus project staff will continue to provide limited support and advice to users on request. "Quercus: Statistics for Bioscientists. A Student GuideBook" was published in 1997 by Arnold, London (ISBN 0 340 67768 6).

Dr. S Blythe  
Dept of Statistics & Modelling Science

<http://www.stams.strath.ac.uk/external/quercus/>

Strathclyde University  
Livingstone Tower  
26 Richmond Street  
Glasgow, G1 1XH  
Tel.: 0141 552 4400  
cal@stams.strath.ac.uk

PC (386, DOS 5 or Windows 3.1), requires Minitab  
Version 3 can be downloaded from our ftp site; Available  
on disk, charge £5 (for disks and p&p), cheque made  
payable to University of Strathclyde; also available form  
TLTP Central Ordering Service, see page 33

## 17. DIAGNOSYS

A knowledge-based diagnostic testing system for basic mathematics (currently) and other subjects, with remedial notes. Questions are asked appropriate to prior qualifications and answers to previous questions. Answer types include numbers, range, algebra, multiple choice, list and string. The test typically takes one hour. The coverage, form of output etc, can be customised. Output includes individual profile, group profile, ranked listing etc. The project is not currently funded, though some development work continues.

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Dept of Engineering Mathematics  
Stephenson Building  
University of Newcastle upon Tyne  
Newcastle, NE1 7RU  
Tel.: 0191 222 6286  
john.appleby@newcastle.ac.uk

<http://www.ncl.ac.uk/~ntltp/>

PC (286) stand alone or network

Version 2.4 Distributed on floppy disk (£30), or by ftp,  
contact CTI Maths or the Diagnosys team for details.

Version 3.0 (not a TLTP product) expected soon.

## 18. A COMPUTER BASED TEACHING SYSTEM FOR ELECTRONIC DESIGN EDUCATION (EDEC)

EDEC is a large concerted programme aimed at the development of teaching material to support the education of electronic engineers and computer scientists. The consortium has produced approximately 150 hours of teaching and learning material covering electronic circuit design, systems and high level design, and testing and design for testability. The software runs on standard IBM compatible PCs and can be downloaded and installed by means of ftp transfer over the JANET network; a CD-ROM version is also available. Some modules have been designed to work in conjunction with electronics CAD tools such as SPICE, although in most cases it is not essential that such tools are present. EDEC subscription scheme provides a site licence for the latest version of the courseware as well as access to maintenance and support; regular updates are available via WWW/FTP

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Dept of Electrical Engineering & Electronics  
UMIST  
PO Box 88  
Manchester M60 1QD  
Tel.: 0161 200 4702  
p.j.hicks@umist.ac.uk

<http://edec.brookes.ac.uk>

EDEC subscription scheme (see above) costs £500 per  
annum for UK HE. Preliminary (evaluation) version also  
available free of charge via WWW download, but  
password and username required.

For PC, access to CAD tools (e.g. SPICE) useful.  
Distribution by CD-ROM

## 19. CAL GROUP ENGINEERING CONSORTIUM

The proposal aims to increase the productivity, quality and flexibility of course provision by the development and implementation of open learning materials covering first and second year mechanical, electrical and manufacturing engineering. Modules are available as an integrated unit with an easy to use front end, but some institutions may wish to reconfigure this for their individual needs. Modules include basic electricity, basic electronics, control, data communications, design, digital electronics, fluid mechanics, manufacturing, particle dynamics, rigid body dynamics, statics and thermodynamics.

CAL Group has been successful in securing further funding to assist it towards self-sufficiency in disseminating, marketing and supporting its material for academia and industry in Britain and abroad. To this end it has set up a User Club to provide the benefits of new modules, updates, further features and workshops on the implementation of Computer Aided Learning material.

Mr GL Wiles  
Dept of Mechanical Engineering  
Loughborough University

<http://www.lboro.ac.uk/calgroup/>

A CD-ROM for PCs containing 60 modules was released  
in April 1996. Demos are available on WWW. Material is

Loughborough  
Leicestershire, LE11 3TU  
Tel.: 01509 222 922  
g.l.wiles@lboro.ac.uk

distributed by CBL Technology Ltd, tel. 01332 205 800,  
email calgroup@cbltech.demon.co.uk

### 20. INTERACTIVE ENGINEERING TEACHING AND LEARNING PROJECT (INTERACT)

The project has developed engineering simulations and tools to enable simulations to be fully integrated with the World Wide Web. Modules include: waterhammer; ainet; drainet; phasor; circuit; seepage; pollute; fft; adaptive filtering; airfoil; and promech.

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Heriot-Watt University  
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Tel.: 0131 451 3281  
rct@icbl.hw.ac.uk

<http://interact-www.eng.cam.ac.uk/~interact/>  
Software available free of charge on world wide web.  
Requires UNIX.

### 21. FLEXIBLE LEARNING APPROACH TO PHYSICS (FLAP)

FLAP is primarily a text-based self-study resource that covers physics and associated mathematics from solving equations to the time-dependent Schrödinger equation. It consists of 83 self-contained teaching modules, an extensive two-part Tutor's Guide (which includes a large assessment question-bank), a relational Glossary, Maths Handbook, Student Guide, and audio, video and CAL support. The entire resource contains approximately 500 hours of study material, 7 hours of audio-video support, and 50 hours of computer-based student activity. The CAL component of FLAP comprises of 5 simulations covering selected physics topics, a hyper-text version of the glossary, a Word-processor based assessment question-bank, and CAT-FLAP, a self-assessment testing package.

FLAP will soon be available in electronic format to provide a route for easy reference and printing (in Adobe PDF format). Other products under development are an interactive hyperlinked version of FLAP, and a CD-ROM problem solving tool with problem-solving skills development support.

Dr. Stuart Windsor  
The FLAP Office  
Physics Department  
The Open University  
Walton Hall  
Milton Keynes, MK7 6AA  
Tel.: 01908 654 083, Fax: 01908 654 192  
Email: S.A.Windsor@open.ac.uk

<http://physics.open.ac.uk/flap>  
Project materials are available to UK HE funded institutions at the cost price of £600. Schools and colleges packs are also available at reasonable cost - enquire for details.

Specification: CAL simulations disk: PC only (Windows);  
Assessment material: Word 6.0 for Windows (PC), Word 5.1 for Macintosh; CAT-FLAP: PC only (Windows 3.1 with Win32s extension, or Windows '95); Hypertext Glossary: PC or Macintosh (running Web browser).

or

JJ Thomson Physical Laboratory  
University of Reading  
Whiteknights  
PO Box 220  
Reading, RG6 6AF  
Tel.: 0118 931 8549, Fax: 0118 975 0203  
Email: S.A.Windsor@reading.ac.uk

### 22. SOFTWARE TEACHING OF MODULAR PHYSICS (SToMP)

A consortium of physics departments from the UK and beyond have designed and created complete computer based first year courses in 'Waves and Vibrations' and 'Measurement and Uncertainty'. Evaluation of their educational effectiveness has been carried out in five sites and a report is available. The current version includes the modules "Waves Demonstrations", which uses the same material as the Waves & Vibrations module, but is designed to facilitate use of the package as an aid to lectures/seminars where SToMP is not being

used as a core resource. An "Optics" module is also included in pre-release form. There are currently over 100 hours of material in SToMP. Several levels of customisation are possible.

Dr R A Bacon  
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University of Surrey  
Guildford, GU2 5XH  
Tel.: 01483 259 414, Fax 01483 259 501  
r.bacon@surrey.ac.uk  
stomp@surrey.ac.uk

<http://www.ph.surrey.ac.uk/stomp/>  
For PC (486, Windows, 150Mb HD, 800×600 SVGA)  
Available via ftp or on CD-ROM. Contact SToMP for  
licensing details.

### 23. BIODIVERSITY CONSORTIUM

The subject focus of the consortium is biological diversity: the formal description and causal interpretation of structural, functional and systematic diversity in living organisms in terms of evolution and adaptation. Courseware content will combine broad coverage of areas of universal interest with in-depth coverage of selected areas relevant to particular specialisms. 39 modules have been created. Courses represented within the consortium include mainstream plant and animal biology, microbiology, applied biology and environmental biology.

Dr. Peter Davies  
Biodiversity Consortium  
Department of Life Science  
The University of Nottingham  
Nottingham, NG7 2RD.  
Tel./fax 0115 951 3196  
Peter.Davies@Nottingham.ac.uk

<http://ibis.nott.ac.uk/biodiv/>  
486, 66MHz, PC with CD-ROM or Mac system 7 with  
CD-ROM, both require lots of memory, QuickTime  
(sound & motion) and....full details of requirements  
available from consortium.  
Commercial materials available from Jenny Ertle-Rickard,  
Ransom Publishing: tel. 01491 613 711; email  
ransom@dial.pipex.com

### 24. BIONET: CHANGING THE PATTERNS OF TEACHING IN BIOLOGY

The project aimed to introduce or extend the use of IT in 32 biological science and 20 pre-clinical courses enrolling over 6,000 students annually. The emphasis was on creating successful courses which make integral use of IT to increase teaching efficiency. Most items are computer based courseware, but some are descriptions of experience with commercial packages. All the material has been used with students in actual classes.

This project is now over.

Dr A G Booth  
Dept of Biochemistry & Molecular Biology  
University of Leeds  
Leeds LS2 9JT  
Tel.: 0113 233 3142  
a.g.booth@leeds.ac.uk

PC or Mac with access to www, requires ToolBook/  
HyperCard.  
Software & text files of exercises available on www. Free.

## 25. UK EARTH SCIENCES COURSEWARE CONSORTIUM

A consortium of Earth Science departments which has developed courseware to improve the quality and productivity of undergraduate teaching at various levels, bearing in mind that in all departments similar material is taught to students studying Earth Science, including those taking it as a subsidiary subject. There is major scope for productivity gains in that over 6,000 students are involved. The project was initially funded by TLTP, but since 1996 has been working as a self-financing, non-profit making project by making the courseware available for purchase by institutions and individuals world-wide.

Modules currently available are, Crystallography; Optical Mineralogy; Using the Compass Clinometer; Visualising Geology in Three Dimensions; Geological Map Skills; Petrogenesis of Granitic Rocks; Rock Deformation and Geological Structures; Radiogenic Isotopes in Geological Sciences; Dynamic Stratigraphy: Controls and Products; Basic Skills for Earth Sciences; Systematic Palaeontology: the Phylum Mollusca; Exploring the Shallow Subsurface using Geophysics; Arc Magmatism; Aspects of Earth Resources; Ocean Crust and Ophiolites; Phase Diagrams in Igneous Systems, and Using Stereonets in Geology.

Modules in development/testing are Basic Geochemistry; Basic Petrography; Fieldwork Safety, and Fossils as Palaeoenvironmental Indicators.

Dr W T C Sowerbutts

UKESCC

Department of Earth Sciences

University of Manchester

Manchester M13 9PL

Tel.: 0161 275 3820 Fax: 0161 275 3947

ukescc@man.ac.uk

<http://www.man.ac.uk/~ukescc/>

The software runs on Macintosh and PC (386/Windows 3.1 or later)

17 modules now available, 4 in development/testing.

Distributed on CD-ROM, £30 per module to UK HE, or £60 for all 17 on one CD-ROM.

## 26. NEW MATERIALS FOR TEACHING CHEMISTRY

The project team is drawn from a consortium of university chemistry departments to provide new video material for teaching and learning in chemistry. The stress is on videodisk technology so as to provide rapid user-friendly access to video material and to co-ordinate with semesterisation and modularization of courses, growth in student numbers etc. Available material covers Basic and Microscale Laboratory Chemistry.

Dr A J Rest

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University of Southampton

Southampton SO17 1BJ

Tel.: 01703 593 595

a.j.rest@soton.ac.uk

<http://www.soton.ac.uk/~chemweb/ajrvideo/>

Requires laser videodisk player, monitor, & bar code reader (also available on VHS video). £50 per videodisk, £30 per VHS tape. Available from Educational Media Film and Video Ltd, tel. 0181 868 1908

## 27. CHEMISTRY COURSEWARE CONSORTIUM (C<sup>3</sup>)

The project has produced 'The Chemistry Tutor' CD-ROM, which contains 27 modules of teaching material for use primarily in A-Level and first year undergraduate chemistry courses. Topics covered include basic chemistry and basic mathematical skills within a chemical context.

Dr Adam Drury

Department of Chemistry

University of Liverpool

Liverpool L69 7ZD

Tel.: 0151 794 3523 Fax: 0151 794 3523

ccubed@liverpool.ac.uk

<http://www.liv.ac.uk/ctichem/c3intro.html>

PC with windows 3.1: Single user licence: £30.

Departmental and Site Licences by negotiation.

Free software sampler and periodic table quiz, by ftp ([ftp.liv.ac.uk](ftp://ftp.liv.ac.uk), in directory pub/chemistry/c3/software)

**28. PHARMACY CONSORTIUM FOR COMPUTER AIDED LEARNING (PCCAL)**

PCCAL is an awards-winning international consortium that is developing and distributing courseware for teaching and learning in the Pharmaceutical and Life Sciences. The current portfolio comprises over 70 software packages, representing about 300 hours of teaching software. These materials include software developed by PCCAL together with a range of products from other projects. To date over 2000 copies of packages have been distributed to customers around the world.

Mr K Brown  
School of Pharmacy & Pharmacology  
University of Bath  
Bath BA2 7AY  
Tel.: 01225 826826 ext. 5100  
pccal@bath.ac.uk

<http://www.coacs.com/PCCAL/>

For PC. 26 packages from TLTP funding available at special price to UK HEIs on floppy disk or CD-ROM, for pricing of others see www page.

**29. CONSORTIUM FOR COURSEWARE IN LAND USE AND ENVIRONMENTAL SCIENCES (CLUES)**

The consortium, from 19 UK higher education institutions, is developing an extensive range of Windows based computer assisted learning (CAL) courseware modules. The modules include:

AgricEcon – exploring and illustrating agricultural economics; Agricultural Marketing; Animal Breeding - introduction to quantitative genetics and its application in livestock improvement; Beet - pest management simulation for a sugar beet crop; Biovent - bioremediation of soils; Budget Builder 2 (New Version) - for training in farm business management; C Turnover in Soils - the decomposition and turnover of organic matter in soils; Digestion in Ruminants; Grass ID - a random access computer guide to UK grass species; Landscape Tutor - an introduction to soils mapping; LUCIE - A CAL courseware module for land evaluation and an introduction to GIS methods; N Cycle - the Nitrogen Cycle in grazed grassland; Seed - seed longevity; Soil Surveyor - Fettercairn dataset; Landscape Tutor - Rothbury dataset; SPACTeach - water movement in the soil-plant-atmosphere continuum.

These modules are designed to provide a rich and stimulating learning environment, which will enhance understanding and make teaching and learning more productive in subjects relating to land use and the environmental sciences. TLTP CLUES will continue to support the development of CAL modules and wishes to discuss with staff from UK higher education institutions new CAL courseware development ventures.

John Milne  
Centre for CBL in Land Use & Environmental Sc.  
MacRobert Building  
University of Aberdeen  
Aberdeen AB24 5UA  
Tel.: 01224 273762 Fax 01224 273752  
CLUES@aberndeen.ac.uk

<http://www.clues.abdn.ac.uk:8080/>

For PC. Distribution on disc supported by full manuals. Version 1 available to HE for £30 - £45. Standalone licences £95-£125 per module +VAT. Multiple user licences also available, price on application.

**30. PSYCHOLOGY COMPUTER-BASED LEARNING ENVIRONMENT PsyCLE**

PsyCLE V2.0 is being released in conjunction with Blackwell Publishers and is aimed at first year Psychology undergraduates. The material is organised into 12 independent modules grouped into 7 broad subject areas with between one and three modules in each subject area. Each module includes a number of simulations or demonstrations, intended to illustrate important phenomena or concepts, together with descriptive textual materials. A Workbook is being released with the CD-ROM which includes questions and exercises designed to allow students to engage with the materials. The modules are not 'complete courses' nor are they intended to provide full coverage of a topic. They are best studied in the context of courses. PsyCLE is designed to be used for small group work as well as for self-study.

The PsyCLE Project  
Blackwell Publishers  
108 Cowley Road  
Oxford OX4 1JF  
Tel.: 01865 791100 Fax: 01865 791347  
Email: newmedia@blackwellpublishers.co.uk

<http://www.york.ac.uk/inst/ctipsych/web/PsyCLE/contents.htm>

Site Licence - £150, Single User Licence - £24.99  
(Includes Workbook)

### 31. TECHNOLOGY BASED LEARNING IN MEDICINE: BEYOND COURSEWARE

This project aims to promote the incremental development of a transportable technology based system of learning medicine which will be fully integrated within the curriculum and will be used by students on a daily basis to guide their learning. This material is by no means only of interest to medical students. The development system is available.

Mr Neil McManus  
Centre for Medical Education  
Ninewells Hospital & Medical School  
Dundee DD1 9SY  
Tel.: 01382 660 111  
n.k.mcmanus@dundee.ac.uk

<http://www.dundee.ac.uk/MedEd/tltp/>  
For PC (486 if possible)  
The system can be downloaded by ftp, or available from  
TLTP Central Ordering Service, see page 33.

### 32. FULLY EVALUATED PROBLEM CENTRED PRACTICAL AND TUTORIAL COURSEWARE FOR THE LIFE SCIENCES

This project has produced fully evaluated computer based problem solving teaching materials to support laboratory practicals for undergraduate students of the biomedical sciences, specifically physiology, neurophysiology, cardiorespiration and biomechanics. The LSC Centre continues its work to broaden its portfolio to include computer based learning materials to support or replace conventional lectures and tutorials.

Dr Malcolm George  
Medical Science Building  
Queen Mary & Westfield College  
Mile End Road, London, E1 4NS  
Tel.: 0171 982 6375, Fax 0181 983 0467  
m.j.george@qmw.ac.uk

<http://www.qmw.ac.uk/~lsc/home.html>  
PC and Mac.  
10 modules currently available. Demos available by ftp  
from WWW pages. CoAcS (the marketing arm of  
PCCAL, project 28) are marketing agents for overseas  
customers: see the web pages for further details

### 33. CKS CONSORTIUM: MULTIMEDIA MATERIALS IN FRENCH AND GERMAN FOR SCIENTISTS AND ENGINEERS

The project was aimed at producing and spreading cost effective multimedia language learning materials for scientists and engineers who are at various levels of proficiency. Module CKS1 covers the topic of the environment, CKS2 is on living working and studying in France or Germany, and CKS3 is task-based on the topic of the Channel Tunnel and the Berlin Transport System. These materials are suitable for distance learning using fibre optic technology.

Ms A King  
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11 West Road  
Cambridge CB3 9DP  
Tel.: 01223 335 051  
ank11@cus.cam.ac.uk

<http://wserv.langcen.cam.ac.uk/research/cks/homepage.htm>  
Distribution on CD-ROMS and videotapes available from  
TLTP Central Ordering Service, see page 33.

### 34. ARCHAEOLOGY CONSORTIUM

The aim of this project was to produce 14 software modules forming an integrated set of high quality resources and a tutorial system to promote efficient learning of core elements of archaeology courses. Module topics include identification of animal bone, human remains, environmental archaeology, British prehistory, introductory archaeology, lithic artefacts, geophysics & aerial photography, scientific dating, statistics, OS grid references, planning issues, GIS and excavation simulation.

