



# Evaluation of the DEL Regional Pilots and HEA Subject Centre Projects

Final Report

Glenaffric Ltd  
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## **1 Introduction**

- 1.1 The Joint Information Systems Committee (JISC) has commissioned Glenaffric Ltd to undertake an evaluation review of the Distributed e-Learning (DeL) Programme regional pilots and the Higher Education Academy (HEA) Subject Centre projects. The aim of the study is to provide a synthesis and summary of the lessons learned by the DeL regional pilot projects and HEA Subject Centre projects, to aid JISC and the wider community in understanding the emerging lessons and appropriately applying and building upon them.
- 1.2 The overall aims of the Distributed e-Learning programme are to facilitate lifelong learning and wider participation by providing learners with:
- a more seamless learning experience;
  - better learning tools;
  - easier access to personal learning information such as portfolios; and
  - access to greater quantities of quality-assured learning materials.
- 1.3 Twenty-one regional pilot projects were funded across the nine English regions. The programme commenced in April 2004 and projects were scheduled to submit their final reports from March 2006. Twenty-four HE Academy Subject Centre projects were funded from August 2004 to March 2006 to explore cultural issues and subject differences surrounding the re-use and sharing e-learning content.
- 1.4 The evaluation was tasked with exploring the extent to which the projects in both strands are able to gauge the success of their achievements in these four key areas against quality indicators in the projects themselves, grouped within three programme themes:
- facilitating progression
  - collaborative teaching and sharing of resources
  - supporting the independent lifelong learner.
- 1.5 The overall objectives of the evaluation were:
- to undertake an initial review of the projects and produce and identify early lessons which could be built on and issues which should be addressed;
  - to identify and synthesise the final lessons learned by the projects;
  - to identify areas of successful innovation or emerging good practice from the projects which could be built on by JISC and the wider community;
  - to assess the progress of the projects towards realising the overall aim of the distributed e-learning programme; and
  - to identify gaps in the work carried out by the projects which could be addressed in a future funding call in order to meet the aim of the programme.
- 1.6 The study had two main deliverables: an interim report of the work of the regional pilots and subject centre projects, and a final evaluation and synthesis of the lessons learned by the projects.
- 1.7 The final report (D2 of the intended review deliverables) is intended to evaluate the regional pilots and the Subject Centre strands of the DeL programme and synthesise the lessons learned by these projects. The specific objectives of this final report are to:
- evaluate the progress of the two strands towards achieving the aims of the DeL programme, identifying any significant gaps;
  - provide an executive summary of the key messages emerging from the programme;
  - provide a themed summary of the lessons learned, synthesising the outputs and outcomes of different projects. These lessons should be placed in the context of the lessons emerging from other relevant programmes;
  - point to key project outputs which can be used by the wider community; and

- identify successful innovation or emerging good practice in technical, administrative or pedagogical systems and approaches which could be adopted or built upon by the wider community.

## **2 Methodology**

### **2.1 First interim report**

- 2.1.1 The first interim report (D1) was submitted in December 2005. Preparation for this report included meetings with the Programme Manager and Director to discuss approaches to the work and key areas of focus for the interim report, and to clarify a shared understanding of the scope and purpose of the review as a whole. An early issues report was also produced and presented for discussion with the Programme Advisory Board in November 2005.
- 2.1.2 A substantial body of programme documentation was also reviewed for the interim report, including project plans, interim reports and outputs, planned deliverables, and the outcomes of community surveys undertaken by the Subject Centres. Documentation relating to other relevant JISC initiatives was also reviewed, particularly the MLEs for Lifelong Learning Programme and the other strands of the e-Learning Programme, as was the final report on the initial study commissioned by the Programme management team into the extent to which opportunities for distributed e-learning are available in each of the English regions. A face-to-face meeting took place in early December with the HE Academy Subject Centre Co-ordinator.
- 2.1.3 The interim report included a review of the projects in terms of their focus and scope and relationship with the overall programme aims, the relevance of regionality and relationship with regional HE development priorities, and the relationships of the projects with other relevant development initiatives. Illustrative overviews were provided of the DeL project partners by region, external links and relationships with other initiatives, and the focus of the HEA Subject Centre projects (see Appendix A).
- 2.1.4 The report included a number of comments and recommendations with regard to programme structure and content, programme management and support, developing the regional agenda, and external partnerships and networks.

### **2.2 Project consultation**

- 2.2.1 Telephone interviews were arranged with representatives from each of the twenty-one DeL projects in February 2006. Interviews ranged in duration from 15 to 54 minutes, with an average of 37 minutes. Respondents were asked the following questions, with follow-up questions and requests for clarification as appropriate:
- Looking ahead, do you have plans to respond to the invitation for additional funding to support embedding, transfer and increased impact?
  - Looking back, what has the project achieved, what are your successes?
  - What remains to be done in the lifetime of the project?
  - Are you going to achieve what you set out to do?
  - What will you have to 'show' at the end of the project in terms of tangible outputs?
  - What does 'regionality' mean in the context of your project?
  - What lessons have you learned along the way, what would you do differently next time?
  - Comments on programme support – programme meetings, support workshops, networking with other projects and programmes?
  - Any other general comments?
- 2.2.2 A group discussion with representatives from the HEA Subject Centres took place in January 2006. The discussion focused on the following questions:

- How did the project bidding process meet the needs of your Subject Centre at the time?
- Was there anything that might have made things easier – time, admin support, project planning?
- How helpful did you find the project management documentation, guidelines and reporting?
- What external supports did you need during the project and did you get them (for example programme meetings, workshops, risk assessment briefing)?
- What is the collective role of the Subject Centres?
- The JISC have identified four key areas around which they would like to invite expressions of interest from Subject Centres. Which of these areas are most relevant to your Subject Centre?
- What other areas of relevance to your subject community need to be addressed?
- What supports would you need in order to do this?

2.2.3 A summary report of the discussion was produced for the HEA programme management. This feedback also formed the basis of a workshop for Subject Centre representatives during the HEA Subject Centre Annual Conference in March 2006.

### **2.3 Gap analysis**

2.3.1 DeL pilot projects were asked to complete a gap analysis questionnaire in early 2006. The questionnaire was sent to key project representatives by email and was also available online. Respondents were asked to complete the following fields:

- To what extent has your project been able to achieve what it set out to do?
- What remains to be done?
- What gaps in your current work have emerged?
- What new areas for possible future work have emerged?
- Are there any technical aspects that need further development?
- Are there any other areas not covered above that you would like to see developed?

2.3.2 Responses to the gap analysis questionnaire were received from ten projects. With hindsight, there was insufficient difference between the gap analysis questions and the project consultation interview questions, and respondents may not have perceived the different focus of the two exercises. Most respondents to the gap analysis were based on the current scope and work of the projects and did not offer much direct insight into the implications of this work for the scope of future developments.

### **2.4 Second interim report**

2.4.1 A second interim report was produced and presented to the Programme Advisory Board in March 2006. The report was based on three main sources of information: the project update reports submitted in January 2006, the telephone interviews with key project representatives, and the gap analysis questionnaire. The main purpose of submitting an additional interim report at this stage was to capture information arising from the programme evaluation in time to inform decisions regarding project extension activities and additional funding, and to contribute interim findings from the DeL pilots to ongoing discussions about the JISC Capital Funding Programme 2006-2009.

2.4.2 The second interim report summarised the key successes and challenges identified by the projects, the key outputs and deliverables that were anticipated, issues and concerns raised, and the areas for possible further development and collaboration that had been identified by both the DeL pilots and the Subject Centre projects at that stage.

## **2.5 Expert consultation**

2.5.1 Telephone discussions were arranged with the JISC and HEA programme managers and key representatives from the Programme Advisory Board in May 2006. The main purpose of these consultations was to discuss the key points of strategic interest and relevance arising from the programme. Several of the respondents are regular contributors to evaluation interviews aiming to capture lessons learned and key messages for future developments. In an attempt to avoid 'evaluation fatigue' and with a view to stimulating a more interesting discussion for the participants, a slightly unusual questioning approach was used, adapted from critical incident reporting techniques<sup>1</sup>. Respondents were asked the following questions:

- At what point did you feel most engaged with the programme?
- At what points did you feel cooler or most distant to what going on?
- What have been the most helpful things about the way the programme was run and what the projects have achieved?
- Is there anything about the programme that you found puzzling or confusing?
- Were there things that surprised you about the programme?

## **2.6 Review of final documentation**

2.6.1 Most DeL projects were due to submit their final reports at the end of March 2006. The final reports that were available were reviewed and analysed in terms of their accounts of lessons learned, outputs, innovations and good practice. A summary table was produced (see Appendix B). This updates the information presented in the December 2005 report in terms of the final aims that the projects articulated, the programme themes within which they were working, the outputs they actually produced and the examples of innovation and good practice they identified.

2.6.2 The final reports of the HEA Subject Centres were also due for submission in March 2006. These reports have been analysed in terms of the project aims, reported outputs and key approaches or issues of particular interest (see Appendix C).

2.6.3 A number of summary reports and synthesis documents produced by JISC and HEA programme management staff following the submission of the project final reports have also been consulted as part of this review. These include internal reports, and briefing papers and supporting documentation published in support of the call for bids under the JISC Capital Funding Programme April 2006 – March 2009.

## **3 Achievements and successes**

### **3.1 Introduction**

3.1.1 This section discusses and expands the information drawn from the final project reports that is summarised in the tables at Appendix B (DeL Pilot Projects Summary) and Appendix C (Subject Centre Projects Summary). Reference is also made to the initial analysis of project scope, themes and anticipated outputs that was presented in the first interim report of December 2005. This account also draws on the summary of project successes presented in the second interim report of March 2006, and achievements of particular strategic interest highlighted in the expert consultation process.

