



Project Document Cover Sheet

Before completing this template please note:

- *This template is for completion by JISC funded project managers*
- *Text in italics is explanatory and should be deleted in completed documents.*
- *Please check with your programme manager before completing this form whether they would like to use a specially adapted template specific to your project.*
- *Please see Project Management Guidelines for information about assigning version numbers.*

Project Information			
Project Acronym			
Project Title	Dynamic learning maps		
Start Date	1 November 2008	End Date	31 October 2010
Lead Institution	Newcastle Univesity		
Project Director	Dr Stephen Ball		
Project Manager & contact details	Simon Cotterill [s.j.cotterill@ncl.ac.uk, (0191) 222 4540] Gordon Skelly [gordon.skelly@ncl.ac.uk, (0191) 222 4548]		
Partner Institutions			
Project Web URL	http://learning-maps.ncl.ac.uk		
Programme Name (and number)	Transforming Curriculum Delivery Through Technology		
Programme Manager	Lisa Gray		

Document Name			
Document Title	Project Plan		
Reporting Period			
Author(s) & project role	S.J.Cotterill & G.J.Skelly		
Date	18 th May 2009	Filename	Learning Maps Project Plan - final 18th May 2009.doc
URL			
Access	<input type="checkbox"/> Project and JISC internal		<input type="checkbox"/> General dissemination

Document History		
Version	Date	Comments



JISC Project Plan

Overview of Project

1. Background

Navigable **Dynamic Learning Maps** will be developed and evaluated to assist students and staff in actively mapping learning by drawing on formal curricular and personalised learning records, supported by easy-to-use facilities to add and rate resources, and tools to support discussion and reflection. These maps will fuse both 'semantic web' and 'Web 2.0' approaches, building on established technologies and standards to provide 'mash-ups' of resources and curriculum information (managed learning environments) and personal learning records (ePortfolios/blogs). The project will meet a number of JISC Programme objectives and will be of value to the wider HE/FE community. The approach will be a participative Work Package/Case Study model, working closely with students, staff, employers and other stakeholders to develop and implement a scalable, manageable and sustainable system to support the use of **Dynamic Learning Maps** to meet diverse educational requirements, ranging from Personal Development Planning to assessment.

The project builds on extensive experience in ePortfolios (ePET, EPICS projects etc) and VLEs at Newcastle to address some of the issues of course transparency in terms of what has been taught and what comes next. This has been identified as a high priority in courses such as Medicine. Where over 1500 regionally dispersed staff need to know where their contributions fit into the context of the wider curriculum.

2. Aims and Objectives

This project aims to enhance curriculum delivery and student learning through the use of dynamic learning maps, which fuse curriculum maps, learner content using elements of Web 2.0 and semantic Web approaches.

Objectives:

- Provide a navigable map of both formal (planned) curricula and personalised learning records.
- Enhance curriculum delivery by providing a very flexible space in which learners can explore their curriculum, record and reflect on their learning and evidence their skills/learning outcomes.
- Provide teachers with a better way of understanding where their teaching fits within the broader context of the curriculum, and know students' prior and future learning in specific areas.
- To allow staff and student to add and rate resources and provide curriculum leaders with better insight into the actual learning and perceived values of both internal and external learning resources.
- Allow learners and teachers to actively extend their maps and connect different parts of the maps together
- Promote the synthesis of ideas, reflection on achievements, self-awareness and forward planning.

The refinement and expansion of these objectives are part of the formative evaluation process along with the stakeholder engagement strategy.

3. Overall Approach

The project is divided into a number of Work Packages and Case Studies (see below) which are designed to meet the aims and objectives of the project. Each of these has a nominated lead who will be responsible to deliver the WP, working in conjunction with other members of the project team. Overall co-ordination will be provided by the Project Managers and the Project Working Group under the overall direction of the Project Director.

The Case Studies will involve pilots in Medicine, Psychology, Speech & Language Sciences, and possibly other subject areas. It is envisaged that a minimum of 400 students would be involved in the pilots.

The technical developments will be an iterative process informed by stakeholder feedback (an action research approach).