Dr E Campbell  
Dept of Archaeology  
University of Glasgow  
Glasgow G12 8QQ  
Tel.: 0141 330 3626/6466 Fax: 0141 330 5518  
ctich@arts.gla.ac.uk

<http://www.gla.ac.uk/~archtltp>  
For PC (486) with SVGA monitor  
Distribution by ftp (free) and CD-ROM at cost.

**35. CAL IN THE HUMANITIES**

This project aimed to establish technologically efficient, inexpensive and accessible models of computer assisted courses in a range of humanities subjects, based on the interdisciplinary School of English and American Studies. It was intended to support courses in Poetry, Drama and Film Studies by developing students' abilities in the close analysis of texts and research into relevant contexts.

Mr J Cook

Centre for creative and performing arts  
University of East Anglia  
Norwich, NR4 4TJ  
Tel.: 01603 592783/2873  
J.Cook@uea.ac.uk

For Mac and PC; image scanner, video & sound boards desirable

Distribution on floppy disk

**36. THE TELL CONSORTIUM**

36. THE TELL CONSORTIUM (Technology Enhanced Language Learning) The project has developed new courseware using existing and available tools; More than 30 universities collaborating, led by the University of Hull have developed over 30 packages covering French, German, Spanish, Italian and Portuguese. Applications include multimedia self-access CD-ROMs, grammar practice, translation (including an authoring shell), Interpreting and phonetics. Registered users of TELL products receive one year's free access to a technical helpdesk and user support advice.

Jenny Parsons  
CTI Centre for Modern Languages  
University of Hull  
Hull HU6 7RX  
Tel.: 01482 465 872  
j.a.parsons@selc.hull.ac.uk

<http://www.hull.ac.uk/cti/tell.htm>

For PC & Mac; some programs need SoundBlaster Pro & CD-ROM

£25 per module to UK HEIs, and on a commercial basis from Hodder & Stoughton, from £50.

**37. WinEcon: ECONOMICS CONSORTIUM**

WinEcon is a unique interactive learning software package for teaching introductory economics. The software offers more than 100 hours of tutorial material and includes self-assessment questions and exam, economic databases, economic glossary and reference to leading economics texts. WinEcon is the first CBL package to cover the whole syllabus for first year degree courses in economics and this award winning software represents an internationally unprecedented scaling up of CBL technology.

Mr Simon Price  
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8 Woodland Road  
Bristol, BS8 1TN  
Tel.: 0117 928 8478  
ccss@bristol.ac.uk

<http://www.ilrt.bris.ac.uk/winecon/>

For PCs (SVGA, Win 3.1 or Win95, 35 Mb disk space - 55Mb during installation)

UK HE price £50 per annum for institutional site licence from Blackwell Publishers: for all availability enquiries contact Jane Waters, tel.: 01865 791100, email [newmedia@blackwellpublishers.co.uk](mailto:newmedia@blackwellpublishers.co.uk).

**38. MUSIC CONSORTIUM**

A wide range of courseware targeted at the development of basic skills, musicology study methods and delivery of basic information. Modules include: Introduction to Medieval Music; Techniques of Music Analysis; CD Generator, used to create CD tours; Introduction of Studio Techniques; Studying 18<sup>th</sup> Century Opera; Early Romantic Music – the Cultural Context; Basic Musicianship 1, Aural Perception of Intervals; Basic Musicianship 2, Fundamental Theory of Intervals – Consonance and Dissonance; Basic Musicianship 4, Fundamental Theory of Intervals – Tonic and Dominant; and CD Tours, including Die Zauberflöte and Milhaud, La Creation du Monde.

Distributed on disk at cost, available from TLTP Central Ordering Service, see page 33

### 39. APPROACHES TO QUANTITATIVE METHODS AND BASIC SKILLS TEACHING FOR GEOGRAPHY UNDERGRADUATES

The project has developed courseware for problem solving and quantitative techniques for first year undergraduate geography students, developing assessment methods, and producing materials that allow non specialists to deliver and support the courseware that is developed.

Dr Geoff Thomas  
Dept of Geography  
University of Liverpool  
P.O. Box 147  
Liverpool, L69 3BX  
Tel.: 0151 794 2859

Uses Minitab/SPSS

**Note:** products are paper based with no additional software written.

### 40. BUSINESS EDUCATION WITH INFORMATION TECHNOLOGY (BITE)

The project has developed a series of 6 interactive teaching software modules for effective learning in the numerate business disciplines. In addition to these there is a computer desktop glossary of terms.

For PC and Mac.

Available by ftp from <ftp.mgt.uea.ac.uk/>

### 41. MULTIMEDIA EDUCATION TECHNOLOGY IN OPERATIONAL RESEARCH (MENTOR)

The project is producing a series of courseware modules in commonly taught operational research/management science subjects. These are aimed at increasing the efficiency and effectiveness of OR/MS teaching. This is achieved through reduced staff contact hours and allowing students to have more control over the pace/ level/ organisation of their own work.

Modules include:

Simulation; Linear Programming; Stock Control; Forecasting; Introduction to OR; Integer Programming; Conflict Analysis; Project Network Analysis; Heuristic Search Methods; Decision Analysis; Simulation Modelling; Linear Programming (Advanced) & Mixed Integer Programming Modelling; Stochastic Processes (including Queuing); Systems & OR Methodology Dynamic Programming.

Each module contains the equivalent material to that covered in a traditional 10-hour lecture course. All of the material is fully customisable and is accompanied by substantial support material.

Mentor Project  
Dept of Management Science  
Strathclyde University  
40 George Street  
Glasgow G1 1QE  
Tel.: 0141 552 4400 ext. 3499  
[mentor@mansci.strath.ac.uk](mailto:mentor@mansci.strath.ac.uk)

<http://www.mentor.strath.ac.uk/mentor.html>

Requires 486 PC running Windows 3.1 and 6MB (on average) disk space per module.

Distribution on disk or via ftp.

£50 per module (annual site licence) to cover distribution costs and full support. Reduction for bulk module purchases.

### 42. LAW CONSORTIUM COURSEWARE

The consortium has developed computer based learning materials for legal undergraduates. The materials are supplied on a CD-ROM called Iolis, which offers interactive learning materials covering seven key law subjects for England and Wales. These materials are backed up by a large library of full-text cases, statutes and articles. During 1996 through to 1998 the consortium is developing new courses covering international law, consumer law, family law and trusts. Scottish courseware is being developed through the Strathclyde centre.

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Social Studies Building  
University of Warwick  
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Tel.: 01203 524 616  
[lawcc@warwick.ac.uk](mailto:lawcc@warwick.ac.uk)

<http://www.law.warwick.ac.uk/html/iolis.html>

For PC (486) with Windows.

Distribution on CD-ROM.

The Scottish Law Courseware Consortium:  
Professor A Paterson,  
The Law School,  
173 Cathedral Street,  
University of Strathclyde,  
Glasgow G4 0RQ  
Tel.: 0141 552 4400 ext. 3341  
alan@law.strath.ac.uk

### **43. QUEEN'S UNIVERSITY TEACHING AND LEARNING PROJECT (QUTAL)**

Managed by the Institute of Computer Based Learning, QUTAL's aims are to promote the use and development of computer based learning, and to develop computer based teaching and learning materials. The QUTAL team organises presentations and workshops and is involved in the development of over 200 hours of courseware with almost 30 academics across nine subject disciplines: Education; French; General Practice; Obstetrics; Orthopaedics; Pharmacy; Physics; Psychology and Social Sciences. Specific modules include: PROF (practical revision of French); Introductory Statistics for Social Scientists (Psychology); Conditioning (Psychology); Mental Representation (Psychology) and CMEQS: Computerised Modified Essay Questions (General Practice)

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Tel.: 01232 335 051  
t1tp@qub.ac.uk

<http://www.icbl.qub.ac.uk/t1tp/>  
For PC and Macintosh.

## **Phase Two Projects**

### **44. WIDE RANGING INTEGRATED SOFTWARE DESIGN EDUCATION NETWORK (WISDEN)**

The consortium is producing and making available a wide range of interactive computer based learning materials in the area of software design across all three years of undergraduate study. The prime aim is to achieve a saving of approximately 25% of total staff contact time. A special feature of the project is the co-operative learning environment in which materials will be implemented. The environment will enrich the overall learning experience by giving students access to real software and CASE tools, whilst enabling considerable peer group interaction to occur.

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Sheffield  
Tel.: 0114 253 3260  
A.Norcliffe@SHU.ac.uk

<http://www.shu.ac.uk/schools/cms/wisden/wisden.htm>

### **45. CORE IT SKILLS FOR TEACHING AND LEARNING IN HIGHER EDUCATION: TOOLS FOR THE DEVELOPMENT OF A NATIONAL FRAMEWORK**

A consortium based project, working with 9 universities, which looked at the characteristics of these, particularly the management of and relationship between key areas, such as resource allocation, IT, teaching and learning and staff development, and taking account of the changes affecting higher education. Work has been undertaken on particular themes of wide interest and there are collaborative practical exercises with each institution. Through this work, the policies and structures necessary to encourage the use of IT in teaching and learning in a range of different organisational contexts are being identified. The primary deliverable was a report incorporating instruments to help universities to move towards the integration of IT in teaching and learning. The report is available to every UK Higher Education institution at a cost of £35.

Copies available from TLTP Central Ordering Service, see page 33

### **46. THE VIRTUAL TEACHING COLLECTION PROJECT**

The consortium lead development team provided technology integration and design consultation in the creation of a set of new curriculum development tools supporting the rapid and effective visualisation of objects of material culture. Contributors from each collaborating institution guided the teams efforts in the identification of specific curriculum development goals, and evaluated the tools by authoring course specific digital image databases.

Dr Robin Boast  
Tel.: 01223 333 516

<http://cumaa.archanth.cam.ac.uk/vtc.html>

Copies available from TLTP Central Ordering Service, see page 33

### **47. THE LoCAL PROJECT**

The aim of project LoCAL is to develop a methodology, through the use of standard Windows application software, such as spreadsheets, word processors and Help, which will enable the production of CAL courseware to become a more mainstream activity for university lecturers. The consortium has produced a set of self study materials and exemplary CAL courseware using the LoCAL methodology.

Self teaching tutorials and handbooks (all include booklet and disks) include:

- Developing CAL courseware with Excel - techniques and case studies;
- Evaluation Handbook - for successful CAL courseware development;
- An introduction to creating CAL courseware with Microsoft Excel 5;
- An introduction to developing Windows Help files using the Microsoft Help Author, (available for Microsoft Word 6);

- A practical introduction to creating courseware with Microsoft Excel (versions 3 and 4).

John Milne  
Centre for CBL in land use and environmental  
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MacRobert Building  
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Aberdeen, AB24 5UA  
Tel.: 01224 273 755 Fax: 01224 273752  
CLUES@aberdeen.ac.uk

<http://www.clues.abdn.ac.uk:8080/local/local.html>  
This material costs between £9.50 and £25.50

#### **48. Byzantium: The development of human tutor emulating software for introductory financial and management accounting**

TLTP Byzantium is a consortium of six universities developing software for teaching and learning of introductory accounting. Its primary aim is to develop intelligent computer based tutoring, improving student access, individual learning and imparting of skills. With computerised assessment also built in the software, it aims to enhance the efficiency of the human lecturing resource and enables transfer from low level tutoring to provision of a greater degree of interaction for advanced students. Modules Available: Capital Investment Appraisal, Absorption Costing, Marginal Costing, Standard Costing and Financial Accounting, Combined module automatic marker. Published by Blackwell publishers ltd.

Prof. G Wilkinson-Riddle  
De Montfort University  
The Gateway  
Leicester, LE1 9BH  
Tel.: 0116 257 7211, Fax 0116 251 7548  
apatel@dmu.ac.uk

<http://byzantium.dmu.ac.uk>  
All modules run in Windows on stand-alone or networked PCs.  
Copies available from Blackwell publishers, Tel. 0186 579 1100.

#### **49. TECHNOLOGY BASED CASE STUDIES FOR POLITICS**

The purpose of the programme, now moving towards independent funding, is to use the new technology to generate high quality study materials that will have major study gains. The use of the case material will contribute substantially to efficiency while introducing important innovations in teaching and learning techniques in an expanding discipline.

Dr A Leftwich  
University of York  
Heslington, YORK  
Tel.: 01904 433 566  
Casestudies@york.ac.uk

<http://www.york.ac.uk/depts/poli/casestud/>  
Over 40 case studies now available, cost to UK HEIs is £30 per case.

## 50. CORE RESOURCES FOR HISTORIANS - THE HISTORY COURSEWARE CONSORTIUM

In order to teach the increasing number of history undergraduates more efficiently and effectively, the broadly based History Courseware Consortium has produced computer based multi-media tutorial modules, based upon the metaphor of the enriched lecture.

These tutorials introduce students to a major historical topic through an essay or core document(s). This is linked to a wide range of resources (primary and secondary) which may include; text, images, maps, video clips etc., and datasets. The latter allows students to analyse real data and produce basic statistics and graphs. A bibliography is generally provided and many tutorials have a glossary, biographies and chronologies. In some cases tasks, worksheets or questions are present to reinforce student learning. Another key feature is that staff can customise the tutorials (subject to copyright) for their own needs. For example, instructions for specific courses, new materials, new links etc.

No extra software is needed to run the tutorials as they in html format and run with Netscape (They will run with certain other browsers).

Tutorials are produced in the key areas 'Industrial Revolution and Post Industrialisation', 'The Coming of Mass Politics', and on pre-modern topics such as the Reformation.

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TLTP History Courseware Consortium  
University of Glasgow  
1 University Gardens  
Glasgow G12 8QQ  
Tel.: 0141 330 6979  
tltphist@arts.gla.ac.uk

For IBM or compatible, PC (486 or Pentium), 8 Mb RAM, an SVGA graphics and colour monitor. Windows 3.1 or Windows 95. Networked or standalone.

Most of the tutorials are under 50Mb but the largest is 119. This only matters if you are not running them from the CD-ROM or the network

All 12 tutorials are on a single CD-ROM. The official publication date is planned for 31st March 1998 and they will retail at £60 plus VAT (if applicable). Evaluation versions have been tested at a range of institutions.

## 51. UK COMPUTER ASSISTED LEARNING CONSORTIUM IN GEOGRAPHY (GeographyCal)

The project aimed to specify, develop, test and deliver a library of high quality transportable resources in the form of computer assisted learning modules and other support materials which facilitate an efficient and effective teaching and learning environment for core topics, concepts and techniques in introductory undergraduate geography courses. Seventeen modules cover a wide range of topics in human, physical and technical aspects of the subject. The project is continuing on funding from TLTP and other sources: several new modules are in development.

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University Road  
Leicester, LE1 4RH  
Tel.: 0116 252 3828  
gef@le.ac.uk

<http://www.geog.le.ac.uk/cti/Tltp/>

Copies available for download via web site or from TLTP Central Ordering Service, see page 33.

## 52. IMAGES FOR TEACHING EDUCATION

The three year Teaching and Learning Technology Programme: Images for Teaching Education, was led by the University of Exeter in collaboration with the University of Reading, Sheffield Hallam University and the University of Northumbria. The Project created and is implementing a range of Multimedia resources for Initial Teacher Education (ITE) throughout the UK. The resources address issues and practice relevant to student teachers across all subject disciplines. The resources include:

- Critical Encounters in Secondary Education, videodisc, videotape and support materials
- Multimedia in the Learning Environment, videodisk, videotape and support materials
- English Chalklands, Photo CD and support materials

The development of a version of the resources on other formats is underway. In addition to this the resources are being used through a range of communications technologies for undertaking professional development at a distance.

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School of Education,  
University of Exeter,  
Exeter, EX1 2LU.  
Tel/Fax 01392 264 758  
P.A.Tearle@exeter.ac.uk

<http://www.exeter.ac.uk/telematics/TLTP/>

For further information & availability please contact project.

### 53. VALUE ADDED RE-USE AT STIRLING OF EXISTING TECHNOLOGY IN THE LEARNING EXPERIENCE (VARSETILE)

There is now a considerable volume of software available that can provide a basis for student learning. The material has been produced by a number of initiatives and organisations in Britain and overseas and is at a great variety of levels, ranging from simple teaching datasets, for use with standard packages in a conventional computing workshop, through simulation exercises designed to replace laboratory experiments, to complete multimedia packages designed for self-study. Relatively little attention has been paid to the way in which the material can be integrated into existing courses or to the relationship between the use of the new technology and the efficiency and effectiveness of learning at university level. These are the issues that Varsetile was designed to address.

Simon Booth  
University of Stirling  
Stirling, FK9 4LA  
Tel.: 01786 467 247  
spb1@stirling.ac.uk

<http://annick.stir.ac.uk>

Institutional project, case studies and reports available via web page

### 54. COMPUTER AIDED ASSESSMENT OF TRANSFERABLE SKILLS (CATS)

This project is addressing the problem of assessing large increasing numbers of students taking courses in word processing, spreadsheets and databases. For such large numbers traditional assessment methods are neither desirable nor cost effective and the use of computer aids is becoming a necessity. This project has developed tools and techniques to enable computerised assessment of such IT transferable skills.

The project has developed computerised assessment tools for word processing skills and the use of spreadsheets.

The project is ongoing and enhanced assessors are being developed as well as Intelligent Tutoring Systems (ITS) for these skills.

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School of Information Systems  
University of East Anglia  
Norwich, NR4 7TJ  
Tel.: 01603 593 102  
rdd@sys.uea.ac.uk

<http://www.sys.uea.ac.uk/cats/>

The word-processing assessor, *WordTask*, and spreadsheet assessor, *SpreadTask*, are available to UK HEIs for £20+VAT for a site licence. Demonstration copies are downloadable from the web site.

The software runs on a PC running Windows 3.1 or better. Speed is not a problem unless large numbers are being assessed on a single machine.

## 55. QUALITY IN ENGINEERING THROUGH SIMULATION TECHNOLOGY (QUEST)

QUEST builds upon the unique and widely endorsed simulation based methods developed at the lead institution to enhance the quality, effectiveness and productivity of engineering undergraduate provision. The methods provide the means of creating and delivering flexible, high quality, student centred, interactive courses with significant and proven productivity and efficiency gains for both students and staff. The work is creating an extensive resource of simulation libraries covering first and second year core technical subjects from which can be assembled highly productive and complete courses satisfying local style, need and ownership.

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Guildford, GU2 5XH  
Tel.: 01483 259 358  
A.Cartwright@surrey.ac.uk

<http://www.surrey.ac.uk/MechEng/research/CEET/QUEST.html>

For PC & Mac

Further info. and sample s/w available from Web site.

## 56. COMPUTER AIDED CONCRETE TEACHING (COMPACT)

COMPACT is a suite of 15 computer aided learning programs on concrete technology and the design of concrete structure to EC2. Produced primarily for undergraduate use, the interactive programs use high quality photos and graphics to present teaching material in an easily absorbed manner. The development consortium is also supported by an advisory group which include representatives from the DOE, IStructE, ICE, Concrete Society, BCA and RCC as well as contractors, consultants, and academics. The subject matter covered by the courseware encompasses most, if not all, of the syllabuses taught in University Civil Engineering Departments in the UK, including: cement and cementitious materials, concrete mix design, properties of fresh and hardened concrete, basic design of reinforced concrete structures, advanced design of reinforced concrete structures, design of precast concrete structures, design of prestressed concrete structures, conceptual design of concrete structures, concrete site practice, design of foundations and retaining walls, drawing and detailing of concrete structures, design of concrete bridges, formwork and falsework, inspection, maintenance and repair, buildability and failure modes. It is envisaged that COMPACT will be used for illustrations during lectures, revision material, self learning for topics not covered, investigation of behaviour, and to link theory to practice.

