

# Projects to Develop E-Learning Tools for Learners and Teachers

## 1 *Relevant JISC Programmes and Activities*

The Distributed E-Learning programme will build upon the recommendations and outputs from previous JISC programmes, and be aligned with current activities. This document gives an overview of the most relevant JISC activities upon which this programme will build, and how that activity links with the objectives of the new programme.

### 1.1 **Information Environment architecture and services**

The JISC and other organisations have invested substantially in the specification and, in some cases, development of national infrastructure to support the access, sharing and management of digital content. This has been described under the umbrella term of the Information Environment.

The Information Environment is neutral about the type of content that it might store or manipulate; it is not specific to any educational audience or type of organisation. Equally, it is agnostic about whether implementation of the architecture is at a local, regional, national or international level.

The JISC has not attempted to implement the full infrastructure of the Information Environment architecture within the UK. Rather, it has provided a framework of interoperable standards that allow other users to develop the systems that they require, and to be assured that data flow will be possible between systems. However, the JISC has implemented some demonstrations of aspects of the IE architecture such as portals, and funded exploratory studies that have provided advice to organisations about how they might implement successfully the IE architecture.

The CSR funding will be used to test out the most relevant IE services and use them as pilot services where appropriate.

The current repository pilots will be used as a basis for the development of specifications for local or regional repositories, and some examples of regional repositories for learner data.

**Bidders should note Information Environment projects and reports at:**

[http://www.jisc.ac.uk/development\\_overview.html](http://www.jisc.ac.uk/development_overview.html)

### 1.2 **E-learning content and tools**

The Exchange for Learning programme (X4L) has focused upon learning and teaching tools and the sharing of learning resources. Its technical strand has developed new, standards-based tools for the packaging of e-learning content and for the creation of online assessment questions, and has specified and procured a pilot digital repository 'JORUM' to store e-learning content. Its community-focused strand has funded case studies in colleges and universities of adapting existing digital resources for use in teaching situations.

The content packaging and assessment tools that have been developed under the X4L programme have been very well-received and this programme will allow further development of the tools, or development of new applications if necessary.

**Bidders should note Exchange for Learning projects and reports at:**

[http://www.jisc.ac.uk/programme\\_x4l.html](http://www.jisc.ac.uk/programme_x4l.html)

### 1.3 **Middleware**

In parallel, the JISC funds activities that may be described as middleware. This focuses in particular on the provision of access to content or systems, including authentication and authorisation. Middleware also include some of the 'shared services' that underpin the IE architecture, for example a national URL resolver or the JISC IE Services Registry. These shared services are intended to provide national services for the educational community. Many projects are currently in a pilot stage rather than providing a full service.

Worthy of particular note within the middleware activities is the development of a national service for authentication and authorisation; this will be a necessary component for the new programme and there will be some dependence on the results of this service.

**Bidders should note Middleware projects and reports at:**

[http://www.jisc.ac.uk/development\\_overview.html](http://www.jisc.ac.uk/development_overview.html)

#### **1.4 Managed Learning Environments**

The JCLT has dedicated significant funds to investigating the development of Managed Learning Environments within further and higher education as well as awareness-raising programmes and activities. There have been several studies to explore MLE issues and a substantial body of reference resources have been funded. Most recently the JISC has set up an advisory service to provide information and advice about MLEs to the FE and HE communities. The MLE programmes have increasingly focused upon the use of interoperability standards and specifications to create interoperable systems.

**Bidders should note Managed Learning Environments projects and reports at:**

<http://www.jisc.ac.uk/mle>

#### **1.5 Regional Managed Learning Environments**

The JISC has focused activity on this area by developing a programme of 'Managed Learning Environments for Lifelong Learning'. These are demonstrator projects or case studies of how colleges, universities and other learning providers (e.g. training organisations) can work together to support learners. This is partly through the development of shared systems to allow the sharing of learner profiles.

Within the new programme, this work will be reviewed and recommendations made about a possible regional and national infrastructure to support the movement of learners from institution to institution, and indeed to study independently. This will build upon the pilot 'IO-nodes' student data transfer system, and the development of a UK student transcript.

The programme will work closely with the HEFCE regional advisors to specify suitable regional MLE developments for the regions, and to plan and implement demonstrator projects. The programme will also develop some pilot services for regional MLEs – both for content sharing and learner data.

**Bidders should note the MLE for Lifelong Learning projects and reports at:**

[http://www.jisc.ac.uk/mle\\_lifelonglearning\\_info.html](http://www.jisc.ac.uk/mle_lifelonglearning_info.html)

#### **1.6 Digital Libraries and VLEs (DiVLE)**

The Digital Libraries and VLEs programme ran until October 2003. It was a one-year programme that explored technical and cultural issues of integrating digital library systems with Virtual Learning Environments. The programme made some clear recommendations for further development activities that are needed urgently to help integration of these core systems. The programme also developed some useful technologies that might be further developed or implemented through the DELIA programmes. Outputs from the DiVLE programme are currently being reviewed and recommendations will be fed into the specification of the DELIA programme.

**Bidders should note the MLE for Lifelong Learning projects and reports at:**

[http://www.jisc.ac.uk/mle\\_divle\\_info.html](http://www.jisc.ac.uk/mle_divle_info.html)

## **1.7 E-learning programme (pedagogy, frameworks and innovation)**

JCLT is currently funding a new e-learning programme that covers three large strands of activity: e-learning and pedagogy; technical frameworks; and innovation. The programme has a single over-arching aim: 'to identify how e-learning approaches might be used to facilitate learning and to advise on how these approaches might be effectively implemented.' Activities that are funded under the programme will lead to guidance for practitioners on the use of e-learning systems; identification of the requirements for new e-learning tools, in particular for learning activity design; the creation of toolkits of technologies to enable the development of integrated e-learning systems, and investigations of innovation technologies such as games and mobile devices. The programme is focused upon investigating the requirements of users of e-learning systems, and these activities will feed into the specification of the DELIA programme. It will also investigate some of the e-learning specifications that currently exist and make recommendations about changes to the specifications and standards.

**Bidders should note the e-Learning projects and reports at:**

[http://www.jisc.ac.uk/programme\\_elearning.html](http://www.jisc.ac.uk/programme_elearning.html)