4. Project Outputs

The project outputs will be based around the deliverables identified in the projects work packages (below). Outputs will include:

Set-up and Engagement

- User needs analysis (user scenarios)
- Continuation strategy plan
- Project website and community blog
- Advisory board
- Dissemination plan
- Detailed project plan
- Project Officer recruitment

Developments

- Review of current practice
- Learning maps prototypes
- Refined software application and processes
- Documentation for stakeholders
- Technical guidance

Evaluation

- Refining project goals
- Piloted study with MBBS
- Documented case studies
- Evaluation process documentation.
- Evaluation report

Dissemination

- Final project report
- Internal and national dissemination events
- Project Website

5. Project Outcomes

Dynamic Learning Maps will:

- Enhance curriculum delivery by providing a very flexible approach for learners to explore their curriculum, record and reflect on their learning and evidence their skills/learning outcomes.
- Provide a better way for teachers to be able to understand where their teaching fits in with the broader curriculum (a particular problem in clinical teaching)
- To provide learners with a more holistic way of viewing their learning (a problem on many modular programmes).
- Be a flexible and interoperable tool capable of being applied in other contexts

This is intended to be a high impact project, addressing priority issues identified by learners, teachers and curriculum managers. Learning Maps will provide a flexible and interactive tool which will align with institutional Teaching and Learning Strategies and support a diverse range of requirements for specific programmes. It will also help address sector-wide drivers for greater personalisation and student involvement in the curriculum. This project will influence Curriculum Management and Quality Assurance and assist in the process of constructive alignment (convergence of the planned, taught and learned curricula).

6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance	Engagement
Learners	H	H	Pilots, focus groups
Teaching staff (including clinical teachers)	H	M	Pilots, focus groups
Curriculum managers (Medicine, Psychology, Speech)	H	H	Direct involvement, pilots
JISC	M	M	Reporting & programme/cluster events
Newcastle University (including QUL, ISS)	M	M	Dissemination & senior managers on Advisory Board
HEA Subject Centre (MEDEV)	M	M	Dissemination
FE/HE community	M	L	National events & Advisory
JISC-CETIS	M	M	Interoperability SIG
Professional bodies (GMC, BPS, RCSLT)	M	L	Dissemination via Advisory Board

7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Failure to gain wider organizational involvement	2	4	8	Develop an effective communication strategy. Implement monthly project meetings with institutional representation to plan and coordinate the project.
Staffing:- Failure to recruit	2	3	6	The School is ready to recruit with similar roles already graded and candidates successfully recruited.
Staffing:- Loss of Project Officers	1	3	3	Existing staffing availability already identified. In alignment with institutional policy there is redundant cover of most important aspects of job roles.
Technical and Legal	1	1	1	As the team are familiar with the design of all components of this development, no technical barriers are expected. No legal issues or copyright infringement are anticipated.
Insufficient institutional and community benefits	1	2	2	It is clear from support received at development stage that this project aligns with institutional strategies and has buy-in from the institution.
Scope creep	1	2	2	The scope of work outlined is clear and defined. Project meetings will work to constrain scope creep.
Major Course structure change	1	3	6	Develop flexibility within mapping tools to accommodate multiple versions.
Lack of staff engagement	2	2	4	Involve programme leaders and senior managers in the project to ensure buy in.
Lack of student engagement	2	3	6	Ensure the software meets real user requirements and benefits are clear.
Lack of admin engagement	1	3	3	Involve programme administrators and senior managers in the project to ensure buy in.

8. Standards

Name of standard or specification	Notes
XML	
SCORM	Tagging existing content
IMS Content Packaging	Used in JORUM / Intralect etc.
Leap2a	
EUROPASS	
CSS	
XCRI	Linking to learning opportunities
OPML/OML	Outline markup used in some Mind maps
RSS	
Atom	

9. Technical Development

Technical development within this project will be based on Open Source software including MySQL database, Python and Unix. The majority of the software will be developed in a python framework (Django).

We will use an iterative development process, refining the software based on stakeholder feedback and formative evaluation from the pilots. This will be a Web-based system with interactive 'Web 2.0' features utilising AJAX libraries such as jquery.

The software will be designed to be applicable in a wide range of contexts and will utilise appropriate standards and specifications (see below). It will be designed to be extensible in its ability to communicate with other systems to harvest data from other systems such as curriculum databases, VLEs, library systems, content management systems etc., but with the ability to be applied independently without dependency on external curriculum data. The software will interface with ePortfolio for personal learning records (e.g. reflective records, evidence of learning outcomes etc) with the ability to export lifelong learning records in appropriate standards including Leap2a and EUROPASS-CV.