Dr B S Choo  
University of Nottingham  
Nottingham  
Tel.: 0115 9513 893/907  
compact@nottingham.ac.uk

PC with SVGA monitor 800x600 (>32000 colours)

The software will be issued to HE funded institutions at cost of handling c.£60 per CD.

## 57. COMPUTER AIDED TECHNOLOGY & ENGINEERING EDUCATION CONSORTIUM (CATEEC)

CATEEC is a consortium of the major British Textile universities, who have been co-operating for three years to produce the a truly computer-aided learning system in the area of Textiles and Textile Engineering. In addition, the completed package is supported by a Mechanical Engineering section which is particularly useful in support of Textile Engineering. The CATEEC package is a truly interactive learning system. It is supported by the whole range of multimedia material, animation, video clips, high definition photography, specially designed diagrams plus a high level of user activities and control. It uses an extensive glossary of terms, internationally approved by the Textile Institute.

Mr M Bailey  
Department of Textiles  
UMIST  
Manchester  
Tel.: 0161 200 4147  
Mike.Bailey@umist.ac.uk

[http://www.textiles.umist.ac.uk/textiles/Staff/M\\_bailey/Cateec.htm](http://www.textiles.umist.ac.uk/textiles/Staff/M_bailey/Cateec.htm)

For PC (ideally 486 DX2 minimum), available on CD-ROMs for nominal cost.

## 58. GEOTECHNICAL COMPUTER AIDED LEARNING

The consortium provides tested and validated high quality computer based learning resources in the subject area of geotechnical engineering. The material is appropriate for undergraduate courses in civil engineering & allied

disciplines as well as for HND/C courses. The courseware is configured around GeoTutor, providing a series of task based learning activities and simulations. Courseware includes paper and worksheet support materials, online Windows Help files, online glossary & manuals and a self-assessment quiz. The resources cover: finite elements; foundations; laboratory tests; site investigation; slopes; and water.

Dr Leslie Davison  
University of West of England  
Bristol  
Tel.: 0117 9656 261, Fax 0117 976 3895  
lr-davison@uwe.ac.uk

<http://geocal.uwe.ac.uk/>  
CAL resources available from web site.

## 59. COMPUTER AID TO THE TEACHING OF ENGINEERING PRODUCT DESIGN (IDER: Intelligent Design Engineering Research)

iDE<sub>r</sub> has developed a computer aid for teaching engineering product design, in the form of an expert system incorporating knowledge from both industry and academic disciplines which are involved with design. It is aimed at first year engineering students, but may be appropriate for others. Products include Design Builder, Interactive Concurrent Engineering (ICE). Design Builder is a virtual environment to provide experience of Design within a concurrent engineering environment. ICE takes as a basis the communication chain within a company and shows how this may help or hinder the sequence of design to manufacture. Other products are under development.

Brian Parkinson  
University of Hertfordshire  
Manufacturing Systems Centre  
College Lane  
Hatfield, AL10 9AB  
Tel.: 01707 284227, Fax 01707 284256  
B.Parkinson@herts.ac.uk

<http://www.mansys.herts.ac.uk/ider/>  
For PC CD-ROM & soundcard recommended.  
At cost to UK HE (ca. £50 each), for other prices see web site.

## 60. INTERACTIVE SURGICAL TEACHING BETWEEN REMOTE CENTRES (INSURRECT)

This project seeks to harness advanced telecommunications technology to the teaching and learning of surgery: an area of higher education where visual information is critical to the learning process. The programme involves 30% of students undergoing surgical training in a collaborative programme using interactive video teaching and learning techniques over the high speed data network SuperJANET. This project is experimenting with the ATM video network part of SuperJANET. The objective is to bring the "bedside" to large numbers of students with access to a larger pool of patients and clinical teachers. Student reaction to those lectures that have been delivered over the network has been to request a greater emphasis on clinical material and to develop greater interactivity in the style of lecturing. The challenge is to develop presentation methods that will permit the network to be an effective means of teaching in a collaborative programme. The network is also being used to support the students working alone at their own workstation to provide an integrated teaching and learning environment.

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University College London  
Audio Visual Centre, Windeyer Building  
Cleveland Street  
London W1P 6DR  
Tel.: 0171 380 9320  
g.jameson@ucl.ac.uk

<http://av.avc.ucl.ac.uk/tltp/>  
Prototype courseware is provided on the World Wide Web.  
Sessions available via Janet

## 61. APPLYING BEHAVIOURAL SCIENCES TO THE TEACHING AND TRAINING OF HEALTH PROFESSIONALS

The project identified core topics that are common to many different courses (pain, clinical decision making, stress in health professionals, social cognition and health promotion, pregnancy and childbirth) and designed,

## Phase 2 Project Descriptions

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developed and is disseminating interactive computer based learning packages on these topics. The packages are structured to allow easy modification by the users.

The following packages are available: Clinical decision making (BMA Certificated); Changing health beliefs and behaviour; Child development; Visual perception; Pain; Neonatal pain; Quality of life; Communication skills (on CD-ROM).

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Behavioural Sciences TLTP Consortium  
A Floor South Block  
Queens Medical Centre  
Nottingham, NG7 2UH  
Tel.: 0115 970 9114  
Paul.Garrud@nottingham.ac.uk

<http://www.ccc.nottingham.ac.uk/~mczwww/tltp.htm>  
For Mac and PC: see WWW for up to date availability and details of modules, most of which can be down loaded directly from the site.

## 62. COURSEWARE IN HIGH PERFORMANCE COMPUTING

A series of modules of courseware has been produced in hypertext format covering the topic of high performance computing. The modules were produced in HTML format so that they can be viewed using a Web browser such as Netscape on a PC or Mac or X terminal connected to a Web server. The application areas covered and the content of the modules are such that they can be included in degree courses in computer science, engineering, electronics and mathematics. This project is now completed.

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Southampton, SO17 1BJ  
Tel.: 01703 592722, Fax 01703 593903  
djp@ecs.soton.ac.uk

<http://castle.ecs.soton.ac.uk:8080/CD/INDEX.HTM>  
See WWW for details of material.

## 63. CALRAD: TLTP MEDICAL PHYSICS CONSORTIUM

A consortium of six Universities has developed a Computer Assisted Learning program and associated Student Study Guide which teaches the Core of Knowledge in radiation protection identified in the Ionising Radiation (POPUMET) Regulations 1988.

The program consists of eight interactive "books" covering such topics as Basic Physics of Radiation, Biological Effects of Radiation and Safe Use of X-Rays. The program also incorporates a "problem-based learning" approach in the form of clinical scenarios. These particular scenarios focus on these aspects of a case which relate to the Core of Knowledge in radiation protection. The scenarios have been designed to provide the students with an opportunity to apply the knowledge they have gained in the interactive books in the context of a realistic situation. A "logging system" is available which allows the monitoring of students' progress through the package.

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Dundee  
Tel.: 01382 632700  
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<http://www.dundee.ac.uk/MedPhys/sections/CALRAD.htm>  
A demonstration copy is available from website  
For PC (486 or Pentium)

## 64. MULTIMEDIA MARKETING LEARNING PROGRAMME

A series of CD-ROMs from the Multimedia Marketing Consortium. This introductory level marketing course allows users to: visit the hall of fame and consult with world gurus Theodore Levitt, Rosabeth Moss Kanter, Kenichi Ohmae, Philip Kotler and Peter Doyle; watch top marketing managers from Coca Cola to Concorde, and Microsoft to Manchester United F.C.; browse through images, video clips, text and related examples in a rich world of hypermedia links. Each of the ten titles also includes: up to twelve short tutorials, self assessment sections; glossary and text facilities which allow users to convert video to text, cut paste it along with their own notes; self assessment scores and summaries of the sections studied along with a log of all hyperlinks explored.

Paul Smith  
Multimedia Marketing Consortium

<http://www.lgu.ac.uk/lgu/mmm/>  
CD-ROM based courseware for PCs, currently 10 disks

London Guildhall University,  
84 Moorgate, London EC2M 6SQ.  
psmith@lgu.ac.uk

available, cost to UK HEIs £15+VAT each.

## 65. COMPUTER ASSISTED FL GRAMMAR LEARNING

This project has developed integrated modular multipurpose software packages to assist and enhance the learning and teaching of foreign language grammar for students across the whole range of undergraduate programmes that involve foreign language study. The aim of the software is to guide students from an inadequate, unreliable or misleading perception of the structure of the target language to a reliable awareness of its structure, thus facilitating effective communication. The communicative experience which students have already achieved will be underpinned by use of the software. Grammar is explored in context, with emphasis on textual integrity rather than the traditional concentration on morphological forms.

Prof. Nigel Reeves  
Aston University  
Birmingham B4 7ET  
Tel.: 0121 359 3621  
Astcovea@aston.ac.uk

<http://www.les.aston.ac.uk/TLTP/welcome.html>

## 66. IMPLEMENTATION OF COMPUTER AIDED LEARNING CAMPUS WIDE

The project aimed to co-ordinate and expand the use of technology based teaching and learning on campus by encouragement and support from the centre. It has used a number of approaches, including finding out who is using CAL already and putting them in touch with others, providing staff development, maintaining a resource base, providing support for those wishing to use learning technologies in their teaching in a range of ways, and raising further funding and resources when something needed to be done. It has also supported the development of a strategic view of CAL at departmental and institutional level. From Jan. 1996 this has also been the TLTSN centre at Bangor. The TLTP project has been converted into a permanent unit funded by the university.

Ms Sarah Holyfield  
Head, CAL Unit  
University of Wales, Bangor  
Information Services  
Sackville Road  
Bangor  
Gwynedd LL57 1LD  
Tel 01248 382 425 Fax 01248 383 826  
s.holyfield@bangor.ac.uk

<http://www.bangor.ac.uk/cal/html/calunit/tltppr.htm>  
Institutional Project, reports available from contact.

## 67. VISUAL INFORMATION RESOURCES FOR GENERIC INDEPENDENT LEARNING (THE VIRGIL CENTRE)

The Virgil Centre project was funded jointly by TLTP and the University of Ulster, and was concerned with the introduction of technology in all courses at all levels. The Virgil Centre was established to identify and disseminate good practice in technology-based teaching and learning. The centre works informally with other central support units in the university.

Learning situations are assessed in terms of their aims, resources and teaching methods. They are then examined so that a fit between course requirements and specific technologies can be found. In order to implement solutions, the Virgil Centre offers advice, funds attendance at conferences etc., loans equipment, purchases software and offers training on a one-to-one and small group basis. A member of the VIRGIL staff runs plenary sessions on technology usage for the Post-Graduate Certificate in University Teaching (PGCUT) and supports this with ongoing training and technical support in the use of various technologies.

In the early years, the Centre undertook software development in the areas of Ceramics and Typography. The Beta version of Glaze Ceramics Tutor and Typography Trail are now available through TLTP.

Ms M Mallon  
Virgil Centre  
University of Ulster

<http://www.ulst.ac.uk/misc/virgil>

York Street  
Belfast, BT15 1ED  
Tel.: 01232 366 064  
MJ.Mallon@ulst.ac.uk

### **68. VESOL/TOTAL: VIDEO AUTO-PRODUCTION AND EDITING SYSTEM FOR OPEN LEARNING WITH TUTOR ONLY TRANSFER OF AUTHORED LEARNING**

An online video editing system using three linked cameras produces master tapes of lectures without the need for technician support. These can be viewed in the library, or projected in a lecture theatre, obviating the need for repetition in the short term. They are then used as primary material to be edited by the lecturer into structured multimedia packages using a new co-authoring shell that interfaces with a standard authoring package. The results are stored on CD-ROM and be accessible via the University network.

Dr Chris O'Hagan  
University of Derby  
Western Road  
Derby DE3 5GX  
Tel.: 01332 622 262  
c.m.ohagan@derby.ac.uk

<http://www.derby.ac.uk/cedm/vesol/home.html>

### **69. MATERIALS TEACHING EDUCATIONAL (MATTER)**

This national consortium is producing a graphical microcomputer based learning system to support undergraduate courses in Materials Science at all UK HEIs offering this subject. The modules include substantial teaching materials that integrate micrographs and animation of theoretical concepts.

Prof. P J Goodhew  
Materials Science & Engineering Dept  
University of Liverpool  
Liverpool, L69 3B  
Tel.: 0151 794 4665  
Goodhew@liv.ac.uk

<http://www.liv.ac.uk/~matter/>

Materials Science on CD-ROM v2.1 published by Chapman-Hall. UK HEIs ONLY: discount price of £50 available directly from the MATTER office. All other orders and enquiries to Chapman & Hall. Free demo disk from MATTER web site.

### **70. COMPUTER AIDED LABORATORY TEACHING IN ENGINEERING (CALTIE)**

This project used computer-based technology to improve the efficiency of teaching engineering experimentation and laboratory work. Laboratory work in undergraduate engineering and science teaching is a staff intensive activity, because of guidance, safety and marking requirements. The project used computer technology to assist both in the preparation of the student for the laboratory session and also in assessing the work done.

Royston Young  
Coventry University  
Priory Street  
Coventry, CV1 5FB  
Tel.: 01203 838 872  
cex112@cck.coventry.ac.uk

<http://caltie.coventry.ac.uk>

### **71. THE DEVELOPMENT OF CAL COURSE MATERIAL FOR THE TEACHING OF CORROSION IN ENGINEERING**

The Ecorr project produces CAL course materials to support the teaching of corrosion principles and corrosion control methods to engineering students. This venture is undertaken by a consortium based at the Corrosion & Protection Centre, UMIST, and incorporating the universities of Nottingham, Aston, Leeds and Glasgow.

Dr R A Cottis  
Corrosion and Protection Centre  
UMIST

<http://www.cp.umist.ac.uk/CAL/ECorr.htm>

Ecorr V1.0, which consists of 8 modules, is now available; an evaluation CD-ROM is available free

Manchester  
Tel.: 0161 200 4843 Fax: 0161 200 4865  
R.A.Cottis@umist.ac.uk

of charge to qualifying academics, and the site licence for UK HE is available for a £10 handling fee. For other pricing see the Ecorr Web site or contact Dr Cottis.

## 72. SHARED CURRICULUM MATERIAL FOR THE CARING PROFESSIONS (PROCARE)

The project has developed three modules addressing interpersonal skills for nursing; interpersonal skills for social work; and research methods for nurses and social workers.

Jackie Rafferty  
Procure  
Centre for Human Service Technology,  
Department of Social Work Studies,  
University of Southampton,  
Southampton, SO17 1BJ  
Tel.: 01703 593 536, Fax: 01703 592 779  
ProCare@chst.soton.ac.uk

<http://www.soton.ac.uk/~chst/procure/>  
For PC (386+, Windows 3.1, Windows 95, minimum - 8MB RAM, 256 colours)  
Cost to UK HEI: £50 per module.

## 73. COMPUTER SIMULATIONS FOR TEACHING PRACTICAL DESIGN AND DATA HANDLING (ELABORATE)

The eLABorate simulation packages allow students of chemistry and biochemistry to carry out simulations of investigations on a scale which would not be possible in the laboratory without the commitment of weeks or months of laboratory time. They are not designed to replace laboratory work but to complement it by providing opportunities for students to make their own judgements and decisions about the planning of experimental conditions and the interpretation of data. Simulations are or will soon be available dealing with studying an enzyme, isolating a protein, using simple statistical procedures, radiotracer studies on bacterial growth, electrochemistry, kinetics; radioimmunoassay; infrared analysis and NMR spectroscopy.

Dr J Garratt  
University of York  
Heslington  
York, YO1 5DD  
Tel.: 01904 432551  
cjpg2@york.ac.uk

<http://www.york.ac.uk/depts/chem/staff/elaborate/>  
Available to staff of UK HEI at no charge via password-protected web download – see eLABorate homepage for details.

## 74. COMPUTER BASED COURSEWARE FOR PUBLIC HEALTH MEDICINE

This project has developed ten interactive courseware modules for use by medical students during their study of public health medicine. New modules, expert opinions and self-assessment questions can be added via a toolkit. The courseware addresses the practical use of epidemiological methods, a study area that is well suited to an interactive tutorial type approach, available through the use of computer assisted learning.

Dr J D Baty  
University of Dundee  
Dundee  
Tel.: 01382 632 553  
j.d.baty@dundee.ac.uk

<http://www.dundee.ac.uk/cit/epical.htm>  
UK Higher Education Institutions can obtain a set of disks and a manual for £35. The toolkit is available as a single user product for £75.

## 75. COMPUTER BASED LEARNING IN VETERINARY EDUCATION (CLIVE)

CLIVE is a consortium of all the UK veterinary schools that aims to make computer assisted learning an established and expanding feature of veterinary education. To cover all disciplines and species the designers concentrate on making customisable templates for Windows, PC and Mac. The content is in text and multimedia files separate from instructional structures and can be added to or altered with simple tools such as text editors. Courseware is announced on the mailbase t1tp-clive.

Dr A Short  
University of Edinburgh  
Dept of Pre-Clinical Vet Science  
Summerhall  
Edinburgh  
Tel.: 0131 650 6112  
adshort@ed.ac.uk

<http://www.clive.ed.ac.uk/clive.html>  
For PC & Mac  
10 templates and 28 stand alone packages available on CD-ROM.

## 76. PHARMA-CAL-OGY

This project is focused on the teaching of undergraduate pharmacologists from a range of biomedical courses. It provides increased efficiency of teaching and expansion and enhancement of the student learning experience. A resource centre facilitates the implementation of existing CAL materials; and new technology based courseware – software, video and printed support materials – is developed in identified and agreed topic areas. Further details are available on WWW.

Dr I E Hughes  
University of Leeds  
Leeds  
Tel.: 0113 233 4313 Fax: 0113 233 4331  
i.e.hughes@leeds.ac.uk

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# The Joint Information Systems Committee



*This section of the directory has been abstracted and summarised from the JISC's web pages. Further information can be found on those pages at <http://www.jisc.ac.uk/>.*

Funded by the Scottish Higher Education Funding Council, the Higher Education Funding Council for England, the Higher Education Funding Council for Wales and the Department of Education Northern Ireland, the mission of the JISC is:

*To stimulate and enable the cost effective exploitation of information systems and to provide a high quality national network infrastructure for the UK higher education and research councils communities.*

This section of the information directory contains information on:

- **JISC ASSIST:** the JISC Activities, Services and Special Initiatives Support Team
- **JISC Services:**\* network, information, advisory, discussion list and software services funded by the JISC
- **JISC Programmes:**\* various programmes funded to further the development and exploitation of the network and its services

\*A *service* receives rolling funding from the JISC on an annual basis, whereas a *project* is funded for a set period of time. A *project* may, however, successfully develop into a *service*.

Further information on JISC's structural organisation, publications and events can be found via the JISC home page, URL: <http://www.jisc.ac.uk/>.

## Contacts

In general the most appropriate route for contacts would be through your institutional computer or library support unit, or through the individual service or programme.

For information on JISC ASSIST, see p62.

