A national centre of excellence in the development and use of technology-based methods in teaching, learning and research







# Institute for Learning and Research Technology

The Institute for Learning and Research Technology is organised into six project groups:

- Networked Information Research and Services
- Learning and Research Software Development
- Multimedia Research Unit
- **Centre for Learning Technology in Business and Economics**
- Centre for Learning Technology in Medicine
- Learning Technology Support Service

## MULTIMEDIA RESEARCH UNIT

# Mobile Multimedia University (MMU)

The MMU is a Bristol-based collaboration between Hewlett-Packard Research Laboratories, the University of the West of England and the University of Bristol. The MMU aims to work with the Bristol MAN (Metropolitan Area Network) to promote the development of a regional infrastructure for continuing education and training. As part of this work the MRU is developing a distributed database structure for the delivery of electronic learning materials such as still images, video or courseware over networks. This is being implemented in MIDRIB (see under Centre for Learning Technology in Medicine), which incorporates the Bristol Biomedical Image Database, an early MRU project.

### **ISDN** in Dental Training

ISDN in Dental Training is a project investigating the use of ISDN video conferencing links between general dental practitioners, dental postgraduate centres and dental consultants based in leading hospitals, for continuing professional development and postgraduate education. Video conferencing systems over ISDN offer an optimum solution where remote transmission of lectures, workshops and diagnostic support all require a two-way exchange of visual information.

#### **NetQuest**

NetQuest is a project developing TML (Tutorial Markup Language), a superset of HTML, to enable tutors and students to create sets of questions for self or course assessment. NetQuest is compiling indexed and searchable questionbanks in the subject areas (initially) of geoscience, chemistry, medicine, veterinary science and engineering.



# **Technical Advisory Service for Images (TASI)**

TASI provides technical advice and consultancy on the digital creation, storage and networked delivery of image-related information to support the development of image-based projects in HE institutions across the country. TASI can advise on all issues encountered by such projects, ranging from formats and compression standards, search and retrieval methods, through to intellectual property rights and user issues like authentication and licensing.

## CENTRE FOR LEARNING TECHNOLOGY IN MEDICINE

#### CTI Centre for Medicine

The CTI Centre for Medicine promotes the use of learning technology in medicine, dentistry, veterinary science and pharmacy throughout the UK. It maintains an online resource guide and information base on the Web, publishes a newsletter twice a year and hosts a conference every other year. The Centre's staff visit medical, dental and veterinary schools as well as schools of pharmacy to demonstrate courseware and to advise on the use of learning technology in education and training.

# British Society for CAL in Dentistry (BSCD)

The BSCD promotes the use of CAL materials in dental training and continuing education. BSCD is funded entirely by institutional and individual membership fees. Its senior officers are drawn from a number of dental schools across the country and the society welcomes members from around the world. BSCD publishes the Journal of Computer Assisted Learning in Dentistry six-monthly on CD-ROM, runs an email discussion list called dental-cal, organises an annual conference and maintains a World Wide Web presence.

## Medical Images Digitised Reference Information Bank (MIDRIB)

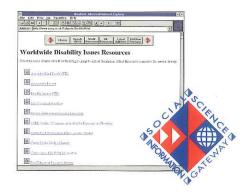
MIDRIB is a national project which will create, maintain and deliver a comprehensive collection of medical images in digital form for use in teaching and research. MIDRIB will be accessible via the Joint Academic Network from a single Web site. The project is developing online tools and case study imagesets to facilitate the use of the archive in teaching and learning.

#### ReproMed

ReproMed is producing an online information guide to help GPs to keep up to date with the latest developments in reproductive medicine. ReproMed will cover both contraception and infertility and each subject will be delivered as two modules, one for healthcare professionals and one for patients. Planned as an online resource, the final product will incorporate interactive elements with appropriate use of multimedia.



Image from MIDRIB



# NETWORKED INFORMATION RESEARCH AND SERVICES

# Social Science Information Gateway (SOSIG)

SOSIG is a national service funded by the ESRC and JISC which provides an easy means of access to a wide variety of high quality Internet resources for social scientists. Each resource is strictly evaluated before it is catalogued with a description and keywords. Users can browse or search before dynamically connecting to resources of interest. The SOSIG team also runs training and awareness sessions all over the UK.