10. Intellectual Property Rights

- Newcastle University will own the IPR for the tools and methodologies developed.
- Both software and methodologies developed will be freely available to the wider HE/FE community and downloadable from the project website. This will utilise licensing, such as the Creative Commons Attribution-Non-Commercial-Share Alike 2.0 UK: England & Wales
- Curriculum information will remain the IPR of the relevant institutions/organisations (data displayed in the maps).
- Usage of student content will be explicitly managed through formal student permission granting tools within the content tools.

Project Resources

11. Project Partners

This is a single institutional bid, but potential to add partners if capacity and time. Internal partners include:

- Learning Technologies for Medical Sciences (LTMS), School of Medical Sciences Education Development
- Medicine (MBBS)
- School of Psychology
- Speech and Language Sciences – School of Education, Communication and Language Sciences
- Quality in Teaching and Learning (QuILT)
- Library
- Information System Services (ISS)
- Careers Service

The project will also engage with JISC, the programme/cluster partners.

12. Project Management

This section lists the core project team, extended project team and Advisory Board all of whom will have access to project meetings, project and public blogs.

Core project team:

- | | |
|--|--|
| • Stephen Ball (Project Director) | >10 days |
| • Simon Cotterill (Project Management) | 20% FTE |
| • Gordon Skelly (Project Management) | 20% FTE |
| • TBA (Project Officer) | 100% FTE (interviews to be held 5 th June 2009) |
| • Paul Horner (Project Officer) | 40% FTE |

Extended Project Team:

- | | |
|----------------------|-------------------|
| • John Moss | (LTMS) |
| • David Teasdale | (LTMS) |
| • John Snowdon | (LTMS) |
| • Richard Moon | (LTMS) |
| • Tony McDonald | (LTMS) |
| • Paul Drummond | (LTMS) |
| • Sue Gill | (QuILT) |
| • Simon Meacher | (QuILT) |
| • Jim Wood | (Careers Service) |
| • Erika Gavillet | (Library) |
| • Moira Bent | (Library) |
| • Katriona Watson | (MBBS Programme) |
| • Philip Bradley | (MBBS Programme) |
| • Patrick Rosenkranz | (Psychology) |
| • Jill Moffat | (Psychology) |
| • Vicki Bruce | (Psychology) |

Project Acronym: Dynamic Learning Maps
Version: v1.1, 18th May 2009
Contact: Simon Cotterill, Gordon Skelly

- Val Tuck (Psychology)
- Anne Whitworth (Speech and Language Sciences)
- Helen Nazlie (Speech and Language Sciences)
- David Baume (External Evaluator)
- Peter Hartley (Critical Friend)
- Marianne Sheppard (Support and Synthesis project)
- Lisa Gray (JISC Programme Manager)

In addition there will be student representatives in the pilot subject areas

Advisory Board:

The role of the Advisory Board is:

- to provide advice and guidance on particular strategic issues and any potential problems as they arise during the project
- to raise the profile of the project in the Faculty of Medical Sciences
- to raise the profile of the project within Newcastle University
- to raise the profile of the project regionally and nationally
- to provide input regarding continuation and anticipated engagement & 3rd strand applicability of the project.

The Advisory Board includes:

- Geoff Hammond (Chair) HOS, Newcastle University, Director CETL4HealthNE
- Suzanne Cholerton Dean of Undergraduate Studies, FMS, Newcastle Uni
- David Davies Warwick University
- Charlie Ellis Education Officer, Student Society, Newcastle Uni
- Ella Ritchie PVC (Learning & Teaching) , Newcastle University
- Megan Quentin-Baxter Director, HEA Subject Centre, MEDEV
- Jamie Thompson NTFS, Northumbria University
- + JISC representative(s)

13. Programme Support

- Knowledge support in automatic metadata harvesting.
- Learning from the JISC Curriculum Design programme
- Cluster community

Detailed Project Planning

15. Workpackages

Work Packages (WP)	Description	Months	Deliverables
WP1: Project Management and Setup	Establish terms of reference, advisory & reporting structures. Detailed project planning and dissemination strategy. Staff recruitment.	0-3	Advisory Board. Dissemination plan. Detailed project plan. Project Officer recruited.
WP2: Review of current practice	Investigate existing structures and solutions and define requirements	0-9	4 Short Reports
WP3: Consultation with stakeholders	Identify criteria suite for mapping curricula, external relationships and personal student experiences	3-7 +ongoing	User needs analysis
WP4: Developing the Learning Maps	Implement learning maps using pilot degree programme.	0-12	Learning Maps application
WP5: Pilots	Initial large scale pilot to prove the developed concepts and infrastructure	4-20	Pilot Learning Maps in a range of contexts Documented case studies
WP6: Evaluation	Develop, and guided implementation throughout the project, using methodologies to identify and understand attainment of project outcomes	0-24	Documented evaluation processes. Evaluation report.
WP7: Refining and implementing sustainability strategy	Plan how the project deliverables can be sustained and built upon.	12-24	Sustainability strategy
WP8: Dissemination	Dissemination for engagement and understanding	0-24	Website, community blog, 2 national meetings, dissemination at national and regional conferences and local events with stakeholders.
WP9: Project Documentation	Review achievements, collate findings, document and assess outcomes.	18	Final report, Completed evaluation