The head of JISC Secretariat is Malcolm Read  
JISC Secretariat  
Northavon House  
Coldharbour Lane  
Bristol, BS16 1QD

Tel.: 0117 931 7403  
Fax: 0117 931 7255  
Email: [jisc@jisc.ac.uk](mailto:jisc@jisc.ac.uk)

The Head of Programmes is Norman Wiseman  
C35 Cherry Tree Buildings  
University of Nottingham  
University Boulevard  
Nottingham, NG7 2RD

Tel.: 0115 951 4790  
Email: [jisc@nottingham.ac.uk](mailto:jisc@nottingham.ac.uk)  
Fax: 0115 951 4791

## JISC ASSIST



JISC ASSIST (Activities, Services and Special Initiatives Support Team) has been set up with the mission:

*to close the gap between the availability of Communications and Information Technology products and services and the Higher Education community's ability to deploy them.*

This is a particularly timely initiative in the light of the Dearing Report. It puts in place the "awareness unit" described in the JISC Strategy which was proposed in recognition that "the opportunities presented by IT are outstripping the ability of the sector to assimilate and exploit them."

### The objectives of JISC ASSIST are:

- to support and encourage those charged with a C&IT strategic brief in UK HE institutions.
- to meet the objectives of their information strategy, to ensure that UK Higher Education Institutions are fully aware of the activities and services provided by JISC and understand their strategic importance.
- to channel feedback to JISC from the community to help inform JISC's discussions and planning of future work.

### Current Activities

#### Workshop Series

This workshop series will take key areas of strategic importance for HEIs in support of their corporate strategy and discuss the barriers we face and exchange ideas on good practice. The target audience is those people charged with a responsibility for Communications and Information Technology in HEIs. The level of presentation and discussion will focus on strategic and not technical considerations.

#### Site Visits to HEIs

These will be led by senior people in the community and will be aimed at senior managers in HEIs. The nature of the visit and the topics covered will depend on the requirements of the institution. If your site wishes to be involved early in this initiative please contact Anne Mumford at [assist@jisc.ac.uk](mailto:assist@jisc.ac.uk).

#### Senior Management Briefing Papers

Computer Network Security; JANET Connection Policy; Information Strategies; Why Networks are Important Copyright; and Update to the JISC Five Year Strategy. Available online from the JISC website.

### Contact

JISC ASSIST is headed by Dr Anne Mumford from Loughborough University who is known to many as the Co-ordinator for the Advisory Group On Computer Graphics.

Dr Anne Mumford  
Computing Services  
Loughborough University, LE11 3TU

Tel.: 01509 222312  
Fax: 01509 223989  
Email: [assist@jisc.ac.uk](mailto:assist@jisc.ac.uk)  
URL: <http://www.jisc.ac.uk/assist/>

## **JISC Services**

The JISC funds a wide range and growing number of national services for the benefit of the UK higher education and research communities. A 'service' receives rolling funding from the JISC on an annual basis, (whereas a 'project' is funded for a set period of time).

The JISC is working on the creation and continuing development of the network infrastructure, and of content on it, which it calls the **Distributed National Electronic Resource** (DNER: information on how this resource is being built is described in the DNER Collection Policy, URL: [http://www.jisc.ac.uk/cei/dner\\_colpol.html](http://www.jisc.ac.uk/cei/dner_colpol.html)) This section of the handbook describes all the elements of infrastructure, content and support under the headings of:

- **Information service providers.**
- **Infrastructure** (Network services; Communications services - electronic discussion lists and videoconferencing facilities; Software repositories).
- **Support services** (Advisory and research services; Negotiation agency; Training and Awareness; Practical services).

For further information, please do not hesitate to contact the individual services – you can find their contact details via the URL given for their web pages.

### **Information Service Providers**

#### **AHDS - The Arts and Humanities Data Service**

<http://ahds.ac.uk/>

Aims to co-ordinate access to and facilitate the creation and use of electronic resources in the arts and humanities by offering a range of services to the UK's higher educational institutions and their members.

#### **BIDS - Bath Information and Data Services**

<http://www.bids.ac.uk/>

Provides the higher education community with network access to a range of commercially supplied bibliographic databases and online journals.

#### **BUBL - The BUBL Information Service**

<http://bubl.ac.uk/>

Provides clear, fast and reliable access to selected Internet resources and services of academic relevance.

#### **BUFVC - British Universities Film and Video Council**

<http://www.bufvc.ac.uk/>

A representative body with members from UK institutions of higher education, which provides a range of services to promote the production, study and use of film and related media for higher education and research. See p65 for details of the BUFVC Off-Air Recording Back-Up Service.

#### **COPAC - The CURL OPAC project**

<http://copac.ac.uk/copac/>

Provides a unified interface to the consolidated online catalogues of the Consortium of University Research Libraries, giving searchers free access to some of the largest university research library collections in the UK and Ireland.

#### **The Data Archive**

<http://dawwww.essex.ac.uk/>

A national resource centre for computer-readable data in the social sciences and humanities.

#### **EDINA - Edinburgh Data and Information Access**

<http://edina.ed.ac.uk/>

Provides national on-line services for the UK higher education and research community, giving access to bibliographic databases and digital map data.

#### **MIDAS - Manchester Information, Datasets and Associated Services**

<http://midas.ac.uk/>

Provides on-line access to, and support for, many large and complex datasets, including the 1991 and 1981 UK Census of Population Statistics, continuous government surveys, macro-economic time series databanks, digital map datasets, and scientific datasets. The latest services include Beilstein CrossFire Chemical Information System and the UK mirror of JStor, a collection of over 100 online journals.

**NISS Services**<http://www.niss.ac.uk/>

Provides comprehensive, professionally maintained information services designed to meet the needs of staff and students in Higher Education.

**SOSIG - Social Science Information Gateway**<http://sosig.ac.uk/>

Provides access to quality networked resources available world-wide as well as training and support in using these resources.

**Network services**

All UK Higher Education and Research Council Institutions, and many other educational establishments, are linked to JANET, the Joint Academic Network. A map, developed by the University of Wolverhampton, which provides more information on connected sites can be found at <http://www.scit.wlv.ac.uk/ukinfo/uk.map.html>.

**UKERNA, the United Kingdom Education & Research Networking Association**<http://www.ukerna.ac.uk/>

Manages the operation and development of JANET.

**JANET - The Joint Academic Network**<http://www.ja.net/>

The United Kingdom's academic and research network JANET connects several hundred institutions, including all universities, most colleges of higher education, most research council establishments and other organisations that work in collaboration with the academic and research community.

Information on other network services (Authentication and registration, the national cache, and national mirror registry) is available through the JISC web pages.

**Communications services - electronic discussion lists and videoconferencing facilities****Mailbase**<http://www.mailbase.ac.uk/>

The UK's major electronic mailing list service, enabling researchers and academics to manage discussions and to share information regardless of geographical distance.

**JANET videoconferencing service**<http://www.ja.net/video/service/>

Booking, administration and documentation for the JANET and Scottish MAN Videoconferencing Services

**Software repositories****HENSA (HENSA micros and HENSA Unix)**<http://www.hensa.ac.uk/>

HENSA micros is an up-to-date collection of Public Domain and Shareware software for various microcomputers. HENSA also mirrors several major archives from around the world. Software held ranges from accountancy packages to virus protection utilities. HENSA Unix provides access to over 40 archives containing Unix, numerical and statistical software, Unix-like operating systems for PCs, Internet applications, and multimedia collections as well as distributing packages developed by UK institutions all of which are freely available. A number of services are also provided including Web page validation and the Technical Reports Search service.

**Advisory and research services****AGOOG - The Advisory Group on Computer Graphics**<http://www.agocg.ac.uk/>

Provides a single national focus for computer graphics, visualisation and multimedia within the UK higher education community.

## Services and Programmes

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### **DISHE – Disability and Information Systems in HE**

Support centre at Dundee University for issues relating to disability and the use of IT (from Jan 1998).

### **UKOLN - The UK Office for Library and Information Networking** <http://www.ukoln.ac.uk/>

Supports the UK library and information communities through research, network services, and co-ordination in the areas of networking and bibliographic management.(jointly funded with the British Library)

### **Other Advisory and Research services:**

- DRRG - Database Resources Research Group (jointly funded with the British Library)
- JISC ASSIST (see p62)
- MAU - Monitoring and Advisory Unit of the Committee for Electronic Information (CEI)
- TASI - Technical Advisory Service for Images
- TAU - Technical Advisory Unit of the Advisory Committee on Networking (ACN) #
- UK Web Focus
- VCAS - JANET Videoconferencing Advisory Service

See the JISC Services web page for more details.

## Negotiation Agency

### **CHEST - Combined Higher Education Software Team** <http://www.chest.ac.uk/>

The mission of CHEST is to obtain quality software, datasets, training materials and other IT products for the UK Higher Education and Research Community at low prices and attractive terms.

## Training and Awareness

Services providing training in use of the network or of individual services.

### **Netskills** <http://www.netskills.ac.uk/>

Training programmes and materials to help develop network skills which will enable more effective use of the internet for teaching, research and administration.

Other Services providing training and awareness are UKERNA (specifically network technical training), AGOCC, AHDS, BIDS, BUFVC, EDINA, Mailbase, MIDAS, SOSIG, UKOLN (see the respective entries above).

## Practical services

### **Higher Education Digitisation Service** <http://hedc.herts.ac.uk/>

Provides a range of services to support the conversion of high volumes of teaching, learning and scholarly materials from paper and other formats to electronic form. Focuses on providing advice and consultancy with a total management package to provide complete digitisation services from feasibility assessment to final product delivery.

### **Off-Air Recording Back-Up Service, BUFVC** <http://www.bufvc.ac.uk/services.htm>

The BUFVC runs a television recording back-up service on behalf of universities and colleges. Any educational institution holding an Educational Recording Agency licence for off-air recording can take advantage of this service by taking out a BUFVC Enhanced Services Membership. The membership allows staff in BUFVC member institutions to obtain copies of broadcast television programmes up to two months after the last transmission date. See p63 for details on BUFVC.

### **National Video service** <http://www.man.ac.uk/MVC/Video.html>

Provides the UK academic community with a assistance in creating analogue or digital video.

## **JISC Programmes**

The JISC runs or oversees a small number of programmes aimed at furthering the development and exploitation of communications and information technologies for the benefit of the UK Higher Education and Research communities.

### **The Electronic Libraries Programme – eLib**

Around 60 projects aiming to "transform the use and storage of knowledge in higher education institutions" have been funded. This programme started in 1995 with funding of £15,000,000 over three years.

See the next section (p68) for a description of the projects.

### **The JISC Technology Applications Programme – JTAP**

This is a directed programme to investigate the impact of technologies on higher education and develop applications in support of the JISC's strategy and is the successor to the New Technologies Initiative (see below).

Projects have been funded in a number of areas including: Visualisation; Virtual and remote environments; Collaborative and distance working; IT to support administration; Videoconferencing; Affordable provision of computers for students.

**URL:** <http://www.jtap.ac.uk/>

### **Information Strategies**

December 1995 saw the publication of the JISC's 'Guidelines for Developing an Information Strategy'. Subsequently six Higher Education Institutions were selected as pilot sites to work their way through the Guidelines. These institutions began work on their Information Strategies in June 1996 and by the summer of 1997 have embryonic strategy documents in place. A new edition of the Guidelines will soon be issued, and the service extended to cover a wider range of consultative assistance. A Co-ordinator works with the pilot sites and is also available to assist other institutions developing information strategies.

**Contact:** Ann Hughes, JISC Information Strategies Co-ordinator. Email: [m.a.hughes@nottingham.ac.uk](mailto:m.a.hughes@nottingham.ac.uk)

### **Non-Formula Funding of Specialised Research Collections in the Humanities**

This initiative results from the Joint Funding Councils' Libraries Review Group, chaired by Sir Brian Follett in December 1993, which made a number of recommendations, one of which was to "...invite bids from institutions for recurrent non-formula funding to support specialised research collections which are widely used by researchers in the humanities..." (paragraph 347).

Further information about this initiative, its management and the projects it has funded and the work it is undertaking in the field of archiving, can be found at its web site.

**URL:** <http://www.kcl.ac.uk/projects/srch/>

### **The Pilot Site Licence Initiative -PSLI**

This pilot programme began in January 1996; its aim is to test a national site licence concept between HEIs and publishers in an attempt to keep the costs of journal prices down. Three publishers are involved in the initiative, Academic Press Ltd, Blackwell Science and Blackwell Publishers, and The Institute of Physics Publishing. The pilot has also encouraged the introduction of access to the electronic journals of each of the publishers involved.

See National Electronic Site Licensing Initiative (NESLI) below.

**Contact:** Jacqueline Fitzgerald, Email: [Jacqueline.Fitzgerald@kcl.ac.uk](mailto:Jacqueline.Fitzgerald@kcl.ac.uk)

### **National Electronic Site Licensing Initiative - NESLI**

The JISC intends that The Pilot Site Licence Initiative will be followed by a similar but much more wide ranging initiative, involving many more publishers than the four involved in PSLI and focusing on the commercial delivery of electronic journals only. The scheme will require the implementation of a national site license by a Managing Agent to be appointed by JISC.

See the JISC Programmes web pages for more details

### **The New Technologies Initiative - NTI (*now completed*)**

This programme, which ran from 1993 to 1996, aimed to identify emerging technology and assist the transfer to productive use to meet the needs of Higher Education in Training, Education, Administration and other emergent information and knowledge based services. Succeeded by JTAP, see above.

**URL:** <http://www.jtap.ac.uk/nti/frame.htm>



## **The Electronic Libraries Programme**

The main aim of the eLib programme, through its projects, is to engage the Higher Education community in developing and shaping the implementation of the electronic library. The projects examine the products, processes and training needed for new ways of working and address the impact they will have on faculty, students and library staff.

The programme has been established through two separate calls for proposals that have so far yielded almost 60 projects funded in different programme areas. These areas are:

- Document Delivery
- Access To Network Resources
- Training and Awareness
- Electronic Journals
- Digitisation
- Images
- Electronic Short Loan Collections
- On Demand Publishing
- Pre-Prints and Grey Literature
- Supporting Studies
- Quality Assurance

The third phase, funded from late 1997, addresses the areas of

- Hybrid Libraries
- Large Scale Resource Discovery
- Digital Preservation

See p69 for more details on eLib Phase 3.

## **Support for Teaching and Learning**

Improving access for students to library and teaching materials is an important goal of many of the eLib projects. Projects in On Demand Publishing and projects establishing Electronic Short Loan collections seek to facilitate access to course materials and reading lists via networks for both full and part-time students. Projects in these areas are working in subjects such as Management Studies (ERIMS) or in the humanities (ODP in the Humanities) as well as with different types of materials, for example, music and video (Patron). Some are focusing initially on the production of print course packs from an electronic source (SCOPE), (PHOENIX), while others are concentrating on delivery of material over networks in electronic form (ACORN), (Eurotext). The projects are working closely with publishers to explore new and effective copyright management and pricing models to ensure document integrity and royalty controls.

Teaching is also enhanced through eLib Access to Networked Resources projects which seek to create quality controlled subject-access gateways to networked information.

eLib is also providing support for all library staff and users through projects in the Training And Awareness and Supporting Studies areas which consider how university infrastructure and current user support can be improved to support teaching and learning more effectively in an electronic environment models to ensure document integrity and royalty controls (NetLinkS), (SKIP).

## **Further Information**

The eLib web pages can be found at <http://www.ukoln.ac.uk/services/elib/>

Ariadne (URL: <http://www.ariadne.ac.uk/>) is an eLib electronic journal providing up to date information on eLib and the world of Electronic Libraries in general.

The eLib programme director is Mr Chris Rusbridge, contact:

Mr Chris Rusbridge  
eLib Programme Director  
University of Warwick  
Coventry, CV4 7AL

Tel.: 01203 524 979  
fax: 01203 524 981  
email: [C.A.Rusbridge@warwick.ac.uk](mailto:C.A.Rusbridge@warwick.ac.uk)

### eLib Phase 3

Funding for the ten new projects selected for the third phase of eLib began in January 1998. These projects fall into three main thematic strands: Hybrid Libraries, Large Scale Resource Discovery ('clumps') and Digital Preservation. The new projects aim to incorporate lessons learned from the successes and failures of phases one and two in building fully integrated library services which incorporate both print and electronic resources.

In addition, some earlier projects have received extension funding to assist them in the transition to being self-supporting services. These projects are: *Access to Network Resources* projects ADAM (p71), Biz/ed (p71), CATRIONA II (p71), EEVL (p71), IHR-Info (p71), OMNI(p72), ROADS (p72) and SOSIG (p72); *Electronic Document Delivery* projects EDDIS (p72) and SEREN (p72); the *Electronic Journals Internet Archaeology* (p73), JILT (p73), Sociological Research Online (p73) and NewsAgent for Libraries (p73); *Images* project DIGIMAP (p74); *On Demand Publishing* projects SCOPE (p74) and Eurotext (p75); *Preprints* projects Education-line (p75) and WoPEc (p75); and the *Supporting Study* MODELS (p75).

### Hybrid Libraries

Funding in this area aims to build a small number of exemplar or pilot hybrid library development projects, integrating a wide range of traditional and new library resources as seamlessly as possible.

#### **HEADLINE: Hybrid Electronic Access and Delivery in the Library Networked Environment**

<http://www.lse.ac.uk/blpes/headline.shtml>

This project aims to develop a scalable model of the hybrid library environment in three academic libraries with complementary approaches and subject coverage (economics, finance, business and management).

#### **MALIBU: Managing the Hybrid Library for the Benefit of Users**

<http://www.kcl.ac.uk/humanities/cch/malibu>

The project will develop and implement prototype hybrid libraries in each of the three major partner institutions and in so doing derive generalisable institutional models, which will be tested first in a number of test-bed institutions before being distributed throughout the community, focusing on humanities disciplines (history, English and music).

#### **HYLIFE: Hybrid Library of the Future**

HYLIFE aims to develop a generic software interface, which can then be tailored to the needs of individual clients. The project will involve a wide range of client groups and will develop six implementation interfaces.

#### **BUILDER: Birmingham University Integrated Library Development and Electronic Resource**

<http://builder.bham.ac.uk/builderHome/>

This project is essentially an institutional bid but involves other HEIs and a public library as primary test sites. The model focuses on a series of six modules which will be developed and applied in six disciplines.

#### **Agora**

The project aims to provide an open, standards-based platform for distributed, mixed-media information management as well as a framework for end-user-oriented services and an infrastructure which can be scaled up to provide the backbone for national access to distributed collections (the Distributed National Electronic Resource, see p63).

### Large Scale Resource Discovery ('Clumps')

The JISC has also funded a series of pilot projects which aim to create virtual union catalogues using Z39.50. These 'clumps' may be subject or regionally based.

#### **Music Libraries Online**

The project will link all 9 UK conservatoire library catalogues, enabling the participating libraries to provide a single point of access to their teaching and research collections, to provide an efficient interlending scheme and to collaborate on acquisitions policies.

### **RIDING**

Riding will use Z39.50 to create a distributed union catalogue comprising the library catalogues across nine university libraries in the Yorkshire and Humberside Universities Association, the British Library and Leeds Library and Information Services.

### **M25 Link**

<http://www.lse.ac.uk/blpes/m25/>

The project will establish a pilot virtual clump across six partner libraries to enable single search access across their catalogues, including serials records. The outcome will be a blueprint for extending the service to the other libraries in the M25 consortium.