### **3.2 Programme objectives and themes**

3.2.1 The first interim report commented that the four over-arching aims of the DeL programme all express comparative progression on a continuum of improvement in specific areas (a 'more' seamless learning experience; 'better' learning tools; 'easier' access to personal learning information; access to 'greater' quantities of quality-assured

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<sup>1</sup> See Flanagan, J.C. (1954) 'The Critical Incident Technique', Psychological Bulletin 327-359. The technique was developed originally for analysing pilot training behaviour and subsequently adapted for use in many different contexts.

learning materials). Early analysis indicated that all of the projects were engaged in exploring areas that contributed to the overall aims of the DeL programme.

- 3.2.2 The programme themes were defined in retrospect by the Programme Manager from a analysis of the initial project aims and objectives. Three broad themes were defined, each sub-divided into two further areas of interest as follows:

Programme themes	Project areas of interest
Facilitating progression	Progression pathways Learner support environments
Collaborative teaching and sharing of resources	Content Repositories
Supporting the independent lifelong learner	e-Portfolio/PDP Learner records

- 3.2.3 Most project final reports make reference to the programme themes within which they were working. However, analysis indicates that there is a great deal of overlap between the thematic areas, with most projects working within at least two of the specific areas of interest. A further thematic category 'work-based learning' has been added to the analysis of final reports. There is a strong conceptual overlap between 'facilitating progression' and 'supporting the lifelong learner', and most projects working with e-portfolios and PDP were also developing tools and processes for progress pathways and learner support. The programme themes were relevant at the outset for scoping the programme and representing its key areas of focus for bidders, funders and managers. They help projects to partition and conceptualise their areas of interest and activity, and demonstrate the relevance of their work to specific audiences.
- 3.2.4 The DeL programme themes were therefore useful signposts of the road that projects were travelling, but did not specify a destination for that journey. The final analysis of the DeL projects indicates that while there may be overlap between the programme themes in the scope and activities of the projects, there was no drift in scope and focus at programme level and the overarching themes that were defined at the outset continued to be relevant throughout the programme.

### 3.3 Outputs

- 3.3.1 The key outputs identified by the DeL projects include technical tools and prototypes, scenarios, use cases and demonstrations, proofs of concept and evaluations, applications, content and pedagogical processes. Most of the DeL projects have produced outputs that are of some significance and wider potential interest and application. Some project outputs have a specific relevance to ongoing and continuing development work, and some reports have identified relevant outcomes and changes in practice as a result of the implementation of project outputs in an institutional or regional context. The table at Appendix B summarises all of the key outputs identified by the projects in their final reports. Some of the outputs of particular interest and wider relevance are summarised below.
- 3.3.2 Within the theme of 'Supporting the independent lifelong learner', outputs of particular interest include the development of scenarios and use cases to support learner transition and the implementation of UK LeaP from the RIPPLL project, and the client application incorporating a range of web services produced by MANSLE. Several projects contributed significantly to the development of interest and activity around e-portfolios and PDP in the sector during the lifetime of the programme, including the ePISTLE data exchange infrastructure and the work of EELLS, The Learning Matrix and PDP4Life in developing the application of the ioNode tool for a regional network.

- 3.3.3 The REHASH project has developed a repurposing model with a continuing relevance both to the immediate user community and in the wider context of content development for medical and healthcare learning provision.
- 3.3.4 Project outputs of particular interest in the 'Facilitating progression' theme include the work of the eLISA project in producing a prototype PLE, series of LAMS and Moodle learning sequences and an annotated framework of e-learning resources for study support. These have a continuing relevance both within the development community through work progressing within the JISC Design for Learning programme, and as implementable resources within the sector in their own right. The L4All project has produced a prototype 'complete system' through which the lifelong learner is able to access information about learning opportunities, search for existing pathways and create individual progression plans. The content authoring tool developed by the G4L project is particularly relevant to lifelong learning support and facilitating progression in the wider context of work-based learning and working with SMEs. This project has also helped to developed the potential application of the XCRI course information specification.
- 3.3.5 Most of the Subject Centre projects have produced case studies, scoping studies and surveys of relevance to the specific subject communities. Some have also produced implementable resources including worksheets, a variety of RLOs, question banks and templates, websites and online resource catalogues.
- 3.3.6 Several DeL projects produced diagrams to illustrate their final reports. These are interesting project outputs in their own right and are included at Appendix D. These examples of relational, schematic, structural and process diagrams in these projects demonstrate the ongoing concern of development projects to understand the complexities of the issues with which they are dealing, and to convey this complexity to a wider audience.
- 3.3.7 The project final reports included a narrative reflection on the implications and conclusions to be drawn from the project activities and outputs. Appendix E is a summary of the key comments of generic interest arising from each of the projects.

### **3.4 Innovation and good practice**

- 3.4.1 Interim reports highlighted successes identified by the projects in terms of collaboration and networking, enhanced regional awareness, and progress in developing and piloting usable tools. These successes are further developed in the project final reports with illustrative examples of innovation and good practice, and summarised in the tables at Appendix B and Appendix C.
- 3.4.2 Collaboration was highlighted as a principal success by almost all of the projects. Teams had identified common cultural issues across different institutions and sectors and had developed strategies for addressing these. The management of multi-disciplinary teams and engagement of key stakeholders from different institutions, departments and divisions was emphasised as a particular success by a number of projects. The eLISA project specifically highlighted the development of a democratic and collaborative methodology for project management and evaluation. The L4All project identified a potential tension between technological developers and curriculum specialists at the outset, and addressed this by separating technical developments from the more pedagogically and people-focused trialling work, enabling both aspects of the project to continue in parallel and to be brought together successfully in the final project development phase.
- 3.4.3 Communication strategies for successful project collaboration were highlighted by some projects (for example EPICS), including telephone conferencing and use of smart space as well as email and regular team meetings.
- 3.4.4 Significant levels of collaboration between different projects were also highlighted, and the contribution of projects to the development of communities of practice in key areas of shared interest and expertise. The collaboration of PDP4Life, EELLS and The Learning

Matrix is perceived to have facilitated the development of a community of interested partners across different regional settings and sectoral contexts.

- 3.4.5 Several projects commented that they had developed an enhanced regional awareness and sense of common understanding with partner institutions, and most expressed the intention to continue to build on these partnerships. Links with Lifelong Learning Networks and regional career development services were identified as particular successes. The projects had also served to develop an enhanced understanding and appreciation of different cultures and working arrangements in FE and HE, and several also highlighted positive relationships with the schools sector.
- 3.4.6 Some projects highlighted success and innovative practice in the development and application of tools and processes, including applications for e-portfolio development, learning design and content packaging tools. The pilots had been successful in proving concepts, had taken forward the work of previous projects and established parameters for sustainable implementation. In particular, progress in working with real learners and practitioner-focused implementation were identified as key successes. MANSLE identified the use of the Eclipse development environment enabling the implementation of a rapid software development lifecycle. G4L highlighted the pedagogical aspects of the toolkit developed through the project as examples of best practice in work-based learning provision. EERN identified the potential value of the DELTA tool in raising awareness of pedagogical issues for learning design and curriculum development.
- 3.4.7 Projects also contributed to raising awareness of the importance of interoperability standards and open source software, and understanding user needs in the community. RIPPLL has consolidated a position as the prime test bed for the implementation of the BSI UKLeaP, and has identified some significant implementation issues with the standard which should impact on its future development. L2O has developed good practice guidelines to ensure that the development project complies to existing standards and is future-proofed for industry-standard interoperability. PDP4Life and PLPP also emphasise raised awareness of interoperability and open source issues as examples of good practice.
- 3.4.8 A key aspect of good practice emerging from the Subject Centre projects is the enhanced appreciation and understanding of e-learning developments in the sector on a subject-specific basis. Scoping studies, systematic reviews and landscape surveys have not only impacted on further project proposals but also on planning core activities from an informed standpoint of what the sector needs and wants. Several of the reports also highlight raised awareness of JISC and its services, particularly JORUM , ReLOAD and TOIA.

## **4 Issues and challenges**

### **4.1 Introduction**

- 4.1.1 Interim reports highlighted issues and challenges raised by the projects in relation to the maturity of the tools and systems being piloted, the ambitious scope of some projects, and an emerging tension between technological development and pedagogical implementation. Other issues included the need to secure the support of key individuals within institutional management structures, and the challenges presented by working within the relatively new concept of regionality.
- 4.1.2 These issues are further developed below with reference to the project final reports. This section also includes a discussion of some of the strategic issues emerging from the expert consultations, with reference to ongoing development work in the sector.

### **4.2 Project issues and challenges**

- 4.2.1 A significant issue for a number of projects was the state of readiness of the tools and systems for piloting. Several commented on a lack of robustness and stability in the products they were testing, with implications for project scope and achievement. This may have been due to some extent by inadequate scoping of the pilots at the outset,

exacerbated in some cases by exaggerated claims that were made for the maturity of prototypes that were made available for piloting. One common result of this lack of robustness and readiness was the amount of time and resource that projects then had to devote to the further development of tools before they could be sensibly piloted in an institutional or regional context. In some instances the lack of readiness led to inappropriate expectations on the part of practitioners and in the worst cases to the disillusionment and disaffection of project partners.