16. Evaluation Plan

Methodologies will include interviews, questionnaires and focus groups. Our external evaluator will continually work with the project to develop and implement appropriate methodologies both to identify and to analyse the attainment of intended and additional outcomes. We will capture process evaluation (including 'lessons learned') in addition to evaluation of the specific case studies.

The evaluation process will include:

1. 'Goal sharpening' informed by:
 - the original project proposal
 - initial consultations with key stakeholder groups (learners, teachers, curriculum managers, senior managers)
 - user scenarios around key stakeholder groups
 - programme-level outcomes / evaluation

How will we measure if we have achieved each aims and objectives?

 - Designing evaluation instruments (questionnaires, outlines for semi-structured focus groups / interviews)
2. Capturing 'base line' data (identifying existing materials, focus groups, questionnaire)
 - describing existing curriculum delivery, including identifying problems/requirements
 - for both modular and non-modular programmes at Newcastle University
 - from the perspectives of students, teachers, curriculum managers and other stakeholders
3. Phase I formative evaluation from focus groups and initial pilots (to inform iterative development process)
 - focus on usability, interface, personalisation/preferences
 - perceptions on value for learning support
4. Phase 2 formative and summative evaluation of larger-scale pilots (focus groups, questionnaires, interviews)
 - usability, interface, personalisation/preferences
 - perceptions on value for learning support / delivery
 - perceptions on value as a vehicle to support active learning
 - capturing 'unanticipated' outcomes (open-ended questions/forums)
5. Capturing lessons learned from the process of doing the project.
6. Mapping project deliverables and outcomes to the refined aims and objectives defined in step 1.

17. Quality Plan

The outputs of the project for each of the nine work packages will be monitored by the work package lead and project management working group. The project management group will primarily involve the project director and project managers meeting regularly to review progress and monitor the quality of the deliverables.

The Advisory Group will also play a role in Quality Assurance providing timely feedback on project documentation and outputs. Engagement activities will involve the wider project team and utilise the advisory board for wider stakeholder engagement. The external evaluator will also provide input on QA processes in relation to evaluation, development and dissemination activities.

The development of software and processes will be monitored to ensure they meet existing interoperable and accessibility standards used across the HE/FE community.

18. Dissemination Plan

Dissemination for engagement will involve meetings of the broader project team and meetings related to specific subject pilots. For example the broader project team, including Advisory Board members first met on 31st March 2009. The project will also run at least two national workshops (end of year 1 workshop, end of project workshop). In addition we will disseminate the processes and implementation results of the project through:

- o a website and community blog running both during and after the project completion
- o national and internal conferences during the projects lifecycle with presentations focusing on how challenging aspects of this project where implemented
- o local workshops / training events with stakeholders

We will engage with MEDEV and other Subject Centres (also represented on the Advisory Board) to disseminate within our subject communities. We will also disseminate at other regional and national events, such as ALT-C and utilise regional networks (such as EPICS, CETL4HealthNE & JISC RSC Northern) and national networks (such as JISC, MEDEV, JISC-CETIS & CRA). One of the functions of the project Advisory Board is to help with internal dissemination (for engagement) and also with regional/national dissemination (for awareness / information).

19. Exit and Sustainability Plans

The main strategy is to ensure that the project addresses real problems for real users, and that the outputs are of particular importance and value to the stakeholders, thus maximising the likelihood of embedding, ongoing support and further development. The project team has a good track record of embedding both pedagogy and technology beyond the lifetime of the project. For example our bespoke MLE developed for Medicine is a matured TLTP3 project and the ePET portfolio developed for Medicine is an extension of an FDTL-4 project; both these are deeply embedded in the curriculum and now used by >15,000 users in other contexts. We recognise the need to continuously engage with our stakeholders to ensure that the project deliverables can be sustained and built upon. Our strategy will include the establishment of quality assurance procedures and workflows to manage the 'living' nature of these learning maps i.e. engaging with programme leaders and administrators to ensure their ongoing involvement and embedding of the project outcomes beyond the lifetime of the project.