### **CAIRNS: Co-operative Academic Information Retrieval Network for Scotland**

The aim is to set up a clump comprising servers at 16 Scottish sites which will also be configurable as a number of more specialised sub-clumps to allow single search access across the library catalogues.

## **Digital Preservation**

Recent years have seen a massive increase in the range and volume of digital information resources, and their acquisition by libraries, but there is no formal mechanism for the long-term preservation of this material. There is a pressing need for a strategy for digital preservation.

### **CEDARS: CURL Exemplar for Digital Archives**

Under the overall direction of the Consortium of University Research Libraries (CURL), CEDARS aims to address the strategic, methodological and practical issues and will provide guidance for libraries in best practice for digital preservation.

## eLib Phase 1 and 2 Project Details

This section consists of a listing of all of the projects in the first two phases of the eLib programme, divided into the original programme areas. It should be stressed that the programme areas give only a general impression of the nature of the work of the project. For example, some projects in the on demand publishing section overlap, in terms of what they are trying to achieve, with some projects in the pre-prints section.

**NB: The inclusion of a project in this directory does not imply that the project is still funded by eLib.**

This information, along with further contact details can be found online at <http://www.ukoln.ac.uk/services/elib/projects/>

## Access to Network Resources\*

**ADAM: Art, Design, Architecture & Media Information Gateway** <http://www.adam.ac.uk/>

ADAM is a service to help you locate useful, quality-assured information on the Internet in subject areas related to Art, Design, Architecture & Media in the broadest sense.

**Biz/ed: Business Education on the Internet** <http://www.bized.ac.uk/>

Business Education on the Internet (biz/ed) is a free information service available via the World Wide Web which allows users to search and retrieve targeted information about business and economics held on computers around the world. The service offers a one-stop information gateway for the one million economics, business and management students and staff as well as the general public in the UK and overseas.

**CAIN: Conflict Archive on the INternet** <http://cain.ulst.ac.uk/>

This project aimed to develop, using Northern Ireland as a case study, a collaborative multimedia database of resources relevant to teaching and research in conflict studies. This resource, through its links with the INCORE project, acts as a gateway to network resources on ethnic conflict on the Internet and provide a platform for mounting resources specific to the Northern Ireland conflict held within the partner institutions and elsewhere throughout the province and beyond. Funding for CAIN has now finished.

**CATRIONA II** <http://catriona2.lib.strath.ac.uk/catriona/>

The CATRIONA II project is an investigation of approaches to the management and creation of institutional and departmental electronic resources in Scottish universities; of the existence of quality, locally-created, electronic resources on individual campuses and their value both within and beyond the local institution; of intentions regarding the provision of campus-wide and external access to such resources; and of associated questions relating to institutional policy, strategy, organisational infrastructure, and approaches to resource delivery and maintenance, with particular reference to the role of the library. A subsidiary aim is to establish guidelines for best practice in these areas.

**EEVL: Edinburgh Engineering Virtual Library** <http://www.eevl.ac.uk/>

The EEVL project provides a Gateway for the higher education and research community to facilitate access to high quality information resources in Engineering. It is similar in concept to BUBL (Bulletin Board for Libraries), SOSIG (Social Science Information Gateway), and OMNI (Organising Medical Networked Information), and provides free access via the Internet to Engineering information.

**IHR-Info** <http://ihr.sas.ac.uk/>

Archives and libraries are the laboratories of historical research. Increased information about these laboratories, and easier access to these and other historical sources is provided by IHR-INFO.

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\* Many projects under this heading have been extended until the end of 1998, when a decision will be made on the future direction that subject gateways should take.

**OMNI: Organising Medical Networked Information**

<http://omni.ac.uk/>

The OMNI Gateway is a database of Internet resources in medicine, biomedicine, allied health, health management and related topics; providing comprehensive coverage of UK resources in the area and access to the best resources world-wide. The collection is being constantly updated by a process of selection, evaluation and description.

**ROADS: Resource Organisation and Discovery in Subject-based services**

<http://www.ukoln.ac.uk/roads/>

The ROADS project contributes to the broad aims of the Electronic Libraries programme by providing a set of software tools and a standards framework for the information gateways being developed by the Access to Network Resources Projects.

**RUDI: Resources for Urban Design Information**

<http://rudi.herts.ac.uk/>

The service provided material on urban design in the Western cultural context using text, high quality colour images, sound and moving picture elements. It was designed to be useful to students, academics and professional practitioners. Project not extended.

**SOSIG: Social Science Information Gateway**

<http://sosig.ac.uk/>

The Social Science Information Gateway (SOSIG) allows social science researchers and practitioners to discover and easily to access relevant high-quality networked resources world-wide. It also provides a comprehensive list of relevant UK-based resources.

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## Digitisation

**Internet Library of Early Journals**

<http://www.bodley.ox.ac.uk/ilej/>

Offers expanded access over the Internet to digitised page images of substantial runs of 18th- and 19th-century journals.

**DIAD: Digitisation in Art and Design**

<http://tdg.linst.ac.uk/tdg/research/diad/index.htm>

A digitised record of selected core journals in the subject areas of design and the applied arts.

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## Electronic Document Delivery

**EDDIS: Electronic Document Delivery**

This project is establishing the software infrastructure for an electronic document delivery programme on a national scale.

**SEREN: Sharing of Educational Resources in an Electronic Network in Wales**

<http://seren.newi.ac.uk/user/seren/>

SEREN aims to provide the software to enable the Welsh HE community to maximise use of the library resource-base in Wales.

**JEDDS: Joint Electronic Document Delivery Software Project**

<http://www.gu.edu.au/alib/iii/docdel/jointdev.htm>

An international co-operative initiative involving four organisations which each form a development focal point for significant sectors of the library community in their own country.

**LAMDA: Electronic Document Delivery in London and Manchester**

<http://www.ucl.ac.uk/Library/lamda/>

Provides a document delivery service to users of academic libraries in London and in Manchester, with further development of the service to other UK universities.

**InfoBike** <http://www.bids.ac.uk/elib/infobike/homepage.html>  
Provides the academic and library user with the ability to search for articles of interest within bibliographic databases, order articles in an electronic form and have them delivered to the user's work station for browsing.

## Electronic Journals

**CLIC** <http://www.ch.ic.ac.uk/clic/>  
A parallel electronic version of an established journal - Chemical Communications.

**Internet Archaeology** <http://intarch.ac.uk/>  
an international electronic journal for archaeology

**Electronic support for Scholarly Communication** <http://www.mpi-sb.mpg.de/~ohlbach/dictionary/stacks.html>  
A "live" electronic dictionary of logic

**PPT: Parallel Publishing for Transactions** [http://ppt.geog.qmw.ac.uk/tibg/ppt\\_hom.html](http://ppt.geog.qmw.ac.uk/tibg/ppt_hom.html)  
Electronic Transactions of the Institute of British Geographers

**Electronic Seminars in History** URL not available

**Electronic Reviews in History** URL not available

**DeLiberations** <http://www.lgu.ac.uk/deliberations/home.html>  
Deliberations on Teaching and Learning in Higher Education

**JILT: The Journal of Information, Law and Technology** <http://elj.warwick.ac.uk/>

**Sociological Research Online** <http://www.soc.surrey.ac.uk/socresonline/>  
This project feeds into EPRESS in phase 3 which will provide a mechanism for electronic journal production.

**The SuperJournal project** <http://www.superjournal.ac.uk/sj/>  
Seeks to create a significant body of multimedia journal content, based on established journals, on which to explore systematically the question "what do authors and readers want from electronic journals?"

**NewsAgent for libraries** <http://www.sbu.ac.uk/~litc/newsagent/>  
A personalised current awareness service for library and information staff.

**Open Journal** <http://journals.ecs.soton.ac.uk/>  
The integration of electronic journals with networked information resources.

**Learned Societies Support Service** <http://Journals.eecs.qub.ac.uk/>  
This project seeks to establish a system that will serve as a test bed for learned societies publishing material in an electronic format.

## Electronic Short Loan Projects

**ACORN: Access to COurse Readings via Networks** <http://acorn.lboro.ac.uk/>  
A partnership between Loughborough University, Swets & Zeitlinger BV, and Leicester University Library. The project has explored the potential of IT to deliver high-demand material electronically to students, across the campus, via networked computers, and has developed and implemented a model for effectively managing the whole process.

**ERCOMS: Electronic Reserve Copyright Management System**

<http://www.iieir.dmu.ac.uk/Projects/ERCOMS/>

Aimed to develop a generic electronic copyright management system capable of working various electronic reserve management systems, and able to provide full tracking of usage accountability and automatic counts of the occurrence of copyright events.

**PATRON: Performing Arts Teaching Resources ONline**

<http://www.lib.surrey.ac.uk/eLib/Patron/Patron.htm>

The overall aim of the project can be encapsulated in one sentence: "The delivery of high quality digital audio, video, scores and text on-demand across a high-speed network to the desktop."

**ResIDe: Electronic reserve for UK Universities**

<http://www.uwe.ac.uk/library/itdev/reside/>

Making use of existing expertise within the library at University of the West of England, Bristol, this project developed supporting infrastructures for an electronic reserve, commonly known as electronic short loan collection. The system has been developed with two discrete elements; a current awareness database and a reserve collection database using a Netscape interface.

## Images

**DIGIMAP: National on-line Access to Ordnance Survey Digital Map Data**

<http://digimap.ed.ac.uk:8081/>

**HELIX: Higher Education Library for Image eXchange**

<http://severn.dmu.ac.uk/elib/helix/>

**MIDRIB: Medical Images: Digitised Reference Information Bank**

<http://www.midrib.ac.uk/>

## On Demand Publishing

**eOn: Electronic On Demand**

<http://eon.unn.ac.uk/>

The project sought to provide a large scale demonstrator model for the delivery of on-demand publishing to HE students and staff, as an integral part of the provision of formal educational programmes, library and learning support services. The eOn Project finished on 28th February 1998 but the project's web pages will remain for the foreseeable future.

**Project Phoenix**

<http://www.hud.ac.uk/schools/phoenix/pages/homepage.htm>

A project intended to assess the technologies and provide the infrastructure for offering Higher Education students course support materials on demand.

**Edbank**

<http://www-edbank.open.ac.uk/edbank/>

The aim of Edbank is to create, maintain and run a full text database of digitised teaching materials, delivered over the WWW, which can be used to support remote students (off-campus) in teacher training.

**On-Demand Publishing in the Humanities (was Only Connect)** [http://www.livjm.ac.uk/on\\_demand/](http://www.livjm.ac.uk/on_demand/)

Meeting the demand for multiple copies of set texts is a major problem for academic libraries. This project sets out to examine the benefits and the potential difficulties of using on-demand publishing by developing a "cheap and cheerful", WWW-based, model for making electronic texts available to specific student groups over a university network.

**SCOPE: Scottish On Demand Publishing Enterprise**

<http://www.stir.ac.uk/infoserv/scope/>

SCOPE is a consortium of 13 Scottish higher education institutions. Documents are stored electronically for the purposes of customised on-demand publishing: digitised anthologies of texts are created from a variety of sources specified by lecturers, and printed as required for students to purchase at low cost. This project will feed into phase 3's HERON service.

**ERIMS: Electronic Readings in Management Studies**

<http://www.templeton.ox.ac.uk/www/college/library/erims/intro.htm>

The ERIMS System is designed to enable users (postgraduate students, academic and library staff) to gain easy access to reading lists and full text reading list material, to browse through it at the computer screen and to print out a hard copy if required.

**Eurotext: A Collaborative Resource Bank of Learning Materials on Europe**

<http://eurotext.ulst.ac.uk/>

The Eurotext project has developed a collaborative, inter-university, electronic resource bank which can significantly enhance student access to learning materials relating to the European Union and to European integration.

## Pre-prints

**CogPrints: The Cognitive Sciences Eprint Archive**

<http://cogprints.soton.ac.uk/>

An electronic archive for papers in any area of Psychology, Neuroscience, and Linguistics, and many areas of Computer Science, Philosophy and Biology.

**Education-line: Electronic Texts in Education and Training**

<http://www.leeds.ac.uk/educol/index.html>

Within its initial remit as an electronic archive of preprint and grey literature in the field of education and training, Education-line has several objectives:

- to establish a generally accessible database of texts awaiting "traditional" publication or without widespread availability, making research results more quickly available.
- to facilitate visible discussion about such documents and general education and training issues.
- to provide a wide community of users with an information resource which promotes quality research and practice.

**Formations**

<http://formations.ulst.ac.uk/>

A net-centric, user-driven system for scholars in cultural studies, media studies, performance research and related areas.

**WoPEc: Working Papers in Economics**

<http://netec.mcc.ac.uk/WoPEc.html>

An application of Internet protocols to the management of a database of metadata of grey literature, demonstrated in the subject area of Economics. Rather than collecting electronic documents representing recent research results in a central store, the project brings together information on publications from various servers. WoPEc has been extended as an "Access to Network Resources" project, see p71.

## Quality Assurance

**ESPERE: Electronic Submission and Peer Quality Review Project**

<http://www.endocrinology.org/espere/>

The project is investigating the implications of electronic peer review in biomedical disciplines. Electronic submission and peer review represents a profound change in working practices for both academics and journal publishers and both the technical and cultural aspects will be examined.

## Supporting Studies

**MODELS: MOving to Distributed Environments for Library Services**

<http://www.ukoln.ac.uk/models/>

**IMPEL2: Impact on People of Electronic Libraries**

<http://ilm.unn.ac.uk/impel/>

Final report will be published by eLib in 1998.

**FIDDO: Focused Investigation of Document Delivery Options**

<http://dils2.lboro.ac.uk/fiddo/fiddo.html>

**Training and Awareness**

**Ariadne**

<http://www.ariadne.ac.uk/>

A parallel Web and print newsletter for librarians and information scientists

**CINE: Cartoon Images for Network Education**

<http://www.kcl.ac.uk/projects/cine/>

**EduLib**

<http://www.hull.ac.uk/edulib/>

Educational Development for Higher Education Library Staff

**NetLinkS: Networked Learner Support**

<http://netways.shef.ac.uk/>

Aims to encourage further development of the use of networked communication and information technologies to deliver training and other forms of help to users of networked information resources.

**Netskills**

<http://www.netskills.ac.uk/>

Netskills helps the UK higher education community develop the network skills to make effective use of the Internet for teaching, research and administration.

**SKIP: SKills for new Information Professionals** <http://www.plym.ac.uk/faculties/research/skip1.htm>

This project seeks to explore and illuminate the nature, type and scope of IT skills required by staff in the changing information environment of Higher Education. Final report to be published in 1998.

**TAPin: Training and Awareness Programme in networks**

<http://www.uce.ac.uk/tapin/>

TAPin seeks to improve the quality of teaching and research staff output by identifying staff information needs, and developing their information skills.

# INFORMATION TECHNOLOGY TRAINING INITIATIVE (ITTI)\*



In 1991, the Information Systems Committee of the University Funding Council launched the Information Technology Training Initiative (ITTI). The initiative was funded to a level of £3 million over three years to improve the availability of training materials for the use of IT in UK Higher Education Institutions.

The Initiative has funded 29 projects at universities throughout the United Kingdom. These projects are, in the main, producing quality paper-based and computer-based materials in areas such as:

- IT application skills training
- Basic IT skills
- Multimedia and hypertext courseware development tools and training
- IT staff personal and professional skills development.

The materials, including software items, described in the ITTI section of this directory may be copied for the purposes of training/instruction of staff and students in UK HEIs.

## **Contact details**

ITTI product and project administration is carried out by **Sylvia Hardwick** at:

UCoSDA  
Ingram House, 65 Wilkinson Street,  
The University of Sheffield  
Sheffield S10 2GJ

Tel.: 0114 222 1331  
Fax: 0114 222 1333  
Email: [s.hardwick@sheffield.ac.uk](mailto:s.hardwick@sheffield.ac.uk)  
URL: <http://www.icbl.hw.ac.uk/itti>

Further details on the Initiative can be obtained from either **Sylvia Hardwick** (above) or **Sarah Turpin** at: HEFCE, Northavon House, Coldharbour Lane, Bristol BS16 1QD; tel.:0117 931 7454, fax: 0117 931 7173; email [tltp@hefce.ac.uk](mailto:tltp@hefce.ac.uk).

## **ITTI Catalogue of Materials**

### **Contents**

#### **General Information**

#### **Section 1 - IT Application Skills (AS)**

#### **Section 2 - Basic IT Skills (BS)**

#### **Section 3 - Multimedia Courseware Tools and Training (MM)**

#### **Section 4 - IT Staff: Personal and Professional Skills Development (PS)**

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\* This section of the directory is extracted from the ITTI catalogue of materials, we thank Jean Burgan for her considerable help in reproducing this material and ITTI for permission to reproduce it. Please address any enquires directly to ITTI.

## General Information

### Ordering Materials

Orders may be received via email, letter or fax although **cheque with order** is preferred. For orders overseas, a pro forms invoice will be sent for payment before goods are despatched. Cheques should be made payable to UCoSDA and should be in pound sterling. For those wishing to pay in dollars please add an extra \$15 to the converted total to cover the cost of exchange.

Prices include p&p inside the UK. **Postage and packing** will be added to materials sent **overseas**. Please ensure that your return address accompanies your order.

All prices are quoted exclusive of VAT which will be added at the prevailing rate. This is currently 0%.

Special discounts on orders of 10 or more copies of some of the products are available on request and bulk orders of tutorial booklets can be arranged at reduced rates.

Packages costing £50 or over may be supplied on a sale or return basis on the understanding that if the package is not required, then the institution will pay the postage and packing to return the product to UCoSDA.

Copyright details are explained on the inside cover of each product.

Product specifications are obtainable from Sylvia Hardwick or on request from the project holder.

### Format of the Entries

#### Title of Project

Institution (Project Holder)

URL: <http://www.....ac.uk/>

#### Title of Material Produced

Developers' Names

**Price: £10:00/£20:00\***

**ISBN: 0 12345 678 9**

Brief description of material produced

\* Prices, where given, are quoted as those to the UK higher education community first with those to the non-UK higher education community second. Prices and may fluctuate and ITTI reserves the right to alter prices without notice.

All items listed have been produced with funds provided by the Higher Education Funding Councils.

## Section 1: IT Application Skills (AS)

This section describes projects which focus on the production of training materials which both promote the use of popular IT application areas and instruct in the use of commonly available application packages and centrally provided services.

### GIS (Geographical Information Systems) Awareness Materials

University of Southampton (Dr Michael Clark)

URL: <http://www.geodata.soton.ac.uk/>

#### GIS Survival Guide (Booklet)

**Price: £3.00/£6.00**  
**ISBN: 0 85432 452 6**

An alternative to more substantial texts, providing an insight into the issues surrounding GIS implementation.

#### GIS Awareness Materials (CBT)

**Price: £20.00/£40.00**

A booklet covering the basics of GIS plus four PC-based tutorials each lasting approximately 30 minutes. The tutorials will run on any IBM compatible PC and are copyable within your organisation. No license is required to run these materials on a network.