- 4.2.2 Some projects commented that with hindsight they would have set less ambitious targets and objectives. Most noted that there was some disjunction between the strategic vision and aims expressed in the project bid and the operational reality of project activities. In some cases entirely different people were involved in the planning and operation of projects. Bids had been prepared and submitted over a short time, some had not been adequately scoped, some partners were only nominally engaged with the project planning process and perhaps not fully aware of implications of their involvement. Institutional and regional readiness to adopt technologically-based systems seems to have been over-estimated in some instances, particularly with regard to approaches to PDP, and use of content repositories.
- 4.2.3 An identified issue common with many other JISC development programmes is the need to identify and maintain contact with the right people at the right level in partner institutions. Projects highlighted the need to target institutional decision-makers at the outset, and engage them in plans for embedding activities and outputs. Getting technical staff on board across all partner institutions was seen as critical to project success. This need to engage the right people at the right level and maintain a shared vision of the project aims and longer term vision also applies to employers, system vendors and other external organisations.
- 4.2.4 The regional agenda was felt to have been of little importance to some projects and of great significance to others. Many projects were building on existing relationships and partnerships while others had developed new relationships. In some instances the DeL pilots have helped to clarify a sub-regional context for cross-institutional developments. Most HEIs have identified FE colleges with which they collaborate, and many have developed specific recruiting relationships with local schools. These links constitute 'known boundaries' for regional collaboration without treading unnecessarily on the collaborative or recruitment relationships of other HEIs. Formal recognition of the projects as 'regional pilots' facilitated the establishment of relationships on a regional level with local education authorities and regional development agencies, and employers.
- 4.2.5 Understanding and overcoming differences between schools, colleges and universities, not just in the availability of staff time and institutional resources but also in language, discourse and organisational culture was a significant issue for some projects.

### **4.3 Programme strategic issues**

- 4.3.1 The Distributed e-Learning Regional Pilot projects was a challenging title for a development programme. The Subject Centre projects were given a broad remit in relation to e-learning in their subject communities. The DeL projects were unified by the relatively abstract concept of supporting lifelong learning and progression, which was open to multiple interpretations, terminologies and applications. Both the 'regional' focus and the emphasis on 'distributed e-learning' were something of a tall order for the projects. Most of the projects were able to progress *collaborative* e-learning developments in a regional setting, but there was little evidence of genuinely *distributed* e-learning in the projects' focus. There remains an opportunity to explore and expose the rich seam of issues around the use of technology for the distribution of a core learning experience in terms of the location of learners, teachers, support and institutions.
- 4.3.2 The funding and scoping of the DeL pilots has confirmed that there are significant opportunities for the articulation of special funding developments with core development work. Ideally it should be possible to balance different funding streams within a coherent

developmental whole, with appropriate management and financial monitoring systems in place to track and report on progress within specific streams. The sheer volume of development activity that is taking place has been highlighted as an issue in a number of different contexts. Projects repeatedly express a desire to understand what is going on the rest of the sector that may be relevant to their development focus, but often seem unable to situate their own activities in the wider landscape of other related developments. Programme strategic advisors perceive a need for distinctiveness and clarity in the aims, objectives and planned deliverables of each development stream within a balanced and coherent portfolio of activity.

- 4.3.3 The development of the DeL programme objectives and initial scoping of the regional pilot projects and the Subject Centre projects effectively coincided with the development of HEFCE regional priorities in conjunction with stakeholder organisations in each region.<sup>2</sup> As a consequence, the pilot projects were not specifically required to address regional HE development priorities. However, there was an expectation that the project activities would sit within the broad development framework proposed by each regional development consortium, and also help to shape and enhance the ongoing development of the priorities. There is a sense that the programme has been only partially successful in this, and that more needs to be done to ensure connection and coherence between the strategic priorities established by HEFCE and the JISC and the HE Academy development initiatives. There is a general need for clarity and coherence in the sector's perception of JISC operational structures and development activities. Development programmes such as DeL present an opportunity to progress from a simple process of information exchange, and engage in negotiation and genuinely responsive dialogue involving HEFCE regional representatives and widening participation teams.
- 4.3.4 The experiences of the DeL regional pilots have highlighted the need to articulate of clear project objectives and milestones. Development programmes need to be able to demonstrate a process of continuous improvement, building on previous work and presenting a coherent landscape within which individual projects can locate and understand the significance of their work. The articulation of clear development milestones would help to avoid project drift and give early indication of any management intervention required. It would also enable projects to demonstrate their impact on relevant constituent groups. Projects have emphasised that they welcome critical feedback and robust, iterative dialogue on their plans, progress and challenges in the context of wider developments in the sector.
- 4.3.5 In common with most development programmes, DeL participants have highlighted skills and capacity development, and the consolidation of collaborative networks, as significant successful outcomes of the projects. JISC's mission is to support further and higher education by providing strategic guidance, advice and opportunities to use ICT to support teaching, learning, research and administration. The strategic alliance with the HE Academy in the specific context of this programme has demonstrated the value of action-based capacity building and professional development through project research, development and implementation.
- 4.3.6 This in turn exposes a core tension between project activities and the operational reality in institutions. Often projects based in an individual department or section are attempting to implement solutions that will impact directly on core institutional functions and also demonstrate relevance to the sector as a whole. Several have expressed concerns about the immature specifications and tools they inherited with a view to implementing institution-wide solutions. A number of the projects have demonstrated good practice in documenting their development processes and providing guidance and help facilities for other users. As a whole, the DeL regional pilots have illustrated the need for an insistence at programme level on the implementation of standards for software development and process documentation for sustainable use. Projects should be able to demonstrate that they have engaged in genuine user needs analysis before embarking

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<sup>2</sup> See <http://www.hefce.ac.uk/regions/priorities/> and Appendix B of the December 2005 Interim Report.

on developments, and continuing engagement with communities of users and other developers on an ongoing basis.

## **5 Commentary**

- 5.1 There is a general consensus among project representatives and programme advisors that the DeL pilots and HEA Subject Centre projects have helped to demystify technology and promote e-learning for a wider audience. The regional focus encouraged the engagement of institutions that were not previously actively involved with JISC developments. The programme aims and scope appealed to the practitioner community as well as to technical developers in institutions, and presented a welcome opportunity to test tools and processes in a real institutional and collaborative context.
- 5.2 The programme has also helped to enhance the collaborative relationship between the HE Academy and the JISC, both at a strategic and management level and in terms of forming and consolidating relationships between JISC services and the Subject Centres. Scoping studies have helped to provide a baseline for further subject-based development work in the sector. The programme has helped to create a forum for discussion and networks to take forward further developments. It has also served as a catalyst for developing relationships between subject communities, development communities and CETLs.
- 5.3 Projects generally expressed appreciation of the level and quality of support they received from the programme manager, highlighting the balance of direction, advice and guidance, and pragmatic insight into the challenges being addressed.
- 5.4 The DeL pilot projects have highlighted the need for clear programme objectives within the wider context of JISC developments. One common issue raised by many projects was the lack of awareness of a coherent picture in which to locate their developments, and the need for wider awareness raising and understanding of the significance of specific initiatives in their wider developmental context. There is a potential tension between the 'let 1000 flowers bloom' ethos for encouraging development in general, and crystallising development effort around a small number of specific products or systems. Project plans need to be based on a robust user requirements analysis, to express clear milestones and deliverables, and to include a clear statement of what is expected in management and development terms, accountability and professional approach to funding.
- 5.5 Some projects have produced significant tangible outputs in terms of new processes, approaches, systems, tools and content that deserve to be highlighted and more widely disseminated. Some of these are clearly being built on and further developed in other project work. There is an opportunity to celebrate these successes, to stock-take and disseminate the key outputs and outcomes from the programme, maintaining the collective memory of project and programme experiences.

## Abbreviations and Acronyms

### Project acronyms

EELLS	East of England Lifelong Learning Support
EERN	East of England Resource Network
ELP	Enhancing Learner Progression
eLISA	eLearning Independent Study Award
EPICS	North East Regional e-Portfolio Collaboration
ePISTLE	e-Portfolios Student Learning
FILE-PASS	Facilitating Independent Learning using E-Portfolio and Associated Support Systems
G4L	Gateway for Learning
L4All	Lifelong Learning in London for All
L <sub>2</sub> O	Sharing Language Learning Objects
MANSLE	Manchester Self-directed Learning and ePortfolios
myWORLD	Wider Opportunities for Reflection, Learning and Development
PLPP	Personal Learning Portal Pilot
PDP4Life	Personal Development Planning for Lifelong Learning
REHASH	Re-purposing Existing Healthcare Assets to Share
RIPPLL	Regional Interoperability Project on Progression for Lifelong Learning
SUNIWE	Staffordshire University, Northern Ireland, Welsh eTraining Network
WM-share	West Midlands Share

### Other abbreviations and acronyms

BSI	British Standards Institute
CETL	Centre for Excellence in Teaching and Learning
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institutions
JISC	Joint Information Systems Committee
JORUM	JISC Online Repository for Learning and Teaching Materials
LAMS	Learning Activity Management System
NTI	National Training Initiative
PLE	Personal Learning Environment
ReLOAD	Reusable e-Learning Object Authoring and Delivery
RLO	Reusable Learning Object
SME	Small-medium sized enterprise
TOIA	Tools for Online Interoperable Assessment
UKLeaP	UK Lifelong Learner Information Profile
XCRI	Exchanging Course Information project

[see separate sheets]