Project Outputs	Why Sustainable / Action for Take-up & Embedding	Scenarios for Taking Forward	Issues to Address
Software	Importance to curriculum – addressing real needs of curriculum, teachers & learners Flexible, extensible, standards compliment software.	Freely available to FE/HE community. Applying in other contexts. Further refinement / extending functionality/interoperability	Change management How to resource/ sustain a community of FE/HE adopters? Identify funding model(s) for roll-out to other subjects / institutions.
Processes	Identify workflows and fit with existing processes Build in flexibility to cope with changes in the curriculum.	Further embedding in curricula Extend from curriculum delivery to formal QA and curriculum design processes	Attracting funding / commercialisation potential in other contexts (e.g. CPD)
People	Engaging a wider project team, including senior managers	Retain knowledge and expertise	Retaining knowledge and expertise (resourcing)

Appendixes

Work Package Details

WP1: Project Management and set up

In line with JISC requirements: establish project management framework and working group, Advisory Board, detailed project plan, dissemination plan, recruitment of the 100% FTE Project Officer. Project Management will be led by Simon Cotterill and Gordon Skelly, who already work closely, and have respective expertise in ePortfolios and MLEs, together with extensive project management experience.

WP2: Review of current practice. This will involve established staff in the broader project team who will undertake:

- Baseline description of how curriculum delivery takes place at Newcastle University, including examples from both modular and non-modular programmes.
- Short investigation of methods and effectiveness in participative approaches at selected institutions (e.g. ranking of resources at the Open University and node-based systems at Edinburgh University) together with a scan of JISC project reports (e.g. CAMEL tangible benefits of e-learning project¹ - to which this project team were contributors).
- Short review of tools and functionality in web-based outliners, mind maps and graphical 3D map rendering
- Short review of relevant interoperability standards (e.g. SCORM, VDEX, XCRI, QTI, LEAP2.0, RSS, Atom etc.), taxonomies, and public resource banks (e.g. JORUM) that may be of relevance to the project.

Deliverables: 4 short reports for dissemination and to inform future development

WP3: Consultation with stakeholders

This will be on-going during the project, but there will be a focussed consultation period prior to development and piloting to establish and document user-requirements. The consultation will involve curriculum leaders (see letters of support, Appendix 3), a group of students from a range of years and programmes, the project team including links with Library, Quality in Learning and Teaching Unit (to reflect institution wide requirements for PDP and an Undergraduate Skills Framework). We will also involve a least 1 employer (NHS Northern Deanery).

We already know from preliminary consultation that programme leaders have diverse concepts of curriculum maps (even in the same programme), and as such this consultation will be a crucial stage in the project to help build up a common understanding of concepts across all stakeholders. The external evaluator has proven invaluable in facilitating such discussions in previous projects.

The use of concept demonstrators (see Appendix 1) has proven useful in the discussions about this proposal and will be built upon, together with demonstrations and discussions of tools and approaches identified in WP2.

As part of this Work Package we will also develop a number of scenarios to address key questions. For example 'to what degree of granularity should Learning Maps be pre-populated from the curriculum?'

Scenario: in Medicine information skills training is linked to the curriculum at key points, and comes under the Personal and Professional Development strand which cuts across the curriculum, rather than taught discretely as generic information skills. If the Learning Map was sufficiently granular to include specific assignments then the information skills resources could be connected to these to make it easier for learners to access the relevant information at the most crucial time. For example, in Medicine the first assignment in Nutrition, Metabolism and Endocrinology requires students to be aware of how to manipulate relevant databases using suitable controlled vocabularies and search techniques in order to summarise current literature on topics. In the map this assignment would link to various online library tutorials, 'clinic' type links which allow students to ask questions of the Medical Library

¹ <http://www.jisc.ac.uk/publications/publications/bptangiblebenefitsv1.aspx>.

Liaison Team, and access to the relevant databases and software they need to complete the assignment.