The *Awareness* tutorial defines GIS, its components and illustrates how points, lines, areas, surfaces and networks are used to represent the real world. Functionality is explored with the provision of a number of applications. The second tutorial offers an in-depth introduction to *overlay analysis and modelling*. A number of topics are covered and include features extraction and predictive modelling together with practical examples. A *Digital Elevation Modelling* tutorial covers the steps involved in their production, the use of datasets derived from such models, and a number of applications which include their use with soil erosion modelling, bathymetric change, precipitation and archaeological sites. The fourth tutorial, *Data Entry into GIS*, offers an overview to types and sources of data and how such data are entered into GIS. Coverage is made of digital data, paper records, aerial photographs, video and remotely sensed data, digital elevation models and multimedia.

#### Southampton City Greenways GIS Awareness Data Set (CBT)

**Price: £10.00/£25.00**

Boundaries of 65 ecological units and attribute data for each are provided in addition to enumeration District Boundaries of Southampton City and their population statistics. Analysis suggestions are provided. The data is available in DXF format and comma-delimited ASCII files.

(Available from the University of Southampton, GeoData Institute, tel.: 01703 594 488)

### Finite Element Training Materials

Manchester Computer Centre, UMIST (Mr William Swindells) URL: <http://www.mcc.ac.uk/UMIST/itti.html>

The finite element method is an analysis tool used by engineers to determine the reaction of structures to various types of boundary conditions. The method has a wide range of application from calculating magnetic fields to fluid flow. The aim of the project is to produce finite element training material for use by teaching staff from a wide range of disciplines. The materials will be produced in a machine readable format and will include a range of modules covering: finite element theory; worked examples and case studies; and overhead projector slides. In addition, an overview document will be available explaining the conventions used within the material and the software tools used to produce the material. This will allow trainers to select appropriate modules and modify the material to suit local needs.

(Information available from Mr W Swindells, MCC UMIST Support Unit, tel.: 0161 200 3541)

## Fortran to C Conversion and LaTeX Training Materials

Rutherford Appleton Laboratory (Dr Susan Hilton)

### AS11 - C for Fortran Programmers (Course materials)

**Price: £135.00/£185.00**

Developed by Stuart Robinson and Martin Prime

**ISBN: 1 85889 051 9**

These materials cover a five day, intensive, hands-on programming course for Fortran programmers wishing to utilise the programming language C. The course covers the basic features of C, using simple examples from Fortran to ease the learning process.

### AS17 - An Introduction to LaTeX (Course materials)

**Price: £67.50/£92.50**

Developed by Martin Prime

**ISBN: 1 85889 021 7**

These materials cover a one-day basic level LaTeX course for users of SUN workstations. It covers document styles, font sizes and styles, section numbering, table of contents, tables, maths, indexes and references. No previous knowledge of LaTeX is needed by the students. The course aims to give students a good understanding of the fundamentals of LaTeX and enable them to carry out their own document preparation.

## Graphics and Visualisation Training Courses

University of Manchester Computing Centre  
(Dr Terry Hewitt)

URL <http://info.mcc.ac.uk/CGU/ITTI/gravigs.html>

### AS05 - Colour in Computer Graphics (Course materials)

**Price: £140.00/£190.00**

Developed by C Lilley, F Lin, W T Hewitt and T L J Howard

**ISBN: 1 85889 022 5**

A pack of ready prepared teaching materials including handouts, visual aids and software, this pack is one of a series on computer graphics and scientific visualisation. This module has five sections covering: Seeing Colour; Measuring Colour; Colour Models; Colour Output; and Using Colour. The material is aimed at postgraduate students, research assistants and staff who wish to learn enough about graphics and visualisation to use them effectively as tools within their discipline.

### AS06 - Standards for Computer Graphics (Course materials)

**Price: £65.00/£90.00**

Developed by C Lilley, F Lin, W T Hewitt and T L J Howard

**ISBN: 1 85889 017 9**

This module is built around the ISO computer graphics reference model (CGRM), ISO/IEC 11072:1992, which will be referred to throughout the other modules. This provides a framework for comparison and a stable base of standard terminology. The material is aimed at postgraduate students, research assistants and staff who wish to learn enough about graphics and visualisation to use them effectively as tools within their discipline.

### AS07 - Visualisation 1: Graphical Communication (Course materials)

**Price: £35.00/£55.00**

Developed by C Lilley, F Lin, W T Hewitt and T L J Howard

**ISBN: 1 85889 027 6**

This module is suitable for students working on any platform – PC, Mac or Unix workstation – and could, with benefit, be given to all new postgraduates in any numerate discipline. It forms an introduction to another pack on interactive scientific visualisation.

*Other modules available within this series include Geometry for Computer Graphics; Lighting and Shading; and Curves, Surfaces and NURBS.*

**(Information available from Mr John Irwin, University of Manchester Computer Graphics Unit, tel.: 0161 275 6252.)**

## Making GIS Pay its Way (Geographical Information Systems)

Midlands Regional Research Laboratory,  
Leicester University (Dr Peter Fisher)

URL: <http://www.geog.le.ac.uk/assist/>

### AS12 - Getting Started in GIS - A Workbook of Computer Exercises (IDRISI) (Training materials)

Developed by Mitchel Langford

Price: £45.00/£65.00  
ISBN: 1 85889 061 6

*System requirements: IDRISI 4.0*

These materials lead the novice user through four hands-on practical sessions using low-cost IDRISI GIS. Each session will take the average user around 45 minutes to complete. The materials are suitable for a wide range of teaching styles including supervised practicals, self-paced learning and distance learning. The training sessions consist of: Introducing a Simple GIS; Manipulating and Extracting Information; Optimal Routing; and Site Selection

### AS13 - Moving on in GIS (Training materials)

Developed by Mitchel Langford

Price: £35.00/£55.00  
ISBN: 1 85889 066 7

*System requirements: IDRISI 4.0, 386SX PC with coprocessor, VGA colour graphics, and 12Mb free disk space*

These materials are aimed at the reasonably adept GIS user who wishes to consolidate their skills in IDRISI and to be pushed on to use its more advanced capabilities. Based upon real data, these exercises demonstrate the use of GIS as a planning support tool, providing the information and analyses necessary to complete a proposal document for sand and gravel quarrying that will be submitted to the Local Planning Authority. As with *Getting Started in GIS* these materials are suitable for a wide range of teaching modes. The exercises are split into three practical sessions each lasting between 45 minutes and an hour. There is also a section of 'further things to do' at the end of each session, and a full set of answers and marking guidance for the lecturer.

### AS14 - Both GIS manuals may be purchased as a set.

Price: £75.00/£100.00

### AS15 - Getting Started with PC ARC/INFO (Training materials)

By Alan J Strachan, B William Hickin, David J Unwin and Kamie Kitmitto

Price: £70.00/£95.00  
ISBN: 1 85889 075 6

See below.

### AS16 - Getting Started with Workstation ARC/INFO (Training materials)

By Alan J Strachan, B William Hickin, David J Unwin and Kamie Kitmitto

Price: £80.00/£105.00  
ISBN: 1 85889 080 2

Designed and developed to introduce users to ARC/INFO, this pack is available in two complementary versions, for the PC and SUN workstations. The integrated lecture and practical resource bases have been designed for those who have to introduce GIS and its core functionality and potential. They are also ideal for personal study programmes.

## Online Training Materials for INGRES

Lancaster University (Mrs Carole McMillan)

URL <http://wonder.lancs.ac.uk/>

The Lancaster ITTI project has developed WONDER (an online information server based at Lancaster University) to host training materials for INGRES, a relational database management system. WONDER can be accessed using World Wide Web (WWW), or may be accessed via standard TCP/IP services, TELNET and ftp. Materials held on the server include the INGRES Training Series, structured for self-teach and browse, a practical dataset, a FAQ (frequently asked questions) section, and some INGRES News.

(Information available from Mrs Carole McMillan, Lancaster University Computing Services, tel.: 01524 65201.)

## The Production of Training Materials for BRS/Search

University of St Andrews (Dr Malcolm Bain)

### AS01 - BRS/Search Database Design and Maintenance Guide (Book)

Price: £5.00/£10.00  
ISBN: 1 85889 011 X

The aim of this guide is to give advice on how BRS/Search databases of various types may be designed and to explain and clarify some of the more common features used by the BRS/Search database creation procedure.

### AS02 - BRS/Search Database Primer (Book)

Price: £5.00/£10.00  
ISBN: 1 85889 020 9

The book aims to provide an introduction on how to use the search facilities of BRS/Search, a full text database management system. It is aimed at people who are new to searching databases constructed using BRS/Search and who may only have a little computing knowledge.

### AS04 - BRS/Search Advanced User Guide (Book)

Price: £7.50/£12.50  
ISBN: 1 85889 002 0

The aim of this guide is to introduce the user to some of the more advanced features available in BRS/Search. The guide uses the Native mode interface (which is the provided command-drive method of communicating with BRS/Search) to present the information. There is a short introduction to Native mode to help those transferring from one of the other search systems. Users are expected to be familiar with the basic search facilities available in BRS/Search.

## Relational Database Management Systems: Self-Teaching Materials

University of Newcastle (Dr Lorna Weatherill)

The materials produced by this project are in the form of self-teaching booklets for academics and researchers who need to create a relational database. They use real data from research projects in a variety of subjects and are sold with the example data. They emphasise how analysing the data can help in the understanding of the research and they have practical, 'hands-on' instructions aimed at beginners.

Four database products are covered in separate booklets. All are called *Using and Designing Databases for Academic Work: A Practical Guide* by Lorna Weatherill and Vivienne Hemingway. The versions are:

- Access £10.00;
- Paradox for Windows £10.00;
- Ingres £8.50;
- Paradox for DOS £8.50.

The price includes postage, packing and a disk for Access and Paradox for Windows and Paradox for DOS.

(Available from Dr Lorna Weatherill at the University of Newcastle upon Tyne, tel.: 0191 222 8174, email L.M.Weatherill@ncl.ac.uk. Cheque with order made payable to the University of Newcastle upon Tyne.)

## Training and PC-based Support Tutorials for Statistical Applications

University of Ulster at Jordanstown (Mr Noel Wilson)

*System requirements for the following statistical applications:* IBM compatible PC, 2Mb RAM (but preferably 4Mb), EGA or VGA monitor (colour preferred), MS DOS 3.1 (or later), and MS Windows 3.1 (or later)

### AS18 - Introduction to the SAS System (CBT)

Developed by Ian Cantley

Price: £15.00/£25.00  
ISBN: 1 85889 090 X

*Other system requirements:* minimum of 600K free disk space to install the tutorial, Base SAS software, Release 6.03 or Reference 6.04

## Catalogue of Materials: Application Skills

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This product consists of a computer based tutorial, a user guide, workbook and an installer's and administrator's manual. The purpose of the product is to introduce new users to the SAS system for elementary statistical analysis.

**AS19 - Generating Descriptive Statistics Using the SAS System (CBT)** Price: £15.00/£25.00  
Developed by Ian Cantley ISBN: 1 85889 095 0

*Other system requirements:* minimum of 600K free disk space to install the tutorial, Base SAS and SAS/GRAPH software, Release 6.03 or Reference 6.04

This product consists of a computer-based tutorial, a user guide, workbook, and installer's and administrator's manual. The purpose of the product is to introduce new users to the use of the SAS system for elementary univariate and bivariate statistical analysis. Simple presentation statistics are also covered. The 'Introduction to the SAS System' product is seen as a prerequisite course for users of this product.

**AS20 - Introductory Data Analysis Using Minitab - Version 1.1 (CBT)** Price: £10.00/£20.00  
Developed by Ian Cantley in collaboration with Noel Wilson and Sally McClean ISBN: 1 85889 067 5

*Other system requirements:* MINITAB Release 9 for DOS

A licence for GUIDE is NOT now needed to use this product which consists of a computer-based tutorial and companion workbook. It is designed to introduce basic statistical concepts, presentation techniques and summary measures of location and dispersion. The package aims to provide a self-teach facility for students who are not studying statistics as a mainstream topic. A basic working knowledge of the statistical package MINITAB will also be achieved.

**AS21 - An updated version of the above pack is available for those who purchased Version 1.**  
Price: £5.00/£10.00

**AS22 - Workbook on Questionnaire Design - A Practical Introduction (Booklet)**  
Price: £4.00/£9.00 each or £3.50/£8.50 for 10 or more  
Developed by Noel Wilson and Sally McClean ISBN: 1 85889 33 0

This booklet will provide a practical and comprehensive overview of aspects of questionnaire design, methods of conducting a survey and data cleaning. The document is aimed at students and staff who are associated with statistical work which requires them to design a questionnaire and to conduct a survey. Many illustrative examples are used throughout the sections of the document and a set of self-test exercises are included.

**AS24 - Introduction to SPSS/PC+ Data Entry Module (CBT)** Price: £25.00/£45.00  
Developed by Trevor McMullan in collaboration with Noel Wilson and Sally McClean  
ISBN: 1 85889 048 9

*Other system requirements:* minimum of 5Mb free disk space to install the tutorial

This package consists of a computer-based tutorial, user guide, workbook, function key reference card, specimen data set and installer's manual. It is designed to teach users the basics of data input using the features of SPSS/PC+ Data Entry (for DOS) and includes instructions on screen-based form design, data validation and cleaning and conditional data entry. It is suitable for use by persons conducting small-medium sized surveys and who are involved in data preparation for statistical analysis.

**AS25 An Introduction to Factor Analysis** Price £25.00/£45.00  
Developed by Nuala Colgan in collaboration with Brendan Bunting and Noel Wilson  
ISBN: 1 85889 150 7

This product consists of hypertext-based tutorials and companion documentation. It is designed to introduce the concepts of exploratory and confirmatory factor analysis and principal component analysis. The package provides a self-teach facility for students who are not studying statistic as a mainstream topic, and support for those who are associated with project and research work which entails the use of factor analysis and principle component analysis techniques. A basic understanding of statistical measurement, especially that presented in the module AS30 is required.

(Information available from Mr Noel Wilson, the University of Ulster, tel.: 01232 368 141)

**AS29 - Introduction to Regression Analysis (CBT)**

**Price: £25.00/£45.00**

Developed by Sharon Gleeson in collaboration with Noel Wilson and Sally McClean

**ISBN: 1 85889 088 8**

*Other system requirements:* minimum of 9MB free disk space to install the tutorial

This package consists of a computer-based tutorial and accompanying documentation. It is aimed at users who are familiar with basic statistical analysis (univariate and bivariate) and who need to use regression techniques. The theoretical considerations are kept to a minimum throughout the CBT although it is necessary to introduce some concepts which are critical to the understanding of regression analysis. Topics covered include correlation; dependent and independent variables; simple linear models; bivariate models; and brief extensions to non-linear models. Simple models are illustrated using MINITAB and their output is interpreted.

**AS30 - Introduction to Reliability and Scale Construction (CBT)**

**Price: £20.00/£40.00**

Developed by Willard McCune in collaboration with Brendan Bunting and Noel Wilson

**ISBN: 1 85889 044 6**

*Other system requirements:* minimum of 8Mb free disk space to install the tutorial

This package consists of a computer-based tutorial and accompanying documentation. Those who wish to become familiar with the concepts of reliability and scale construction and associated terminology will find this package a useful source of information and a convenient way of learning about basic SPSS and LISREL commands which are used in the performance of related statistical analysis.

**AS31 - An Introduction to Inferential Statistics (CBT)**

**£20.00/£40.00**

Developed by Nuala Colgan in collaboration with Noel Wilson & Sally McClean **ISBN: 1 85889 079 9**

*Other system requirements:* minimum of 8MB free disk space to install the tutorial, MINITAB Release 9 for DOS

This package will consists of a computer-based tutorial and accompanying documentation. It is designed to introduce the basics of statistical inference and associated concepts such as types of variables and hypothesis testing.

**AS32 - Data Types and Experimental Design (CBT)**

**£20.00/£40.00**

Developed by Edel Robinson in collaboration with Noel Wilson and Sally McClean

**ISBN: 1 85889 083 7**

*Other system requirements:* minimum of 6.5Mb free disk space to install the tutorial

This package consists of a computer-based tutorial and accompanying documentation. It covers the topics of the concept of a statistical variable; data gathering and data types; an overview of statistical experiments; and introduction to hypothesis testing. The information presented is illustrated throughout with suitable examples and a series of self-tests are included where appropriate.

**Training for the Use of the ESRC Data Archive's Information Retrieval Systems**

University of Essex (Mrs Bridget Winstanley)

<http://dawwww.essex.ac.uk/intro.html>

**AS10 - ESRC Data Archive: BIRON Version 3.0 - User Guide (Booklet)**

**Price: £5.00/£10.00**

**ISBN: 1 85889 097 7**

The ESRC Data Archive at the University of Essex is a national resource centre for computer-readable data in the social sciences and humanities. BIRON (Bibliographic Information Retrieval Online) is a complete source of information about datasets in the Archive's collection and contains a record of each dataset deposited with the Archive. The user guide offers a self-help guide containing sample searches.

**Training Support for the Bath ISI Data Service (BIDS)**

University of Bath (Terry Morrow)

BIDS is a multidisciplinary, online information source enabling access to citation indexes. The materials produced are to enable library and computer centre staff to carry out effective training in the use of BIDS.

**(Information available from Mr Terry Morrow at the University of Bath, tel.: 01225 826 277.)**

## Section 2: Basic IT Skills (BS)

This section describes projects which concentrate on providing training materials, many of which will be in computer based and self paced form, to enable university staff acquire an appropriate level of basic IT skills.

### Computer Based Introductory IT Skills Training (CBT)

University of Durham (Mrs Audrey McCartan)

#### Computer Based Training Tutorials:

A family of four distinct modules covering word-processing, spreadsheet, database and graphics produced using the hypertext authoring package GUIDE. The products are designed to enable academic and other staff to gain a basic working knowledge of word-processing, spreadsheet, database or graphics as opposed to providing instruction on the particular PC package which is used. Each product can be used on its own or as part of a more comprehensive training programme; similarly each product can be incorporated into a taught course or used for self study purposes.

*System requirements for all modules:* IBM compatible PC, VGA display or better, MS Windows compatible mouse, MS DOS 3.1 or later, MS Windows 3.0, GUIDE 3.0, at least 2Mb of RAM.

#### **BS01 - Word Processing Module**

Developed by Jennifer Elliot, Produced by David Adcock

**Price: £10.00/£20.00**

**ISBN: 1 85889 005 5**

*Other system requirements:* Microsoft Word 5.5

#### **BS02 - Spreadsheet Module**

Developed by Jane Noble and Pam Sheard

**Price: £10.00/£20.00**

**ISBN: 1 85889 010 1**

*Other system requirements:* Smartware II, version 1.5

#### **BS03 - Database Module**

Developed by Jane Noble

**Price: £10.00/£20.00**

**ISBN: 1 85889 015 2**

*Other system requirements:* Smartware II, version 1.5

#### **BS04 - Graphics Module**

Developed by Jane Noble

**Price: £10.00/£20.00**

**ISBN: 1 85889 040 3**

*Other system requirements:* Cricket Presents 1.4

#### **BS05 - A Framework for the Development of Core IT Skills for University Staffs (Report)**

**Price: £10.00/£15.00**

By Margaret Hodgson with Catherine Hare in collaboration with Audrey McCartan

**ISBN: 1 85889 012 8**

The report is the outcome of a project which had as its objectives (i) to review current IT training provision; (ii) to identify IT training needs; and (iii) to develop an approach to IT training capable of meeting these needs. The report recommends appropriate levels of core IT skills requirements for all university staffs as suggested by the higher education community together with proposals for relevant approaches to training.