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
East Midlands	G4L East Midlands NTI Gateway for Learning <i>Loughborough University</i>	To facilitate the delivery of course information and e-learning content to SMEs as part of extended blended learning programmes offered by our consortium partners and deliver this in a form suitable for a Work-Based Learning context	L, WBL, C	Content authoring, rendering & packaging tool (CARP) tool incorporates Flash-rendered content linked to an SQL database Course information system (CIS)	We believe that the pedagogical aspects of both strands of the toolkit are examples of best practice  SME Consultation requirements analysis
East Midlands	RIPPLL (Regional Interoperability Project on Progression for Lifelong Learning) <i>University of Nottingham</i>	Establish a national demonstration model of cross-sector collaboration in personal development planning technology (schools and employers, as well as HE and FE) to support widening participation and progression for Lifelong Learning	P, L, E	10 transition points were identified as the basis for developing scenarios/use cases Draft 'fat' use cases have been developed and are published on the project website Demonstration of interoperability along a sample lifelong learner journey	Prime test bed for the implementation of the BSI UK LeaP Exemplary in its engagement with its partners Advice by Becta to DfES that Shibboleth should be considered for government eLearning developments
East of England	East of England Lifelong Learning Support (EELLS) <i>University of Hertfordshire</i>	To explore the issues and benefits of setting up a portal based ePortfolio service for lifelong learners within the East of England region through the development of a pilot service	E, P	Building on the Shell Project, EELLS has developed a Learner Portal ioNetwork and components	Attempting to build on existing work Collaborating with another similar DEL project
East of England	EERN: East of England Resource Network <i>University of Essex</i>	To pilot an enhanced version of DELTA within the East of England Region that will benefit practitioners and learners alike and will contribute to the building of a community of practice within the region	C, L	Technical integration Usability evaluation	DELTA is potentially a very useful tool, with a particular value in raising awareness of pedagogy in learning design and curriculum development

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
East of England	eSWAP <i>Anglia Ruskin University</i>	To create e-Learning tools around the distribution of reusable learning objects cross-institutionally in the region and to create tools for personal development planning which would map and define learning progression and goals	L, C	A very muddled project that seems to have used its evaluation report as its final submission. Impossible to identify individual outputs from the mini projects. The evaluation itself largely regurgitates other documents and uses statistical data inappropriately. No examples of good practice.	
London	eLISA (eLearning Independent Study Award) <i>University of Greenwich</i>	To bring together study skills learning resources, repositories, e-learning systems and support tools to trial these for pedagogical effectiveness, piloting e-learning for study skills	L, C	Accessible map of existing eLISA Greenwich and other appropriate study skills materials Series of LAMs sequences for eLISA Series of Moodle sequences Annotated framework of eLearning resources for study support Prototype PLE	Democratic, distributed collaborative project management and evaluation methodology across a network of partners to arrive at shared understandings of the aims, objectives, project approach, values, role of partners, processes, evaluation methods, data collection, analysis and dissemination of project results

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
London	L4ALL - Lifelong Learning in London for All <i>London Knowledge Lab</i> <i>Birkbeck College</i> <i>University of London</i>	To support lifelong learners in the London region, providing them with access to information and resources that facilitates their progression from Secondary Education, through to FE and on into HE	L, P	Prototype system that combines external services, tools and resources with in-house customization and development in order to provide a complete system through which the lifelong learner is able to access information about learning opportunities in the London area, create learning pathways through this information space, and search for existing pathways created by other people or automatically generated by the system	The project promoted a user-centred approach to development. This has been possible in part by scenario-based activities and through adoption of Vannevar Bush's trails concept. The resulting pilot system has produced innovative solutions for the lifelong learner in terms of supporting their education choices and career decisions, providing tools to facilitate sharing experiences through the creation of individual timelines
London	REHASH Re-purposing Existing Healthcare Assets to Share <i>St Georges</i> <i>University of London</i>	Re-purpose the existing collections of medical and healthcare assets to different educational levels and share via a national repository	L, C	Repurposed resources as Key Topics Repurposing model	Development of a number of guidelines and methodologies for the pedagogical, technological, and societal elements underpinning re-purposing
North East	EPICS <i>University of Newcastle</i>	Collaboration of NE educational institutions building on local practice in PDP and e-Portfolios to support learners at all levels of post-16 education Enhancing the learning experience by supporting individual needs of each learner, along with permanently embedding collaboration in regional activity	E, L	Collaboration and working together as a team Data flow diagrams PDP Forum Case studies	The communications strategy has been very successful, with the implementation and deployment of a number of communications tools

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
North West	FILE-PASS <i>UCLAN</i>	Evaluate the potential of ePortfolios to facilitate and encourage isolated learners to engage with the lifelong learning agenda and to gain access to the opportunities provided by HEIs for personal and work-related development	E, L	Adapted version of OSP software	Project Team focus on quality enhancement as well as quality assurance
North West	MANSLE <i>Bolton University</i>	To demonstrate and evaluate how e-portfolio web services from a variety of sources could be aggregated to support learners undertake personal development planning and portfolio development activities, and to receive appropriate mentoring and guidance, within the context of the lifelong learning agenda	E	Production of a client application incorporating a range of web services An effective network was created to support the ongoing work of the GMSA lifelong learning network Use cases	Use of the Eclipse development environment enabled an extremely rapid software development lifecycle to be implemented
North West	The Learning Matrix <i>Liverpool John Moores University</i>	To enable non-traditional students considering progression to Higher Education to access appropriate learning opportunities from a partnership of FE/HE providers via a standards-based electronic interface	P, L	The output of the project in the technological sense is a configuration of hardware in a network, and two main interfaces. There is a learner interface and a corresponding interface for Learning providers. Other outputs were associated with interoperability investigations and Shibboleth work.	The work done in designing and implementing a Learning Matrix system based on the ioNetwork concept was taken up by other projects, notably the EELLS project in Hertfordshire. The JISC has encouraged this sharing and the Learning Matrix has benefited reciprocally. A community of interested partners has emerged and development work continues in a number of ways.

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
South East	L <sub>2</sub> O – Sharing Language Learning Objects <i>University of Southampton</i>	To share and disseminate good practice in the development of e-learning pedagogies and processes and to share and re-use electronic learning resources across institutions and across sectors	C	Repository of quality assured RLOs and pedagogical assets Pedagogically-led 'process model' of re-purposing and re-use Regionally-based cross-sector community of practice	Good practice guidelines and dialogue with industry practitioners and software/tool developers has ensured that the development project metadata complies to existing standards and frameworks and should be fully interoperable should the industry be mature enough
South East	myWORLD <i>Oxford Brookes University</i>	Implementing OSPI-derived Petal e-Portfolio software at 13 sites on 5 servers in 4 post compulsory education sectors: HE, FE, ACL and Professional Institutes	<i>No final report currently available</i>		
South East	PLPP <i>University of Kent</i>	Pilot a personal learning portal to provide non-traditional learners with simple access to a range of services, including personal development planning and e-portfolio, services that will help them optimise their personal learning experience as they prepare for HE study	E, L	Project delivered a live pilot portal in use by over 100 users which will be maintained until 2007 Users manuals were developed for uPortal and PETAL	Wherever possible, the use of open standards has improved the likelihood of being able to import existing components and also of being able to re-use any components developed during the project
South West	PDP4Life: Personal Development Planning for Lifelong Learning <i>Bournemouth University</i>	Extended the existing specification for an Individual Learner Record Establish IMS LIP compliant common data export Pilot the ioNode technology Establish the extent of local ePDP systems within PDP4Life partners Raise awareness within the PDP4Life partners of ePDP/ePortfolio systems	E	We have taken an output developed by the earlier SHELL project, ioNode, and demonstrated that its use for secure data transfer of learner records from one location to another is replicable	A contribution has been made to the conceptual understanding and practice in relation to standards and interoperability for PDP

Appendix B – DeL Regional Pilot Projects Summary

Region	Project	Final Aims	Themes	Outputs	Innovation/Good Practice
West Midlands	ePISTLE <i>University of Wolverhampton</i>	To set up the technical infrastructure needed to supply learners in four colleges and two schools associated with the University of Wolverhampton with access to an e-Portfolio	E, P	Series of reports Data exchange	Users are at the centre of their e-Portfolios
West Midlands	SUNIWE <i>Staffordshire University</i>	Exploit the work done by NIIMLE to provide learner portal access to personalised information, VLEs and eResources across the SURF and WeTN Consortia	Assume extension as only interim progress report available		
West Midlands	WM-share <i>University of Worcester</i>	To enable educational institutions within the region to make more effective use of their existing digital assets by promoting shared, open and accessible use of digital content across the region	C	Needs Analysis Scoping paper on regional repository services	Staff consultation through surveys
Yorkshire and Humber	Enhancing Learner Progression (ELP) <i>University of Bradford</i>	Evaluating the application and potential of e-portfolios to support students through their lifelong learning journey, with particular emphasis on the key points of transfer Using Hefce Student Lifecycle Model approach to planning widening participation activities as a starting point	Assume extension as only interim evaluation report available		
Yorkshire and Humber	P4P Pathways for Progression <i>The University of Hull</i>	Identify the applicability of curricula mapping to progression routes and produce a repository of searchable curricula from compulsory education through to HE, including vocational routes within the Yorkshire and Humber region	<i>No final report currently available</i>		

Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
A, D & M	Distributed E-Learning in Art, Design and Media	To enhance the learning experience in art, design and media through an investigation of the potential of new technologies	Case studies / reports outlining the findings of the in-depth innovation projects A summary of findings from the three projects A final project report	Focus group research contributing towards the “in-depth investigation of e-learning pedagogies”
Bioscience	Centre for Bioscience	Supporting and developing our community’s awareness and uptake of e-learning	Survey of key contacts Four Mini-projects Learning Guide “Effective use of Technology in Teaching Bioscience”	The Survey provided a highly informative summary of shared experience for those trying to (or being forced to) embed e-learning in the curriculum. Responses revealed a lack of awareness of JISC projects and repositories such as JORUM, ReLOAD and TOIA.
Built Environment	The role and potential for e-learning in architectural design education	To explore the potential for the use of e-learning in design studio education	Report in the style of the Innovative and Effective Practice with E-Learning guides	Systematic review of case study examples of the use of e-learning in architectural design education, as published in existing literature has been carried out
Business, Management, Accountancy & Finance	Using digital learning resources in Business, Management, Accountancy and Finance	To build on the work already initiated and supported by the subject centre via the Teaching Resources in Business Education (TRIBE)	Project delayed in starting therefore no outputs to report	
C-SAP	Extension of Existing Research	To highlight existing e-learning research in the social science academic community, by hosting a one-day event and taking forward a proposed C-SAP monograph on elearning	E-learning in the social sciences monograph E-learning survey of FE colleges E-learning Forum	Survey of regional FE colleges to investigate where social sciences were being taught and especially any HE access level courses

Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
	Regional Network Development	To initiate a regional network of contacts, across a selection of FE institutions and HE institutions	Unfortunately, despite a number of attempts to make contact with suitable people we were unsuccessful in attracting enough people to form the initial network group.	
Economics	Extending the Assessment Question Bank	Extending the content of the question bank both in number and type by paying for academics to create questions and technically developing the prototype	Volume of questions doubled WYSIWYG interface for adding questions Export to Blackboard feature Word format document delivery Instant Remedial Maths Test	Technical development to improve the user interface so creating questions is simple and easy, and interoperate with VLEs
Engineering & Materials	LearnEm (Learning Assets and Resources for Engineering & Materials)	The broad aim of the project is to promote the sustainable sharing of digital assets useful for Engineering and Materials Science education	A survey of resources from previous funding programmes and personal collections Resources will be made available through JORUM: <ul style="list-style-type: none"> <li>• Collections at the University of Cambridge</li> <li>• Resources created as a result of the subject centres' previous mini-projects</li> <li>• Resources from other National and private sources</li> </ul>	We have established a good working relationship with the JORUM service, which we will use to ensure that we make full use of what they can offer
English	Repurposing Digital Research Archives	Collect examples of good practice in the pedagogical use of digital text archives and explore future possibilities Produce a good practice guide on the teaching uses of digital text archives and a collection of case studies	Worksheets for various uses of Early English Books Online	Additional projects not yet completed: <ul style="list-style-type: none"> <li>• Creating and Assessing Discussion Forums in English Studies</li> <li>• Creative Assessment in</li> </ul>

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Subject Centre	Project	Project Aims	Outputs	Key Approach
	Exploration of Online Learning Designs in English	Elicit the key issues associated with the sharing and reuse of e-learning resources among lecturers in three different English departments and to explore the suitability within those departments of LAMS	Report on Reusing Learning Materials in English Literature and Language Eight LAMS sequences	the English Literature degree: Towards Criteria for Assessment <ul style="list-style-type: none"> <li>Scoping Study of E-learning in English</li> </ul>
ESCALATE & Physical Sciences	Repurposing employability resources with the Physical Sciences subject centre	The main project aim was the design of a flexible, attractive and engaging course that enhances the employability of students	An interactive online employability resource produced in Blackboard	Additional project to explore the use of an online environment to develop the learning biographies of mature students on a foundation degree programme
	Creation of an online External Examiner database/register	To create a database for the Education community of External Examiners	Database/ register has been created	
Health Sciences and Practice	Audio Streaming/ Podcast	To make use of a new media technology to support dissemination, as well as enhancing learning and teaching in Health Sciences and Practice subject disciplines	Three podcasts produced: <ul style="list-style-type: none"> <li>About our subject centre</li> <li>Festival of Learning Leeds – Educating for Practice</li> <li>Inter-professional Education (IPE)</li> </ul>	It has been argued that Podcast is a technology for students rather than academic staff. If so, it would be useful to encourage students to use this technology to reflect on how they learn and what obstacles that they have had to overcome in the learning process.
	Review resources	To facilitate the location and effective use of learning objects through the incorporation of review / case study metadata	Review schema – based on the review template that we have been using for years	Technically this is an extension to add value to the learning and teaching resources on our database
ICS	Staff Development Workshops	The emphasis of this work was to prepare staff for the development of both Reusable Learning Objects(RLOs) and Question Bank (QB) materials	The main output of this project was the professional development of 51 interested individuals from 41 institutions	The individuals involved in the development activities have gained considerable experience and expertise
	Development Fund	To create a critical mass of materials relevant to the ICS disciplines	Variety of RLOs and QBs created	

Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
LLAS	DeL I Reusable Learning Objects	Gain an understanding of reusable learning objects and their current use in the humanities	Summary of initial survey of learning object concept and learning objects for the humanities Report on the e-learning survey Learning object checklist Framework for an approach to training in learning object development for practitioners	We have learned many valuable lessons (from first hand experience) about how to approach learning object development, particularly when it comes to ideas of repurposing existing materials.
Maths, Stats & OR	Developing learning materials for the STACK computer aided assessment system	Repurpose two successful paper based books Algebra Refresher and Calculus Refresher as online assessments Develop the core of the system itself	Server purchased and installed Approximately 222 Calculus and 104 algebra question templates were authored	Producing high quality learning materials is difficult, time consuming and requires a high skill level. Hence it is expensive to do well.
PALATINE	PRISM	To develop a learning website that allows its users to create re-usable learning objects that identify connections between the subject areas of art, architecture & design, dance, theatre production, music, film and literature	Draft design for website commissioned First tranche submissions	The legal situation regarding the display of images is complex. Whilst the use of thumbnail images as web links is accepted as 'fair use' in the US, that has not been accepted – or tested – in the UK.
Philosophical & Religious Studies	Scoping Study and Mini-Projects	Undertake a baseline study of the use of e-learning in current practice, general attitudes towards e-learning within our subject communities Four mini-projects in order for practitioners to enhance and disseminate existing work, or to initiate new	Email list and simple database of academics interested/engaged in e-learning Results of the mini-projects Results of the case studies	The sheer number of people interested in e-learning has been pleasantly surprising for us and opportunities for us to broker the knowledge and experience available, and to set up networks of those with similar interests

Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
Psychology	Supporting practical work in UK psychology programmes	To collate existing experiments for use in student practicals and to collaboratively develop and design additional student practicals	A website dedicated to practical work in psychology with various resource areas which include scripted experiments for common experiment generators. These include 101 catalogued resources	A strategic decision was made to populate all sections of the repository before launching the website
	Supporting the sharing of resources across UK HE educational psychology departments	To facilitate the sharing of resources across UK HE Educational Psychology programmes at a time of fundamental change within Educational Psychology HE programmes	Materials launched as a WebCT Psychological Testing course	This project marks the first time representatives from all courses of professional training in educational psychology in England, Northern Ireland, Scotland and Wales have collaborated on the joint development of assessment procedures and learning resources
	Viper2Go	The aim of Viper2go was to enhance Viperlib by constructing tutorials to encourage further personal learning	New dedicated Viper2go section of the Viperlib website FAQ section giving more detailed information Twenty-five Viper2go tutorials	A key aim of Viper2go was to bring the subject to as wide an audience as possible. A significant and growing number of school and college students have registered with Viperlib. We have recently been accepted for inclusion by Becta in their new portal

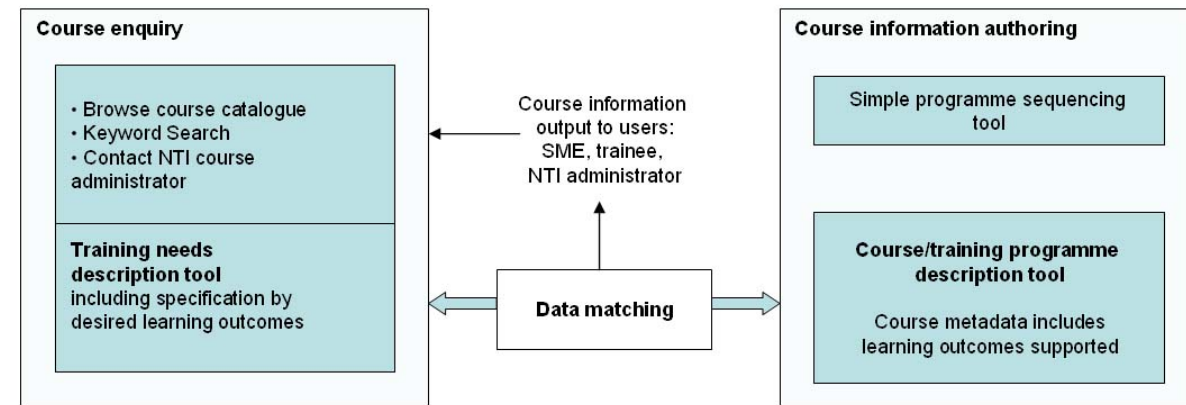
Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
SWAP	Elearning Think Tanks	Two events were organised to bring together a small number but diverse range of individuals and organisations involved in e-learning in higher education to explore current uses of e-learning, anticipate future trends, map needs and appropriate responses, particularly in relation to the notion of share-ability	Reports of events Crosswords	We mapped the areas we covered onto the typology of effective interventions that support e-learning practice developed by Rhona Sharp at Oxford Brookes
	Question bank developments	To explore approaches for development of question resources building on an existing social science resource	Creation of approximately 30 hours of 'collected' digitised audio to be made available to teachers and students in a catalogued collection of social policy related 'mixed resources'	A project blog has been set up to facilitate the process of dissemination of audio and attendant materials to the Social Policy academic community. This will assist busy academics to locate audio quickly and efficiently and provide a forum for further discussion and debate
	Videoconferencing series	Understand more how learning technologies can support and enhance international collaboration	Four seminars were delivered Guide for speakers was prepared Website to support the series was set up with information on each session All sessions were videoed to provide a reusable teaching resource	Factors that helped and hindered naturalistic question and answer sessions were identified. The potential to widen the use of this technology for other purposes was considered, particularly in the context of emergent internationalisation agendas.