Deliverables: user-needs analysis, student liaison group

WP4: Developing the Learning Maps

Developing the Learning Maps technology and pedagogy will be an iterative action research process, informed by stakeholder consultation (WP3) and pilot studies (WP5). The broader approach to our developments is outlined above (see 'Fit to programme objectives') but will vary according to the stakeholder consultation. The technical developments will include:

- Designing a data model to fit a connected nodes approach akin to neural networks. This will allow a given node in the map to be connected to any other node and the strength of that connection to grow each time it is used (relevance).
- The Maps will to some extent be 'folksonomies' (categories defined by users in a way which is meaningful to them), but there will also be the facility to add metadata to a node so that formal taxonomies can also be supported (useful for drawing in resources from other systems e.g. SCORM compliant repositories such as JORUM). These nodes will be curriculum owned, public or private.
- Maps will have multiple views; curriculum and core resources only, curriculum and personal learning information. There will also be a choice of graphical and text interfaces to support individual preferences, mobile access and accessibility requirements. There will be a need to support changing curricula, so learners access the curriculum as they studied it, not necessarily the latest version.
- Drawing in information from the MLEs may require additional technical work (Web services and changes to MLE databases and or processes to support greater granularity of curriculum information and authentication/authorisation details).
- There will be interactive features including rating of external resources, comments, reviews and discussion areas. Such approaches have been tried in a few educational contexts but to the best of our knowledge never in this way as part of a Learning Map.
- We will also integrate personal records which will be associated with specific nodes in the learners' maps these will be drawn from and written to ePortfolios (blog entries, evidence if the node is a skill/outcome, reflective notes, uploaded files, action plans etc).
- There will be management tools; for example a screen to view two curricula/skill sets simultaneously, so that they can be mapped against each other e.g. map a generic skills set to a professional vocational framework. Administrative tools will also contribute to the quality management engagement lifecycle.

In addition to the technical developments, the curriculum-owned parts of the maps will need defining with input from the programme leaders, drawing on existing information, databases and taxonomies where ever possible. There will be initial curriculum mapping that will involve a range of techniques (some programme leaders have a strong preference for flip charts, string and post-it notes! Others may use mind mapping software and others may use the Learning Map to enter information directly). After this initial capture the information will be maintained through the Learning Maps.

Deliverable: refined Learning Map application

WP5: Piloting. This will involve the delivery of a number of Case Studies (CS):

- CS1 - small-scale pilot in Medicine (Semester 2, 2008/9) with the Learning Maps embedded within the bespoke MLE (including established ePET portfolio). Evaluation from this will help further refine the technologies and pedagogy for larger pilots:
- Large scale pilots (over the full academic year, 2009/10)
 - CS2 - Medicine
 - CS3 - Speech & Language Sciences (School of Education, Communication and Language Sciences). Pilot with BSc and MSc students already using the ePET / Blackboard portfolio.
 - CS4 - we will pilot the Learning Maps with at least one modular programme drawing in module information from University MIS systems. This may include Biosciences, Combined-

Studies, and PGCE courses which already have established use of the ePET portfolio accessed via Blackboard.

Deliverables: case study reports

WP6: Evaluation

Our external evaluator will continually work with the project to develop and implement appropriate methodologies both to identify and to analyse the attainment of intended and additional outcomes. We will capture process evaluation (including 'lessons learned') in addition to evaluation of the specific case studies. Methodologies will include interviews, questionnaires and focus groups.

Deliverable: final evaluation report.

WP7: Refining and implementing sustainability strategy

The project team has a good track record of embedding both pedagogy and technology beyond the lifetime of the project. For example our bespoke MLE developed for Medicine is a matured TLTP3 project and the ePET portfolio developed for Medicine is an extension of an FDTL-4 project; both these are deeply embedded in the curriculum and now used by >10,000 users in other contexts. We recognise the need to develop and implement a continuation strategy and engage with our stakeholders to ensure that the project deliverables can be sustained and built upon. This strategy will include the establishment of quality assurance procedures and workflows to manage the 'living' nature of these learning maps. We envisage many ways in which the Learning Maps can be built on (e.g. linking topic nodes to question banks to generate formative assessment and feedback opportunities).

Deliverable: Continuation Strategy

WP8: Dissemination

The project will run at least two national workshops (end of year 1 workshop, end of project workshop) In addition we will disseminate the processes and implementation results of the project through:

- a website and community blog running both during and after the project completion
- national and internal conferences during the projects lifecycle with presentations focusing on how challenging aspects of this project where implemented
- local workshops / training events with stakeholders
- a range of established networks (see 'Engagement with the community', below).

WP9: Project Documentation

We will make the Learning Maps application and other project deliverables freely available to the JISC community. This will require supporting documentation (technical and pedagogic) which will be made available on the project Website.

Deliverables: final project report, technical documentation, Learning Maps application