**IT Training within the Teaching of Clinical Skills**

St George's Hospital Medical School (Mr Stephen Morris)

**BS13 - Equations in Documents: Using WordPerfect and Equations Library and Library of Medical Illustrations and Graphics in Documents: Using WordPerfect (CBT)****Price: £25.00/£45.00**

By Cedric Gilson (Images) and Stephen Morris, Jill Szuscikiewicz and David Proffitt (Software)

**ISBN: 1 85889 043 8***System requirements:* MS Windows and WordPerfect 5.1 for DOS

The package is designed to provide a step-by-step guide for anyone who needs to produce documents containing equations. It runs within WordPerfect and can be used both as a CBT and as online help.

**BS16 - JANET: Bringing the World to your Desktop (CBT)****Price: £10.00/£20.00**

By Kit Chung, Mark Preston and Stephen Morris

**ISBN 1 85889 170 1***System requirements:* 8Mb RAM, 256 colours, MS Windows

Have you ever wondered what a network really is? Or what JANET, SuperJANET and the Internet actually are? And how you and your organisation benefit from using them? This tutorial explains them and their functions to the ordinary user, with animation and interactivity. Subjects covered include Electronic Mail, SuperJANET, file transfer, World Wide Web, and so on. Availability to be announced.

**(Information available from Mr Stephen Morris, SGHMS, tel.: 0181 725 3420)****Multimedia Based IT Training for the Humanities**

University of Hull (Dr Brian Powell)

URL <http://www.hull.ac.uk/Hull/ITTI/homepage.html>**BS06 - Computer-based Presentations: A Demonstration Package (CBT)****Price: £6.50/£11.50**

By Fred Riley

**ISBN: 1 85889 096 9**

The disk contains a demonstration presentation produced in Aldus Persuasion which has been designed to be viewed on a PC. The purpose of the demonstration is to illustrate the ease with which visually interesting and informative presentations can be created, and to encourage you to experiment with a presentation package of your choice to see how presentations can enhance the quality of your teaching. This disk is complementary to the book 'Understanding IT: Computer-based Presentations' by Lorraine Warren.

**BS07 - Understanding IT: Computer-based Presentations (Book)****Price: £10.00/£20.00**

By Lorraine Warren

**ISBN: 1 85889 037 3**

This book is a non-technical guide to the use and preparation of computer based presentations in an academic setting. The book starts with an introduction to computer based presentations – what they are and how they can be used in the classroom – followed by chapters on choosing hardware and software, the preparation of presentations and where an author can obtain material for presentations. The book is complementary to the disk-based product 'Computer-based Presentations: A Demonstration Package' by Fred Riley.

**BS08 - Understanding IT: Computer Graphics (Book)****Price: £15.00/£25.00**

By Fred Riley

**ISBN: 1 85889 042 X**

This publication attempts to answer such common questions as What are computer graphics? and How can we use them? and to thus enable the reader to understand computer graphics and use them (more) effectively. It is aimed at the average non-technical user who has at least a basic level of computer literacy and little or no previous knowledge of the subject. It looks at the nature of computer graphics, the sort of hardware required to display graphics, colour and the computer, and finally types of graphics packages the user can expect to find on the market.

**BS09 - Understanding IT: How to Use Your PC - Version 1.1 (CBT)****Price: £12.50/£22.50**

By Fred Riley

**ISBN: 1 85889 071 3***System requirements:* MS DOS 3.1 (or later), MS Windows 3.1 (or later)

## **Catalogue of Materials: Basic IT Skills**

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This application is a hypertext reference designed for new PC users which runs in Windows 3.1 and was created in the hypermedia authoring package GUIDE. It explains, in simple terms, the hardware and software components of typical PC systems, and how to carry out common file management operations in both MSDOS and Windows. The package is designed to be randomly browsed by the user - it is not an interactive tutorial.

**BS10 - An updated version of the above pack is available for those who purchased Version 1.**  
**Price: £6.00/£11.00**

**BS11 - Understanding IT: An Introduction (Book)** **Price: £6.50/£11.50**  
By Lorraine Warren

This is a book written primarily for academic staff within the Humanities community, although its content is sufficiently broad to be accessible and relevant to anyone starting out in IT whether they be academic, student or ordinary user. Its purpose is to demonstrate the use of the computer both as a powerful teaching tool which can save time by automating routine chores, and as a means of accessing world-wide communications networks and a wide range of multimedia resources. No prior knowledge of computing is assumed and throughout the book the focus is on generic concepts rather than specific techniques.

**BS12 - Understanding IT: A Review of Hypermedia Authoring Packages (Book)**  
**Price: £8.50/£13.50**  
By Fred Riley **ISBN: 1 85889 087 X**

This is a technical review of MS Windows-based authoring systems focusing particularly on their hypermedia capabilities. It is intended for developers with at least a good knowledge of the Windows environment from a user perspective and preferably with some Windows programming/authoring experience.

**BS16 - Understanding IT: Developing Multimedia Courseware (Book)** **Price: £8.50/£13.50**  
By Fred Riley **ISBN: 1 85889 099 3**

This book is about the development of multi/hypermedia courseware at a single (academic) site but which is intended to be distributed off-site. Essentially it's a 'how to' book drawing heavily on the author's own experience and software engineering concepts which use the hypermedia tutorial on the Spanish Civil War (developed with Brian Powell) as a case study ("here's one I prepared earlier").

## Section 3: Multimedia Courseware Tools and Training (MM)

This section describes projects which concentrate on the production of tools, associated training and the development of a framework for conventions and standards to significantly reduce the development effort needed for the production of multimedia\* and hypertext\* courseware and computer based training material.

\* Multimedia and hypertext technologies enable the provision of desktop computer style integration of the use of pictorial material, graphics, interactive video, sound and text into the teaching and learning process.

### Computer Based Learning Authoring Provision: Standards, Environments and Training

University of Nottingham (Dr Peter Davies)

URL: <http://ibis.nott.ac.uk>

**MM01 - New Frontiers of Learning: Guidelines for Multimedia Courseware Developers in Higher Education - Volume 1: Delivery, Production and Provision (Book)** Price: £20.00/£40.00  
By Peter Davies and Tim Brailsford,  
with contributions from Richard McCracken and Stephen Rickard ISBN: 1 85889 062 4

These are practical guidelines for multimedia courseware developers in higher education - a guide to the "multimedia swamp" that should help new adventurers in this area avoid some of the pitfalls.

**MM02 - New Frontiers of Learning: Guidelines for Multimedia Courseware Developers in Higher Education - Volume 2: Pedagogy (Book)** Price: £25.00/£45.00 (approx.)  
ISBN: 1 85889 165 5

Availability to be announced.

(Information available from Dr Peter Davies, the University of Nottingham, tel.: 0115 951 3248.)

**MM03 - Knowledge Tree: Learning Support for Windows Networks (CBT)** Price: £20.00/£40.00  
By Tim Brailsford and Peter Davies ISBN: 1 85889 093 4

*System requirements:* PC 486 recommended, 8Mb RAM recommended, s-VGA graphics, MS Windows 3.1x

This is a software system that makes use of network technology for learning support. It combines bulletin board functionality with a concept-oriented database to provide a structured environment that can host discussions on potentially any subject area - ranging from technical advice to the discussion of academic or administrative issues.

**MM04 - Examine: Multiple Choice Question Authoring and Delivery System for Windows, Version 1.2 (CBT)** Price: £20.00/£40.00  
By Tim Brailsford and Peter Davies ISBN: 1 85889 029 2

*System requirements:* PC 486 recommended, 8Mb RAM recommended, s-VGA graphics, 5Mb free disk space, MS Windows 3.1x

A multiple-choice authoring and delivery system for use either as an adjunct to courseware or in standalone mode as an aid to online self-assessment. Tutors may set "quizzes" which contain either a predefined series of questions or a random selection of questions from a "question folder". In the latter case, a different set of questions will be assembled each time the folder is accessed. If desired, Examine can be used in conjunction with *Microcosm*, the University of Southampton's hypermedia system which is designed to facilitate the interlinking of computer-based learning support materials such as an Examine quiz.

#### Authorware Tutorial Toolkit

The software files for this product are available via the WWW at <http://ibis.nott.ac.uk/software/att.html>.

An entry-level courseware authoring tool for owners of Authorware Professional who don't have design aspirations of their own and are happy to use pre-existing tutorial structures.

### **The Scholar's Desktop**

This is a multimedia courseware delivery shell developed jointly by the Nottingham ITTI and Biodiversity TLTP projects. Demonstrated in its biological incarnation, it is nevertheless discipline-independent in principle.

(Information available from Dr Tim Brailsford, the University of Nottingham, tel.: 0115 951 3248.)

### **The Development of Hypertext and Multimedia Based Training and Teaching Systems**

Ninewells Hospital and Medical School, University of Dundee (Dr Dave Baty)

#### **MM20 - An Introduction to GUIDE - Version 2.0 (CBT)**

Developed by Mrs Jennifer Wilson in collaboration with Dr J D Baty

**Price: £20.00/£40.00**

**ISBN: 1 85889 081 0**

*System requirements:* IBM compatible PC 386 SX, VGA or better. MS Windows 3.1 (or later), GUIDE 3.1, system occupies 7.5Mb of hard disk

*NB: GUIDE 3.1 does not run on Apple Macintosh systems*

This is a self-paced tutorial in the use of Guide, a hypertext and multimedia based authoring language for CAL production. The product includes information on the history of hypertext, a demonstration package, plus hardware and software information of interest to those people wishing to use CBL. The subject is taught by actively involving the user with the Guide program throughout the tutorial. Users are asked to construct a simple hypertext package using text and graphics provided by the tutorial.

This version may be installed on both stand-alone PCs and networks.

#### **MM21 - An updated version of the above pack is available for those purchasing Version 1.**

**Price: £10.00/£20.00**

#### **MM22 - Multimedia GUIDE Tutorial (CBT)**

Developed by Mrs Jennifer Wilson in collaboration with Dr J D Baty

**Price: £20.00/£40.00**

**ISBN: 1 85889 004 7**

*System requirements:* IBM compatible PC 386 SX, VGA or better. MS Windows 3.1 (or later), GUIDE 3.1

*NB: GUIDE 3.1 does not run on Apple Macintosh systems*

This package builds on the original Guide tutorial and demonstrates how sound, digital video (.avi files) and animation (.flc files) can be incorporated into a Guide document. Appropriate sound, video and animation materials are provided to enhance the original tutorial theme of cross channel travel (by ferry, not train!). The user constructs their own multimedia document.

#### **MM23 - Using Hypertext and Multimedia (CBT)**

Developed by Mrs Jennifer Wilson in collaboration with Dr J D Baty

**Price: £20.00/£40.00**

**ISBN: 1 85889 014 4**

*System requirements:* IBM compatible PC 386 SX, VGA or better. MS Windows 3.1 (or later), GUIDE 3.1

*NB: GUIDE 3.1 does not run on Apple Macintosh systems*

This is a computer information package containing help and advice on getting started in CAL production. It is not GUIDE specific, addressing issues of general relevance to CAL production, but also including several GUIDE tips for improving the use of GUIDE. The target audience would be people who wish to know some of the jargon, techniques and problems of CAL development before commencing on a CAL project.

The package is designed to be used with GUIDE READER and a copy of READER 3.1.2 is supplied with the main program.

**Educational Technology Service Enabling Unit at Bristol University**

University of Bristol (Dr Adrian Longstaffe)

URL <http://www.ets.bris.ac.uk/ets.html>**MM05 - Advice on Choosing an Authoring Package (Booklet)****Price: £3.75/£8.75**

By John Edwards, Gilbert Howe and Fred Smith

**ISBN: 1 85889 013 6**

A handy reference document for those beginning the task of choosing a tool for creating their first CBL lessons. It provides information for the complete beginner including what an authoring package does; authoring package suppliers; questions to ask; and what to look for. It uses some of the more popular authoring packages as examples, but it is not intended to be a definitive guide to authoring packages.

**MM06 - Benefits, Uses, Potential and Pitfalls of CBL (Report)****Price: £2.00/£7.00**

By J D Edwards

**ISBN: 1 85889 070 5**

This booklet covers the advantages and disadvantages of computer based learning. It is intended for people who want to begin to use CBL and guides the reader through some of the implications of using CBL.

**MM07 - Five Years' Experience Running an Interactive Video Unit (Report)** **Price: £3.00/£8.00**

By K D Whittlestone in collaboration with Dr J A Longstaffe, Dr L Williams, Dr J Williams and Mr M Whittlestone

**ISBN: 1 85889 030 6**

This booklet covers the key areas involved with implementing and running an interactive video unit with suggestions for success and failure. It is intended for people who want to deliver CBL materials to many users and it is intended to guide the reader through some of the key decisions which need to be made when setting up and running a CBL facility. It will help the reader to establish a successful and popular unit and suggests some of the pitfalls to be avoided.

**MM08 - Getting Started with Computer Based Learning (Booklet)****Price: £5.00/£10.00**

By K Whittlestone, Gilbert Howe and Adrian Longstaffe

**ISBN: 1 85889 001 2**

This publication aims to help newcomers to get started in the use of CBL and avoid the pitfalls which so often result in project failure.

**MM09 - The Use and Capture of Images for Computer-Based Learning (Booklet)****Price: £7.50/£12.50**

By Dr Jane Williams

**ISBN: 1 85889 053 5**

This publication is divided into two sections. The first section takes a look at the evidence supporting the view that illustrations enhance the learning process and suggests appropriate ways of using images. The second section discusses the issues involved with the preparation (capture, manipulation, storage and delivery) of photo-realistic images for use in the creation of computer-based learning material. The document includes a list of references and publications for further reading.

**MM10 - Supporting Learning Technology in Higher Education (Book)****Price: £10.00/£20.00**

By J A Longstaffe, K D Whittlestone, J D Edwards, J Williams and P M Hammond

**ISBN: 1 85889 105 1**

A handbook of strategies on the formation and running of a unit to support the adoption of learning technology by a research-oriented university.

**The Bristol Biomedical Videodisk Project: A Collection of Images for the Biomedical Sciences****Price: £350.00 + p&p**

A collection of Veterinary, Medical and Dental Images, the collection currently stands at 24,000 still frames. The videodisk also contains the contents of the Pathology videodisk UKPATHIII. A visual database is available for detailed searches using any keyword.

(Available from Bristol Imaging, the University of Bristol, Dr Jane Williams, tel.: 0117 930 3500.)

## Establishing Multimedia Authoring Skills in Higher Education (EMASHE)

University of Glasgow (Dr Gordon Doughty)

<http://www.elec.gla.ac.uk/EMASHE/package.html>

The project aims to deliver a package to enable university staff to author hypertext and multimedia teaching programs, accompanied by a series of illustrative applications. The package will be published as a compact disk and paper package for teachers and developers. The package will be cross-platform, supporting authoring in either MS Windows or the Apple Macintosh interface.

**Please consult the world wide web for further details.**

### MM26 – Teaching Package Definition: Progress Report on First Procedures (Report)

**Price: £5.00/£10.00**

This report describes the procedures by which the project achieved an initial goal of defining learning packages to be produced by each of its four teaching departments.

### MM27 - Courseware in Higher Education Evaluation 1: Planning, Developing and Testing (Report)

**Price: £5.00/£10.00**

By Erica McAteer and Robin Shaw

**ISBN: 1 85889 083 7**

This is a chapter of the forthcoming product "Establishing Multimedia Authoring Skills in Higher Education" which has been produced as an independent publication. It deals with the planning and evaluation of courseware during the development phase. Beginning with the question as to whether a multimedia learning program is the correct solution to a perceived learning problem, the report moves through all stages of development and offers suggestions for the on-going evaluation of the product during those stages.

### MM28 - The Design of Multimedia Learning Programs (Guidelines)

**Price: £5.00/£10.00**

By Erica McAteer and Robin Shaw

**ISBN: 1 85889 034 9**

This is a chapter of the forthcoming product "Establishing Multimedia Authoring Skills in Higher Education" which has been produced as an independent publication. It provides guidelines to the design implications of the various components of multimedia courseware, based on research. The topics covered include Overall Design, Interactivity, Screen Design, Text, Graphics, Animation, Video, Sound and Colour. The text is illustrated with examples.

### MM29 - Authorware Tutorial for the Macintosh (CBT)

**Price: £30.00/£50.00**

By Robin Shaw

**ISBN: 1 85889 039 X**

*Minimum system requirements:* 68030 processor, Apple System 7.x, your unique System 7 requirements for RAM, plus 4 Mb (e.g. 8 Mb total), 256 colours, 640 by 480 display, 5 Mb free hard drive space, QuickTime, and the user must have loaded AuthorWare Professional for the Macintosh or the free AuthorWare Working Model which allows potential authors to review AuthorWare without being able to distribute their creations.

The printed tutorial manual, which comes with materials on disk for the creation of the tutorial example, leads the user through the creation of a course-information package to learn: text production/importing/editing, colour addition/usage, graphics creation/importing, movie importing/controlling, sound importing/controlling, basic animation, basic scripting/programming, navigation methods, menu creation, interacting with your user, interacting with other software, documentation, and delivery.

### MM30 - ToolBook Tutorial for the PC (CBT)

**Price: £25.00/£45.00**

By Robin Shaw

**ISBN: 1 85889 084 5**

*System requirements:* Asymetrix ToolBook version 1.53 of Multimedia ToolBook 3.0, a sound card and sound and video drivers and 3Mb of free disk space on your hard disk.

This is a chapter of the forthcoming product "Establishing Multimedia Authoring Skills in Higher Education" which has been produced as an independent publication. The four tutorial units introduce basic authoring skills in ToolBook. The skills covered in the tutorials include importation and manipulation of text, creation of navigational aids including buttons and menus, the importation of graphics, sound and movies, the handling of animation and the use of hypertext links.

**MM31 - Authorware Tutorial for the PC (CBT)**

By Joan Ritchie

**£35.00/£555.00****ISBN: 1 85889 110 8**

This is a chapter of the forthcoming product "Establishing Multimedia Authoring Skills in Higher Education" which has been produced as an independent publication. It is the PC version of MM29.

**MM32 - HyperCard Tutorial for the Macintosh (CBT)****£35.00/£55.00 (approx.)****ISBN: 1 85889 155 8**

This is a chapter of the forthcoming product "Establishing Multimedia Authoring Skills in Higher Education" which has been produced as an independent publication. It will run under HyperCard 2.3.

Availability: to be announced.

**Hypermedia in Language and Literature Subjects**

Oxford University (Dr Marilyn Deegan)

**MM15 - The Dream of the Rood Hypermedia Teaching Package (CBT) (single user)****Price: £25.00/£45.00****MM16 - (10-user pack)****Price: £95.00/£120.00**

By Nicola Timbrell and David Snowling

**ISBN: 1 85889 008 X**

*System requirements:* Authored using The Poetry Shell, IBM compatible 386 PC or better, 256 colour monitor (for best results), MS Windows 3.0 (or later), 4Mb RAM, 6-10Mb disk space

This tutorial can be run on a network.

The Dream of the Rood hypermedia package is an example use of The Poetry Shell. The shell contains the Old English poem 'The Dream of the Rood'. Hypertext links are available from every word in the poem to a glossary and to a comprehensive set of notes. Students can obtain grammatical help whilst looking at the glossary and can find similar occurrences of words in the poem. Sample translations by other authors are included.