Appendix C – HEA Subject Centre Projects Summary

Subject Centre	Project	Project Aims	Outputs	Key Approach
UKCLE	Good practice in sharing resources in law	To develop guidelines of good practice for sharing resources within law, with case study examples highlighting cultural and discipline specific issues	Literature review of the sharing of resources with relevance to the legal education community Mapping of relevant projects	Experience both with this project and with Lawpaths show that there is a real difficulty in delivering project work alongside day to day work for project staff, many of whom are already subject to a range of changing pressures on their time.
	Virtual Legal Environments in Legal Education	Obtain case studies from UK law school websites covering both undergraduate and professional legal education. Co-design a project website for UKCLE and BILETA sites	The principal output of the project is the website which contains the case studies	What had not been expected was how VLEs can be useful for tutors as well

G4L CIS schematic structure



EELLS

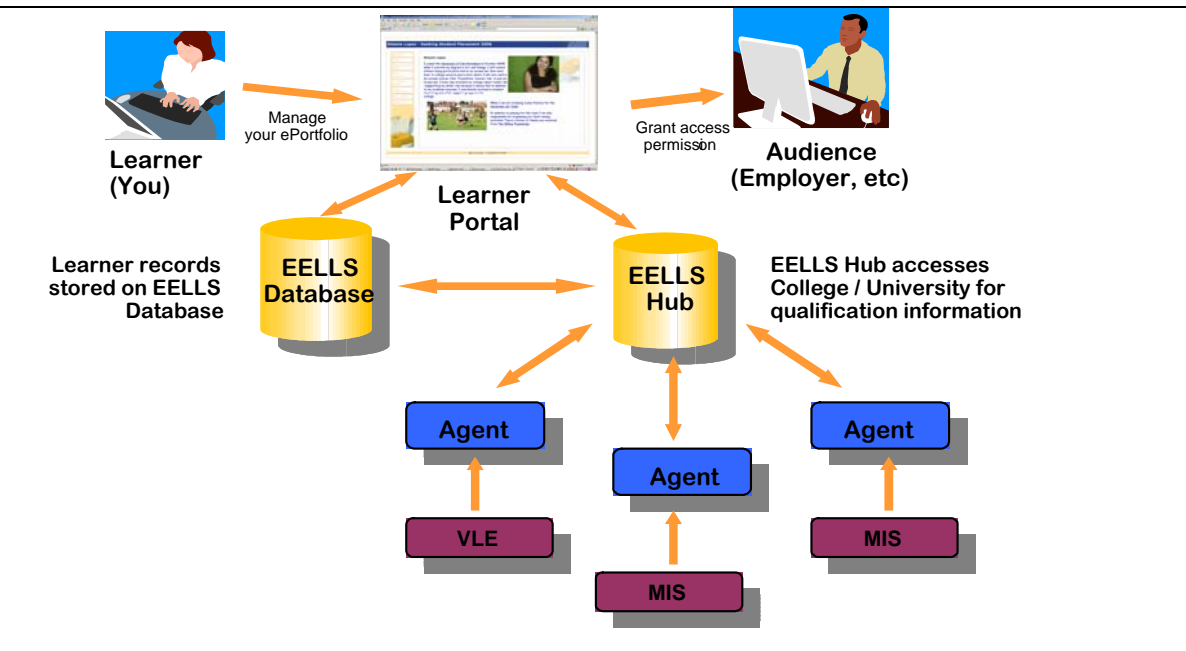
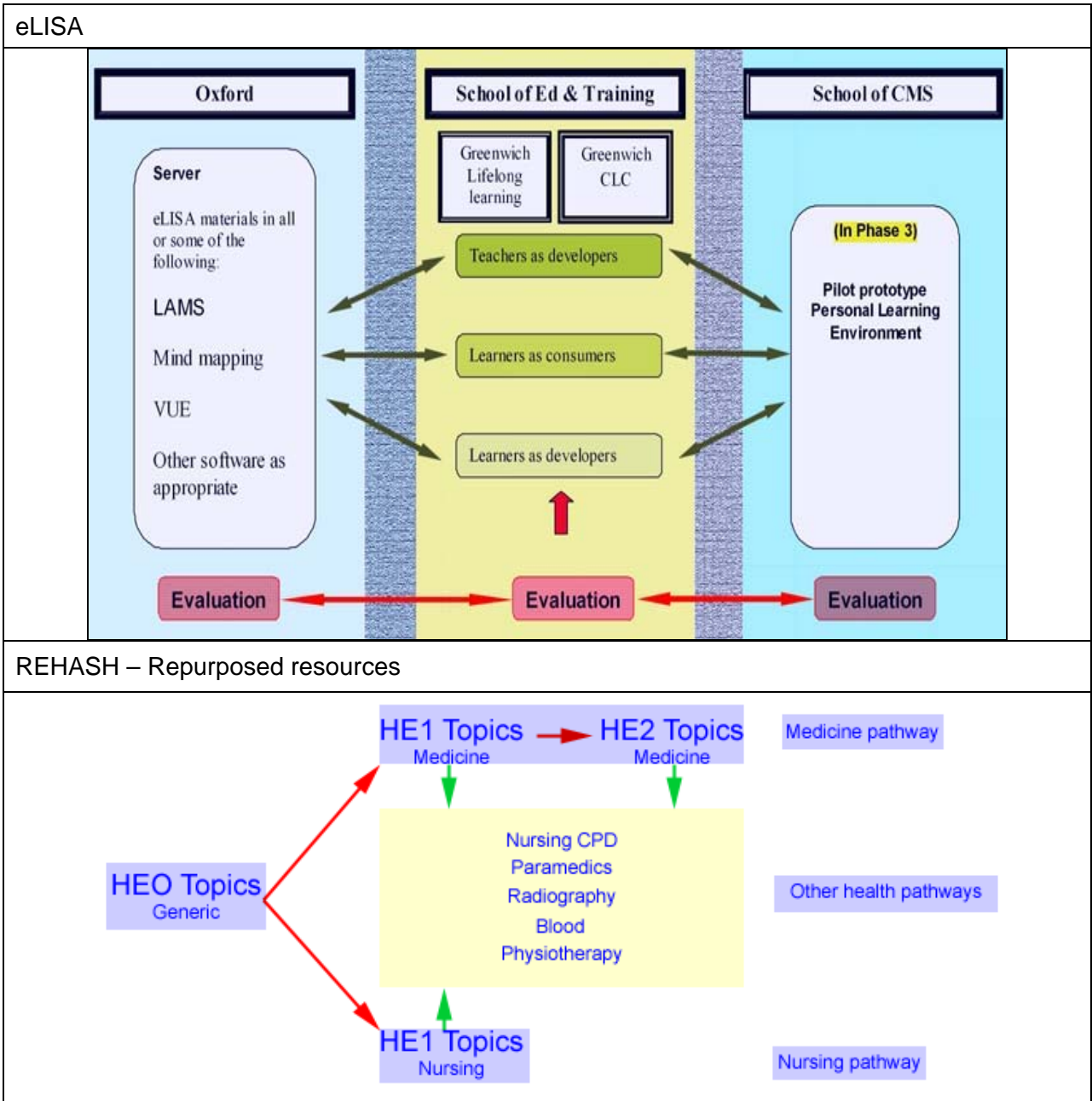


Diagram 1 Technical design – system architecture



REHASH – Repurposing model



FILE-PASS Infrastructure

Live Delivery Server

[myportfolio.uclan.ac.uk/portfolio](http://myportfolio.uclan.ac.uk/portfolio)



Linux (Debian) 2.6.12 Kernel  
 Apache v1.3.33/mod\_perl v1.29  
 Apache Tomcat v4.1  
 Java 2 Runtime Environment v1.4.2\_08-b03  
 MySQL v4.1  
 RSync

Development Server

[ldu.uclan.ac.uk/portfolio](http://ldu.uclan.ac.uk/portfolio)



Linux (Debian) 2.6.12 Kernel  
 Apache v1.3.33/mod\_perl v1.29  
 Apache Tomcat v4.1  
 Java 2 Runtime Environment v1.4.2\_08-b03  
 MySQL v4.1

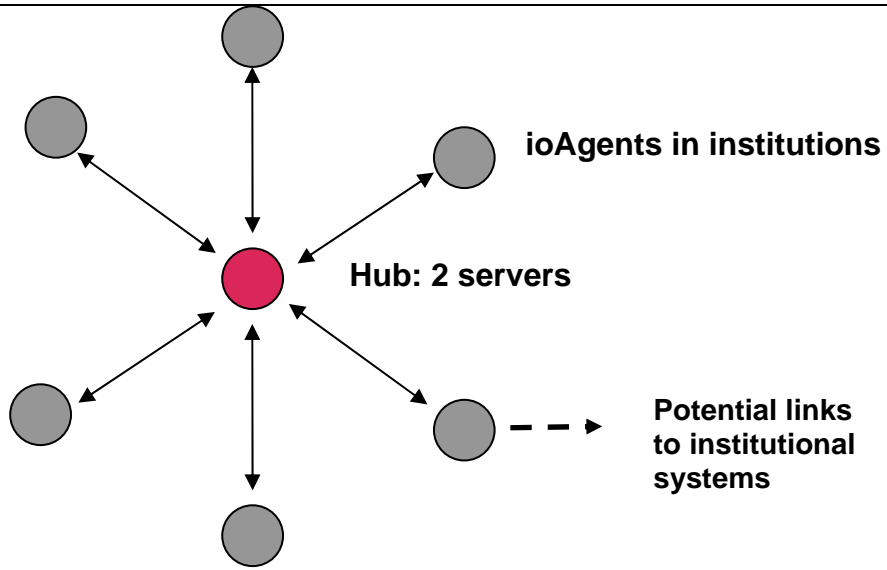
Backup Server

[ldu3.uclan.ac.uk](http://ldu3.uclan.ac.uk)