## Resource Organisation and Discovery in Subject-based Services (ROADS)

ROADS is a collaborative development project, funded under the Electronic Libraries Programme, to design and implement a user-oriented resource discovery system. ROADS also aims to provide a common platform to allow searching across multiple subject-based services. ROADS enables the process of creating resource descriptions to be kept with the appropriate subject specialists.

## Development of a European Service for Information on Research and Education (DESIRE)

The DESIRE project aims to build an information infrastructure for the European academic community and is developing tools to provide better support for multimedia information, better indexing services and better facilities for information management. DESIRE will address the needs of European end-users of research data to locate and retrieve relevant information.

# CENTRE FOR LEARNING TECHNOLOGY IN BUSINESS AND ECONOMICS

## Business Education on the Internet (biz/ed)

Biz/ed is a comprehensive source of education centred business and economics information on a single Web site. Biz/ed hosts original case studies, statistics, assignments and support materials and provides network facilities for economics and business students, teachers and information providers. The core service is being extended to international educators and those developing and using materials for more advanced courses in the UK higher education sector.

#### CTI Centre for Economics

The CTI Centre for Economics is one of a network of 24 subject-based centres at higher education institutions throughout the UK which are working to promote the use of information technology in teaching and learning. Its activities include liaising with economics departments, running workshops

and seminars, hosting an annual "conference, maintaining an electronic information base on the World Wide Web and providing an online resource guide. A key aspect of its work is visiting economics departments to present staff seminars and give software demonstrations.

#### **ILRT Internet Development**

The Institute undertakes a variety of privately funded Internet development projects, ranging from bespoke educational applications to full commercial Web site design and implementation. As a national centre of excellence in the development and use of new technology in teaching and learning, the Institute is able to bring to bear the latest Internet technologies on behalf of its clients, who include educational institutions, charitable organisations and selected leading companies.

## LEARNING AND RESEARCH SOFTWARE DEVELOPMENT

#### WinEcon

WinEcon is an award-winning, customisable multimedia learning package covering the whole syllabus for introductory economics. The software offers more than 75 hours of tutorial material and includes exercises, self-assessment questions and examinations, economic databases, an economics glossary and references to leading economics textbooks. WinEcon was a medallist in the 1995 British Computer Society Awards, a winner at the 1996 European Academic Software Awards, and a winner of the 1996 Asymetrix Interactive Awards for Best Educational Software.



WinEcon screen shot

# Customised Delivery of Study Skills (CuDOSS)

CuDOSS is developing a study skills handbook which can be customised by academic departments to reflect their specific teaching methods, syllabus, student profile and available learning resources.

As the handbook is to be held electronically, it can be delivered to students as a browsable World Wide Web application or as a printed guide.

#### QuickStart

The QuickStart template enables academics to develop Computer Assisted Learning (CAL) courseware without having to acquire advanced programming skills. The template consists of a collection of reusable designs and software components built on top of the popular Asymetrix ToolBook authoring system.

## LEARNING TECHNOLOGY SUPPORT SERVICE

The LTSS provides information, advice and assistance to staff at the University of Bristol who use, or wish to adopt, learning technology in their teaching. The Service, which is wholly funded by the University, aims to develop and maintain an environment in which learning technology is used effectively to support the University's teaching and research activities.

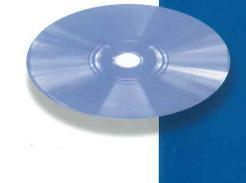
The LTSS promotes and supports the appropriate use of new technologies by informing departments of the latest developments in learning technology and the implications for teaching, learning and research. It provides training and information on learning technology through workshops, seminars and an advisory service. The LTSS assists departments and members of staff in developing proposals for fully funded learning technology projects, which can then be implemented in association with staff from the Institute's other project groups. The LTSS also plays an important strategic role by assisting in the development of the University's teaching and learning strategy in collaboration with other educational support services.







The Institute for Learning and Research Technology was formed in January 1997 from a merger of the Centre for Computing in the Social Sciences (CCSS) and the Educational Technology Service (ETS) at the University of Bristol. The Institute is one of the largest groups of its kind in the UK, with a range of projects including national and international Internet services, award-winning software development and innovative academic support services.



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## **FURTHER INFORMATION**

For further information about the Institute or any of its projects, please contact:

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