**MM17 - Hypermedia in the Humanities (Report)**

By Marilyn Deegan, Nicola Timbrell and Lorraine Warren

**Price: £5.00/£10.00****ISBN: 1 85889 000 4**

This report was written as an introductory guide to hypermedia for academic staff within the humanities community. It is designed to be as non-technical as possible, pointing readers in the direction of further information on all aspects mentioned. It starts with the definition of some of the basic concepts of hypermedia and gives a brief summary of the history of the topic. It contains the results of a survey on the present use of hypermedia in the humanities and the process of authoring is covered. Some assessment, both by teachers and students, of the use of hypermedia in the classroom is included.

**MM18 - The Poetry Shell (CBT)**

Developed by Nicola Timbrell

**Price: £15.00/£25.00****ISBN: 1 85889 092 6**

*System requirements:* Written in ToolBook, though not required, IBM compatible 386 PC or better, 256 colour monitor (for best results), MS Windows 3.0 (or later), 4Mb RAM, 3Mb disk space

This tutorial can be run on a network.

The teaching of poetry in a foreign language, be it Old English, French or Latin, is both teacher and book intensive. The package allows the production of computer based learning materials for the above with minimal technical knowledge and in a relatively short time. Hypertext links from every word in the poem can automatically be made to a glossary and to grammatical help. Automatic hypertext links can also be made from any line in the poem to additional notes. Preparing new computer based teaching material for a particular poem in the shell requires textual material, the poem and associated texts to be stored as ASCII files. A configuration screen for the poem allows the author to easily incorporate their new material. The glossary configuration screen provides various tools for the production of a new glossary.

**MM33 – An introduction to Multimedia for Academic Use (Book)**

By Marilyn Deegan, Stuart Lee and Nicola Timbrell

**Price: £10.00/£20.00**

**ISBN: 1 85889 140 X**

This introductory guide to multimedia for academic use is a revision of the previous publication *Hypermedia in the Humanities* edited by Marilyn Deegan, Nicola Timbrell and Lorraine Warren (Universities of Oxford and Hull: ITTI, 1992 – see MM17).

The new title reflects a broadening of the book's scope to cover all subjects (not just the Humanities), and all areas of further and higher education. Nevertheless, the aim of this publications is similar to that of the first edition: to offer an introduction to the world of multimedia, the means of creating multimedia packages, and the possible uses of multimedia in a learning environment.

The changes in technology and the higher education infrastructure are reflected in the new material contained in this publication. We have included a new chapter on the possibilities of publishing multimedia on the Internet via the world wide web, and have highlighted some of the new projects around the UK, most notably the Teaching and Learning Technology Programme (TLTP). The glossary has been greatly expanded and readers are directed to this for definitions of any unfamiliar terminology.

**Project Electra**

The materials which make up the resource base will be available in various formats and hence will be usable on any platform.

This is an electronic resource base of women's writings from the period 1785-1815. Various works from authors such as Mary Wollstonecraft, Hannah More and Maria Edgeworth will be available in electronic form with accompanying images, biographical and bibliographical material.

**(Information available from Professor Marilyn Deegan, De Montfort University, tel.: 01908 834 824.)**

**Individualised Program for Computer Based Learning (CBL) with Multimedia**

Queen's University of Belfast (Mr Paddy Brannigan)

URL <http://www.icbl.qub.ac.uk/>

**MM19 - Understanding Computer Based Learning (CBT)**

Developed by the Institute of Computer Based Learning

**£35.00/£55.00**

**ISBN: 1 85889 100 0**

This package aims to provide an understanding of the concepts and techniques of computer based learning (CBL). It should be of interest to anyone who wants to know more about CBL. The package comprises CBL materials and a practice development environment, the 'CBL Builder'. The CBL materials consist of courseware chapters which explore CBL concepts and techniques through demonstration and worked examples. The CBL Builder provides the opportunity to practice some of the ideas introduced in the courseware chapters. The courseware chapters cover key elements of CBL, namely, CBL Overview, CBL Approaches, Design Issues, Multimedia, Evaluation, and Analysis and Design.

The courseware chapters and CBL Builder are accessible via a Table of Contents. This provides a flexible learning and exploratory environment as any part of the package can be easily accessed. A full set of paper based documentation is available to support the use of the CBL Builder.

## Section 4: IT Staff: Personal and Professional Skills Development (PS)

*This section describes projects which are engaged in: (i) developing the human and professional skills of computing staff who are engaged in training others in their university in the effective use of IT and in the provision of an effective computer user support service; and (ii) providing relevant training facilities and products so that, what are foreseen as the cornerstones for the provision of university-wide computing services can be more effectively supported.*

### Network Training Materials for User Support Staff

University of Newcastle upon Tyne (Dr Jill Foster)

URL <http://www.netskills.ac.uk/>

(Information on the “Netskills” project is available from Dr Jill Foster, the University of Newcastle upon Tyne, tel.: 0191 222 5000)

### Networking Courses and Training Materials for Technical Support Staff

University of Exeter (Dr John Buckett)

**PS12 - An Introduction to Data Communications and Networking (Guide)** Price: £15.00/£25.00  
By Ian Campbell and John Dolan ISBN: 1 85889 009 8

This guide is based on the course notes used by a course which has been given regularly at Exeter. It consists of a tutorial section and some practical exercises that are used to illustrate some of the points made in the text. The subjects covered are intended to be those relevant to users in the UK academic environment.

The guide starts with a simple introduction to binary and hexadecimal notation and character sets. It then looks at the way data can be transmitted in parallel and serial. It includes details of the RS232 interface and modem operation. On the networking side, the guide contains a detailed discussion of X.25 and TCP/IP protocols, and also looks at local area networking technology concentrating on Ethernet.

Other subjects covered in passing include a brief overview of the Coloured Book suite of protocols, and a look at the OSI model and the OSI protocol suite.

Other ITTI course run by the University of Exeter include NetWare 3 on Campus; Moving to NetWare 4; and TCP/IP on PCs.

(Information available from Dr John Buckett, the University of Exeter, tel.: 01392 263 955/)

### Training of Computer Centre Advisers

London School of Economics (Dr Pat Crocker)

**PS01 - Professional Skills for Computer Advisers (Training materials)** Price: £150.00/£200.00  
By the London School of Economics in collaboration with BIS Applied Systems Ltd  
ISBN: 1 85889 056 X

The course materials are designed for computer advisers or computer help desk staff in HE institutions. The aim is to train advisers in the skills they need, in addition to their technical knowledge, to provide a good service. The emphasis is on interpersonal skills rather than computer-related training; it will therefore be applicable to any computing environment. The course consists of two practical workshops of three and two days' duration and is suitable for both new and experienced advisers in academic computer centres. Topics include Caring for the Customer; Communicating with users; Analysing problems; Coaching users; Time and stress management; and Problem control and teamwork. Course materials consist of a student manual with exercises and a full presenter's pack including notes for the lecturer, overhead projector slides and notes for the demonstrator.

**PS02 - Copies of the student manual only are available.**

**Price: £30.00/£50.00**

## Training Partnerships with Commercial Organisations

University of Wales, Cardiff (Mrs Diane Walker)

### **PS03 - The Cardiff Training Room: Construction, Furniture, Audio-Visual and Ancillary Equipment (Report)**

By Diane Walker

**Price: £3.75/£8.75**  
**ISBN: 1 85889 025 X**

This report is a useful resource for any institution wishing to equip an IT training room. It describes the facilities provided in the IT training room at the University of Wales, Cardiff. The room was constructed out of part of an existing machine room and was equipped to a standard which now makes it suitable for commercial training courses. It was furnished to a high standard within a reasonable budget.

### **PS04 - Training Needs Analysis: A Report of the Application of DECTask Consultancy Techniques to an Academic Department (Report)**

By Diane A Walker

**Price: £6.50/£11.50**  
**ISBN: 1 85889 054 3**

This report focuses on a project undertaken at the University of Wales Cardiff in which the training needs analysis techniques used by Digital Educational Services, part of Digital Equipment Corporation (DEC), were applied within one academic department of the university. Staff of the institution's Computing Centre worked under the guidance of a Digital consultant to assess the IT training needs of members of the department concerned. Details of the stages of the TNA exercise are described and are then related to their implementation in the case study. Finally, the DECTask methodology is assessed for its applicability in an academic department.

### **PS05 - A Review of a Learner-Centred Approach to Evaluation in IT Training (Report)**

By Peter F Goode

**Price: £6.50/£11.50 (approx.)**  
**ISBN: 1 85889 1450**

Frequently, the question of evaluation in the field of IT training is discussed with regard to the relative merits of the planning and organisation of the training programme and of the quality of its delivery. This report is concerned with an evaluation project undertaken at the University of Wales Cardiff which addressed the problem of considering the value of the training to the learners (i.e. what they wished to achieve from the training itself and subsequently). An alternative to the use of established course assessment forms was considered by reference to evaluation techniques used in other fields which might be applicable to IT training. In particular, this report looks at the applicability to IT training of evaluation techniques used in the teaching of English for Academic Purposes (EAP). The report concludes that there is a need to address the challenge of placing greater emphasis on how to learn than on what to learn.

Availability to be announced.

## UNIX Documentation in Hypertext

University of Kent at Canterbury  
(Professor Peter Brown)

URL: [http://mango.ukc.ac.uk/pub/using\\_guide/itti.html](http://mango.ukc.ac.uk/pub/using_guide/itti.html)

### **PS06 - Evaluating a Hypertext Tutorial: An Examination of the Application Xtutor (Report)**

By Duncan Langford

**Price: £7.50/£12.50**  
**ISBN: 1 85889 007 1**

The purpose of the project was to evaluate the operation of Xtutor, paying particular attention to the effects of hypertext as a teaching aid. Two different versions of the original application were also examined. The intention here was to determine the effects on users of varying established methods of information presentation within hypertext.

### **GMAN - UNIX Manual Pages in GUIDE Format**

Freely available by anonymous ftp from [unix.hensa.ac.uk/pub/misc/unix/unix\\_guide](http://unix.hensa.ac.uk/pub/misc/unix/unix_guide) in the directory `guide_docs`.

*System requirements:* either Kent software tools Unix 'GUIDE' or 'GUIDEREADER', the read-only version of UNIX GUIDE, which is available free by anonymous ftp (as above, but in the directory `misc/unix/unix_guide/guide_reader`) for Sun4 machines (running SunOS 4 or Solaris 2), HP900 machines

(running hpux) and SG Indy machines (running Irix 5). We advise that you contact your computer centre for advice on installing these files as some parts of the installation require superuser privileges.

This product converts the standard UNIX manual pages, including locally produced pages, into GUIDE hypertext automatically, on the fly, taking up no extra storage space. Section headings can be examined quickly and their contents revealed by opening 'buttons'. A search option locates text strings and the user can move through the text in either direction. Further manual pages can be displayed either through automatic links built in to the 'SEE ALSO' section or by an option provided in the menu.

**(Information available from Wilma Strang at the University of Kent, tel.: 01227 764000 ext. 3552.)**

### **Xtutor - An Interactive Hypertext Tutorial for X**

Freely available by anonymous ftp from [unix.hensa.ac.uk/pub/misc/unix/unix\\_guide](ftp://unix.hensa.ac.uk/pub/misc/unix/unix_guide) in the directory `guide_docs`.

*System requirements:* either Kent software tools Unix 'GUIDE' or 'GUIDEREADER', the read-only version of UNIX GUIDE, which is available free by anonymous ftp (as above, but in the directory `misc/unix/unix_guide/guide_reader`) for SUN4 machines (running SunOS 4 or Solaris 2), HP900 machines (running hpux) and SG Indy machines (running Irix 5). We advise that you contact your computer centre for advice on installing these files as some parts of the installation require superuser privileges.

This product introduces new users to the X window system. It demonstrates the use of windows, explains how to manipulate them (move, resize, iconise and others) and assists the user in practising these skills. Methods of creating windows and the use of applications in windows are described. Xtutor covers both mwm and twm window managers.

**(Information available from Wilma Strang at the University of Kent, tel.: 01227 764000 ext. 3552.)**

## **UNIX Help for Users**

Edinburgh University (Dr Bob McGonigle)

URL [http://unixhelp.ed.ac.uk/TOP\\_.html](http://unixhelp.ed.ac.uk/TOP_.html)

The materials from this project provide helpful information for users who have no previous experience of using the UNIX operating system. They consist of three products:

### **PS07 - UNIXhelp for Users: A Reference and Guide**

By John Smith

**Price: £25.00/£45.00**

**ISBN: 1 85889 047 0**

This is paper documentation consisting of a manual and quick reference card, derived from the online help. It offers a guide to a comprehensive range of tasks using the UNIX operating system. Try consulting it whenever you are faced with a "how do I ..." situation. While it assumes that you have had an initial introduction to using UNIX, it also appreciates that using a command line interface places severe demands on your memory and recall, making even simple tasks appear difficult and the more complex almost impossible.

### **UNIX Help for Users**

An online hypertext help implemented using the standards provided by the World Wide Web and WAIS. This product is currently in use at many sites around the Internet. UNIXhelp can be used from almost any networked computer - PC, Macintosh, workstation, X terminal, dumb terminal, etc.

### **UNIX Tutor: An Interactive Tutorial for the UNIX Operating System**

A simple to install, interactive tutorial program that runs under Windows 3.1/WFW 3.11. It introduces new users to the basic tasks involved in using the UNIX operating system. The application Provides approximately 20 to 30 minutes of tutorial material.

**(Information about UNIXhelp products available from Mr John Smith, Edinburgh Computing Services tel.: 0131 650 4969.)**

## **X Windows Training**

Edinburgh University (Dr Bob McGonigle)

These materials are also available in Framemaker format by anonymous ftp from xtraining.ed.ac.uk in the directory xtraining/user.

### **The X Window Training Series:**

#### **PS08 - Information Pack**

**Price: £145.00**

By Bob McGonigle

There are four volumes in the Information pack covering Manual pages for mit clients; Manual pages for contrib clients; Other manual pages; and Bibliography, glossary and other information.

#### **PS09 - Motif Course**

**Price: £195.00**

By John Wexler

This is a technical course aimed at people who will program or port applications to use Motif and X, or people who need to know how to do that even if they will not be doing it themselves. The prerequisites for the course are familiarity with UNIX, C programming and user experience of a WIMP interface. The Motif course contains 16 modules and is designed to take four days.

#### **PS10 - System Administrator and Manager Course**

**Price: £120.00**

By Jean Ritchie

The System Administrator course is useful both for network administrators with good Unix experience and for administrators with little experience who only anticipate limited responsibilities. No previous knowledge of the X Window system is assumed. The course could take half a day if practical sessions are not required or a full day if practical sessions are included. The lecture notes include suggestions for practical work which can be carried out either during the course or at attendees' leisure.

The Manager course is aimed at managers who are wondering whether to adopt the X Window system and contains materials suitable for those who need an appreciation of the potential but do not want technical information. It is also for technical managers who want an understanding of the concepts behind the system. The course normally lasts for half a day.

#### **PS11 - User Course**

**Price: £110.00**

By Jean Ritchie

The User course contains nine modules which can be used either as a whole course covering introductory up to advanced material or can be presented as two courses, one elementary and one advanced. The elementary course would take users from the stage of no experience with X, possibly no experience with windowing systems, up to competence at using X, with knowledge of the range of facilities available, a basic understanding of the client/server model, history and design strategy and knowledge that configuration was possible. The advanced course would cover the client/server model in more detail.

**(Information on purchases for non-UK higher education institutions available from UCoSDA tel.: 0114 222 1331.)**

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## Further Information

### *More Sources of Information on the World Wide Web*

URLs are provided throughout the directory section of the handbook for projects and centres for which that information has been provided. We also provide links to other CBL and subject based URLs from our own WWW pages. This section contains a miscellany of interesting Web sites.

LTDI Server: Our own Web pages	<a href="http://www.icbl.hw.ac.uk/ltidi/">http://www.icbl.hw.ac.uk/ltidi/</a>
CTI Server	<a href="http://www.cti.ac.uk/">http://www.cti.ac.uk/</a>
UMI Use of MANs Initiative	<a href="http://www.use-of-mans.ac.uk/">http://www.use-of-mans.ac.uk/</a>
TLTP Central Server	<a href="http://www.tltp.ac.uk/">http://www.tltp.ac.uk/</a>
JISC server	<a href="http://www.jisc.ac.uk/">http://www.jisc.ac.uk/</a>
ITTI Server	<a href="http://www.icbl.hw.ac.uk/itti/">http://www.icbl.hw.ac.uk/itti/</a>
NCET National Council for Educational Technology	<a href="http://www.ncet.org.uk/">http://www.ncet.org.uk/</a>
SCET Scottish Council for Educational Technology	<a href="http://www.scet.co.uk/">http://www.scet.co.uk/</a>
Association for Learning Technology.	<a href="http://www.csv.warwick.ac.uk/alt-E/">http://www.csv.warwick.ac.uk/alt-E/</a>
Higher Education National Software Archive (HENSA)	<a href="http://micros.hensa.ac.uk/">http://micros.hensa.ac.uk/</a>
National Information Services and Systems (NISS)	<a href="http://www.niss.ac.uk/">http://www.niss.ac.uk/</a>
eLib: The Electronic Libraries Programme	<a href="http://www.ukoln.ac.uk/services/elib/">http://www.ukoln.ac.uk/services/elib/</a>
UK Mailbases	<a href="http://www.mailbase.ac.uk">http://www.mailbase.ac.uk</a>
EEVL Edinburgh Engineering Virtual Library	<a href="http://www.eevl.ac.uk/">http://www.eevl.ac.uk/</a>
Social Science Information Gateway – SOSIG	<a href="http://www.sosig.ac.uk/">http://www.sosig.ac.uk/</a>
The CAL Pages: computer assisted learning at the University of Strathclyde & elsewhere	<a href="http://www.strath.ac.uk/CAL/">http://www.strath.ac.uk/CAL/</a>
Virtual library : Educational Technology	<a href="http://agora.unige.ch/tecfa/edutech/welcome_frame.html">http://agora.unige.ch/tecfa/edutech/welcome_frame.html</a>
The World Lecture Hall	<a href="http://wwwhost.cc.utexas.edu/world/instruction/index.html">http://wwwhost.cc.utexas.edu/world/instruction/index.html</a>
GALAXY: Directories – Reference and Interdisciplinary Information	<a href="http://galaxy.einet.net/galaxy.html">http://galaxy.einet.net/galaxy.html</a>
Alta Vista Search the web	<a href="http://www.altavista.digital.com/">http://www.altavista.digital.com/</a>
Yahoo search the web or browse through by category.	<a href="http://www.yahoo.com/">http://www.yahoo.com/</a>
UK Sensitive Maps: Universities and Colleges	<a href="http://scitsc.wlv.ac.uk/ukinfo/uk.map.html">http://scitsc.wlv.ac.uk/ukinfo/uk.map.html</a>
United Kingdom Based WWW Servers.	<a href="http://src.doc.ic.ac.uk/all-uk.html">http://src.doc.ic.ac.uk/all-uk.html</a>
BBC Television	<a href="http://www.bbc.co.uk/">http://www.bbc.co.uk/</a>
W3C: the World Wide Web Consortium, developing standards for HTML and the world wide web.	<a href="http://www.w3.org/">http://www.w3.org/</a>
Scottish Higher Education Funding Council (SHEFC)	<a href="http://www.shefc.ac.uk/shefc/welcome.htm">http://www.shefc.ac.uk/shefc/welcome.htm</a>