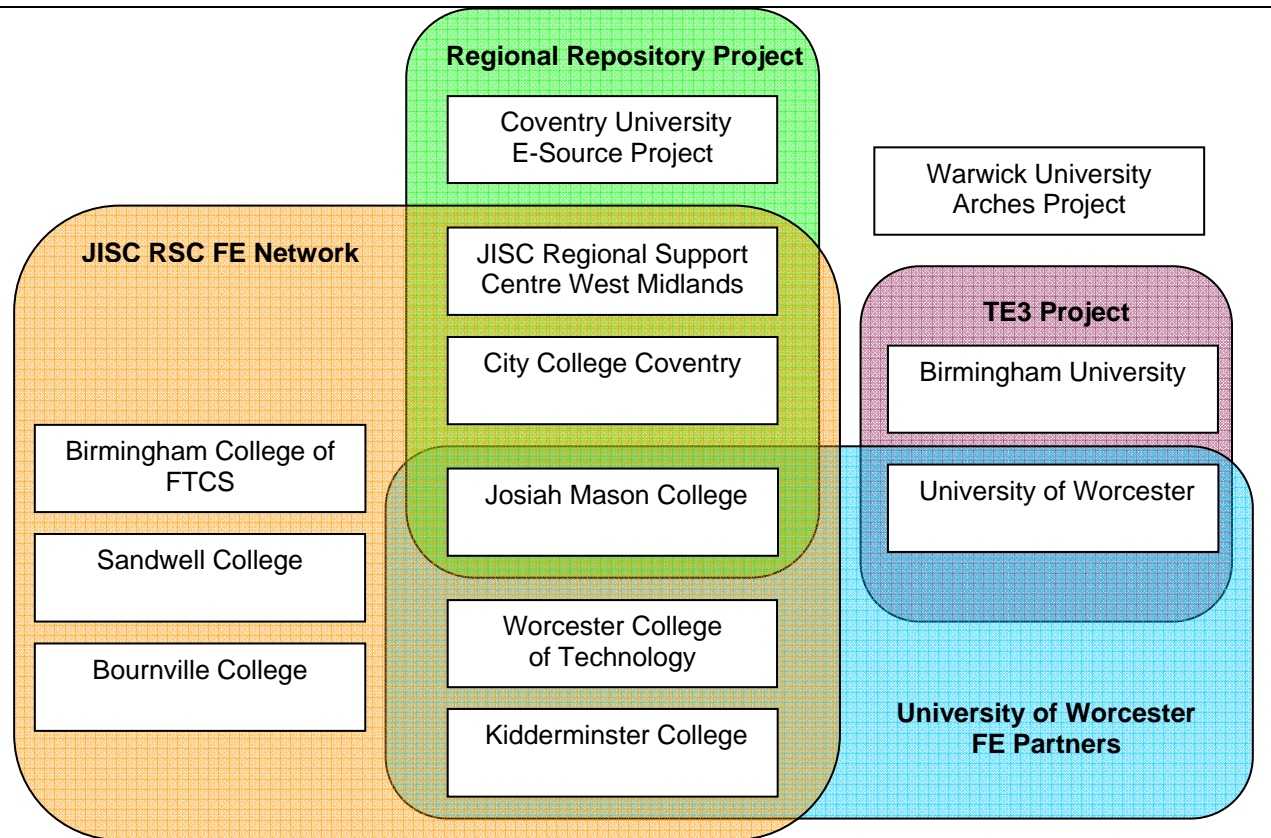


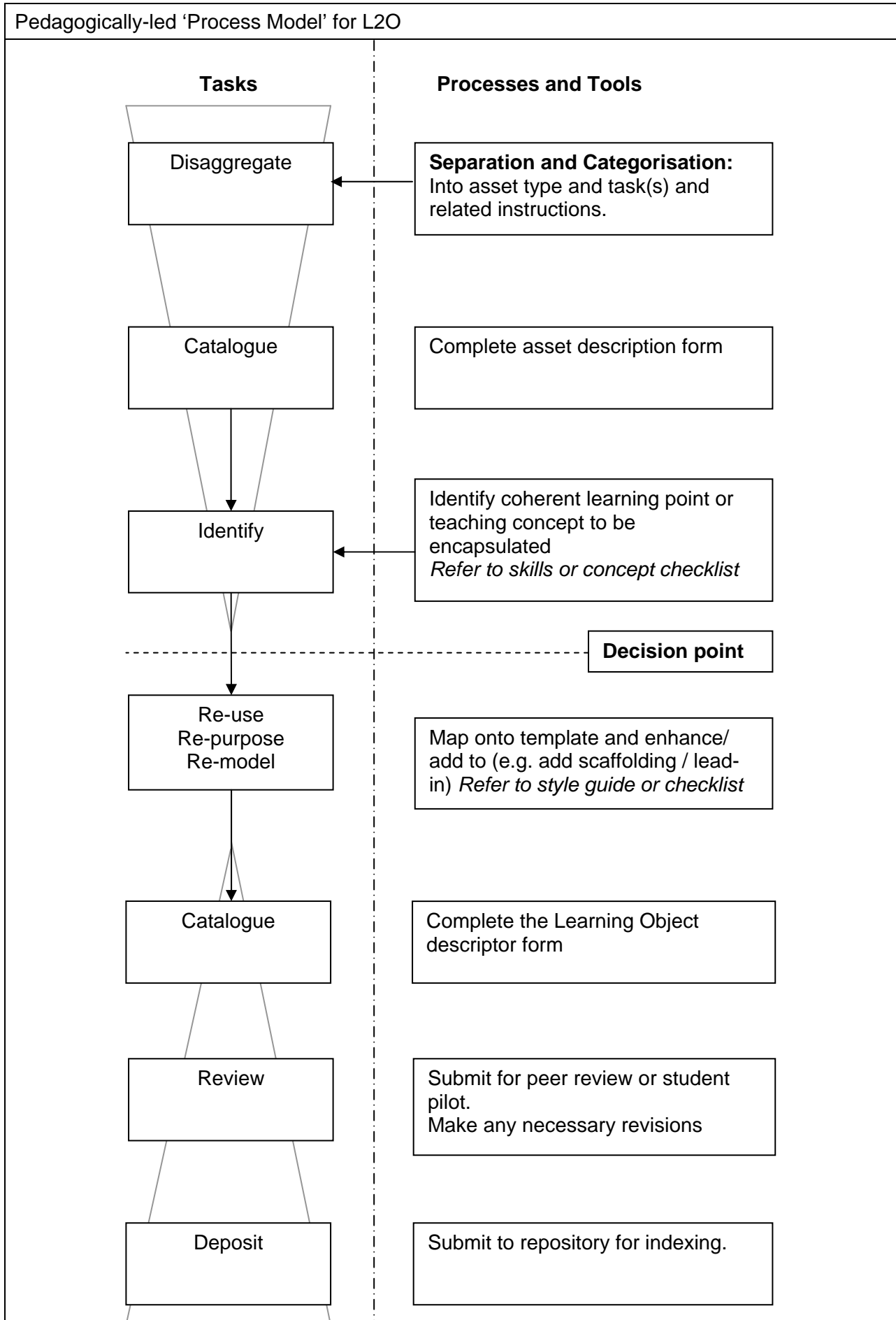
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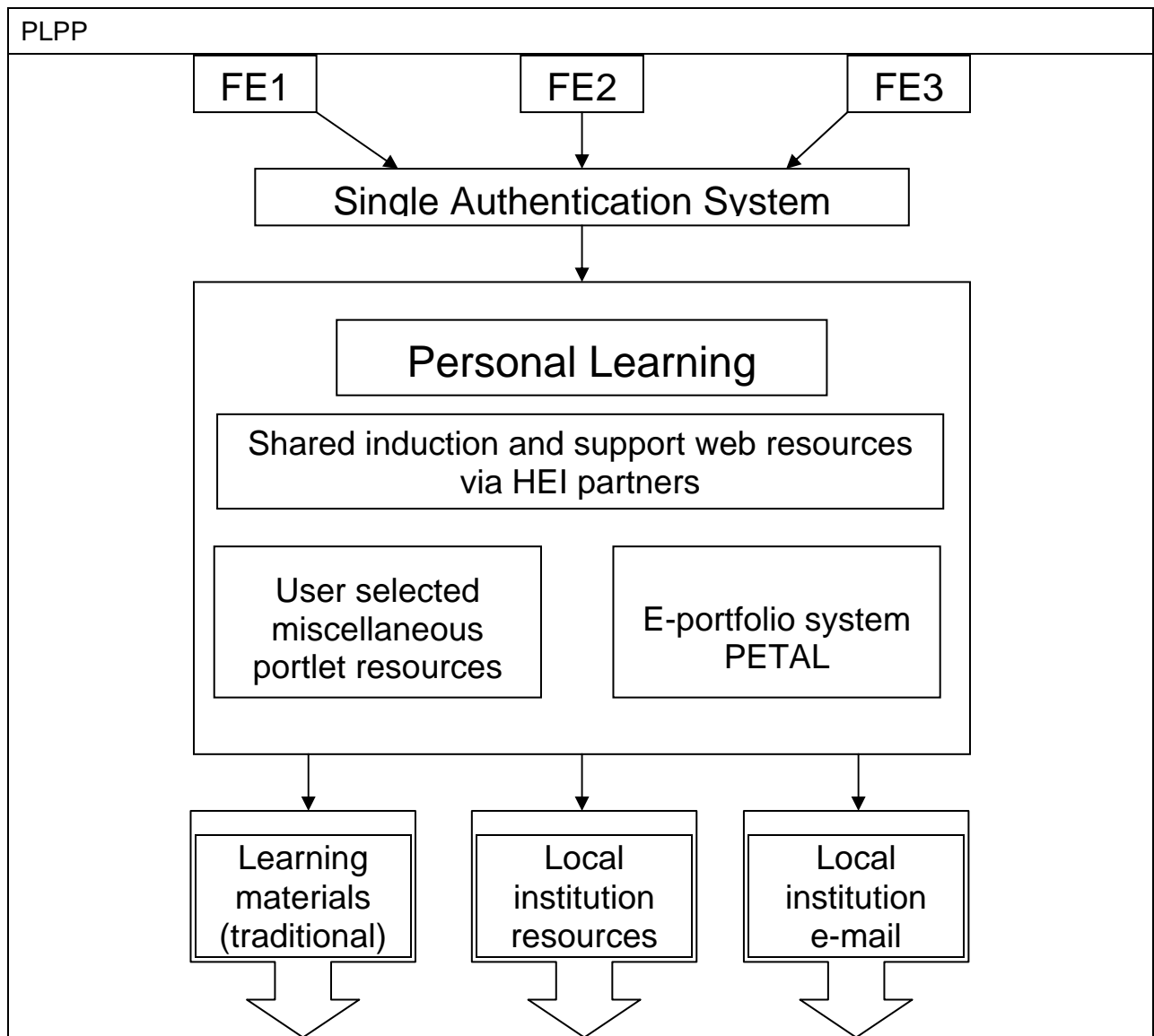
The Learning Matrix



WM-share Project Partners







## **G4L**

There is, however, an additional issue – interoperability from the users' point of view i.e. how easy is it to quickly pick up the skills needed to study at different colleges or universities. This has the potential to cause significant problems for distributed e-learning. A lack of consistent learning platforms (e.g. VLEs) among providers, together with necessary administrative procedures (enrolment/registration, logon) may undermine the aim of providing seamless learning experiences.

## **RIPPLL**

Our technical interoperability work has demonstrated that UK LeaP works, but is actually rather cumbersome and needs refinement to provide a practical solution for the future. While we have pioneered 'reduced' application profiles for particular situations, there is still work to be done in developing the standard further into a more lightweight solution. The findings of the RIPPLL project's technical work were presented to a meeting of the BSI IST/43 committee responsible for UK LeaP, hosted by the University of Nottingham. The committee then confirmed a formal request from CETIS that UK LeaP be published as a draft for development rather than as a full standard. The expertise of the RIPPLL team could make a valuable contribution to the development of a tighter, lighter version of UK LeaP designed for implementation. Consultants from Becta have also reviewed this work.

There is still a significant amount of work to be done on finding solutions to the problems of moving more complex PDP data between locations. Our initial focus on moving data between points of transition has developed to become a realisation that the distributed data model can be realised, and that it can be supported by web services and use of Shibboleth technology.

## **EELLS**

EELLS was a technical success but, as shown in Section 9, the project raised a large number of issues that will need to be addressed as the service grows. Most of these relate to the process of changing from a small scale research project to a service potentially used by a large number of learners.

One specific difficulty was that the project timescale was too short to allow planning of pilot studies within the academic timetable.

## **EERN**

The main and key conclusion is that 'winning hearts and minds' rather than developing more technology is now what is required. The whole issue of managing change has important implications for the JISC and the wider Education community. E-learning in our Institutions as followed a common pattern in ICT uptake (see Jones & Gregor, 2006). In the mid nineties the overriding philosophy was very much 'build it and they will come' and they didn't. This was replaced by 'give them a reason to come' and we did, and they still didn't. The current approach is 'build what they want and build it fast' and the jury is still out but the signs are not promising. We need the fourth generation of 'build it and own it together'.

## **eSWAP**

The project's activities evidently showed that there were many interoperability and technological issues which required addressing. Most of the projects had identified a need for a standards based approach which would make way for a technology that would enable cross-platform interactions. Further research is required therefore to investigate how the mini projects would best share materials with other institutions and possibly with regional and national organizations.

## **eLISA**

Overall, the eLISA project contributed some valuable lessons regarding the design and use of LAMS and Moodle sequences and evaluation protocols using e-learning for study skills with learners and teachers in naturalistic settings in secondary school, college and university classrooms. While the generalisability of some aspects of the evidence gathered is in doubt owing to the small numbers involved in a number of the classroom settings, there are clear

implications and recommendations for future practice in using e-learning for study skills. It is clear that some significant benefits to teachers and learners from the use of e-learning for study skills have been gained by the project, despite limitations and the relatively short timescale of the project. We recommend strongly that further work is carried out in this field, in view of the national significance of issue of study support and the potential for improving motivation and student attainment as well as HE progression from the effective use of e-learning for study skills.

#### **L4ALL**

A key conclusion of the project centres upon the overall approach taken by the project team, such as the use of the trails concept and the adoption of a user-centred approach to development. The provision of a system based specifically upon usage scenarios has proved popular with its intended users, and the evaluation has indicated that the trails concept underpinning the L4All system is extremely effective in practice. The project advisory group have also indicated that the system is much more usable and user-friendly than other existing systems in the area and that there is strong indication that the tool will help learners to reflect more deeply upon their learning choices and career decisions.

#### **REHASH**

Having successfully addressed the project objectives, one of the crucial questions that had been generated by the outcomes is both a practical and pedagogic one. Can well-designed RLOs be both large enough to be useful, and yet sufficiently unrestrained by context, as to be re-used in other institutions in similar courses?

The indications from the project are that, at least in the healthcare sector, teachers from a number of institutions require resources which are large enough to be worth the effort of collecting and using, both in lesson plans and as supplementary web-based resources. Typically this means that each teaching session might contain the equivalent of 1-3 separate resources.

Teachers involved in creating resources were asked to take the viewpoint that these resources should ideally contain the core elements for teachers in other institutions on similar courses and with similar curricula. This approach appeared to be successful.

#### **EPICS**

The EPICs project has shown that increasingly inter-institutional and inter-sector deployment of educational technologies has profound implications for the management and governance of student information (including e-portfolios and identity management). There are also significant pedagogical questions to be asked about the appropriate relationships between institutions and other agencies. There is significant further work to be conducted in this area.

Regionally based approaches to issues such as e-portfolios offer some network benefits above and beyond the project. If the intention of JISC is to stimulate implementation of its' strategic goals and project outputs then the regional dimension could be key to spreading innovation in sustainable regional networks.

#### **FILE-PASS**

It was envisaged that the main problems could involve agreeing and preparing the software. Although this did consume more resources than anticipated it did not jeopardise the project. However the experience of the project for UCLAN led to the conclusion that considerable human resource needs to be allotted for any open source development, perhaps outweighing any financial advantage over commercially available software.

#### **MANSLE**

If the further development of a service oriented architecture to support the development of the JISC e-framework is to occur it is vital that clear definitions of what constitutes a web service are produced.

Potential drawbacks to the use of technology to support these areas relate primarily to the ways in which conventional and technological approaches may duplicate or replicate each other and in ensuring effective integration of these technologies within the rest of the curriculum. The technologies must be accessible at times and from locations required to effectively support reflection and personal development. It is therefore essential that any future implementations of e-PDP and e-portfolio tools enable learners to access data both online and offline. Many students, and in certain cases staff, were confused and had a lack of clarity about the exact role of PDP and portfolio development within the curriculum and the implementation of technology simply highlighted this lack of clarity. It is interesting to note that, in common with experience of other aspects of e-learning, a number of students and staff appeared to blame the technology for their confusion and lack of understanding, rather than reflecting on the underlying reasons.

### **The Learning Matrix**

However, much of the positive benefit from the project will be lost unless ways are found to embed the work as a viable long-term service in the region. To this end, a report has been prepared for partners and relevant organisations in the area detailing what needs to be done to establish a Higher Education taster service delivered through the Learning Matrix technologies.

### **L<sub>2</sub>O**

Development of a fledgling community of practice has shown the importance of encouraging engagement through the use of appropriate technology.

For many, there is a major cultural leap in terms of taking on board proposed benefits of sharing/re-using/re-purposing resources. The project originally underestimated the time needed to move up the learning curve and the amount of hand-holding that might be needed.

### **PLPP**

There are inherent problems in using open-source products within short term projects. Open source development relies on a rigorous sharing of progress, often based on communication via email or users groups. Newcomers to open source products are not always able to benefit or contribute to progress in the short-term. JISC should consider carefully directing projects to applications, especially in such a dynamic environment where new products are frequently introduced to the marketplace without the protocols or depth of testing associated with commercial alternatives. Allocating sufficient time and resources for reviewing and evaluating products is problematic for projects.

Since PETAL was an offshoot of the OSPI (Open Source Portfolio Initiative), it should have come with similar benefits from the OSPI community. However, because PETAL had been split from the main OSPI tree, we found that our support resources were limited to a single support company (Knowledge Integration), who had restricted resources for helping with our problems. Similarly, any knowledge gained or enhancements created through this project were not fed back to the OSPI community. OSS projects can easily die without a strong support community. It is important not to create a dead-end for OSS developments by splitting them from the main tree.

### **PDP4Life**

At the time PDP4Life started, the final acceptance testing of the ioNodes had not taken place, and was not completed until July. Negotiations also had to take place with the University of Plymouth over continuing access to the SHELL server and database during the life period of PDP4Life. These issues were eventually satisfactorily resolved.

The draft specification was mapped to UKLeaP, but Simon Grant observed in his feedback to us that with reference to interoperability standards for e-portfolios, “there is not yet any clear agreement between opinion leaders in the field”.

### **ePISTLE**

The overall conclusion would be that while e-Portfolios are of evident and valuable benefit to learners and their organisations, more work should be done on investigating the feasibility of the passport model linking stages of learning, through practical application. Users need to have a

clear demonstration of the longer term benefits of using an e-Portfolio, beyond immediate applications. The key driver would seem to be whether the concept is adopted widescale by employers, to pull through demand along the whole chain.

**WM-share**

Early on in the project, within the first 2 or 3 months, it became clear that there was not as much use of repositories taking place as we had expected. We therefore included in the scope of our investigation discussion about why repository use is being “talked up” and “hyped”.