


<b>Cover Sheet for Proposals</b> (All sections must be completed)			
<b>Name of Capital Programme:</b>		Institutional Exemplars Initiative	
<b>Name of Lead Institution:</b>		University of Southampton	
<b>Name of Proposed Project:</b>		EdSpace - An Educationally focussed Repository for the University of Southampton	
<b>Name(s) of Project Partner(s):</b>			
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<b>Length of Project:</b>	18 months		
<b>Project Start Date:</b>	1 October 2007	<b>Project End Date:</b>	31 March 2009
<b>Total Funding Requested from JISC:</b>		£299,970	
<b>Funding Broken Down over Financial Years (Mar–Apr):</b>			
<b>Apr07 – Mar08</b>		<b>Apr08 – Mar09</b>	
£99,148		£200,822	
<b>Total Institutional Contributions:</b>		£595,391	
<b>Outline Project Description</b>			
<p>VLEs have proved to be useful tools in facilitating staff in organising educational resources and activities in a hierarchical structure representing the structure of programmes and modules. However, while they are excellent vehicles for <i>delivering</i> materials, they are not in themselves ideal mechanisms for <i>managing and curating</i> materials. What we require is a repository of educational materials that can be used to populate VLEs</p> <p>The University of Southampton has taken the strategic decision to develop a repository for educational materials using its well established EPrints research repository software as the framework. The reason we have chosen this route is embedded in our understanding that excellent technical specifications alone will be unlikely to facilitate the cultural change necessary throughout the institution; it is the co-design process of specifying and implementing the details of the system that will be most important in ensuring community and uptake.</p> <p>The EdSpace repository will be a central part of the educational infrastructure as envisaged in the recently implemented e-Learning Strategy which focuses on enabling student centred research-led learning, inclusivity and employability.</p> <p>The EdSpace repository will be a social site allowing staff and students to share resources; it will provide for metadata, tagging, and semantic mark-up of stored items. A range of local and external tools will access the repository using services interfaces. Between the tools and the repository are service layers to allow users to annotate items according to an educational ontology or according to other metadata schemas, to set the access policies which will apply to items, and to create and access versions of items.</p> <p>The University seeks funding to accelerate the process both in implementing the technical changes to the EPrints interfaces and providing the personnel to engage academics and students in the co-design process. Both the University of Southampton and the wider JISC community will benefit from extending EPrints into the educational domain, and from the case study of the institutional change and integration.</p>			
<b>I have looked at the example FOI form at Appendix A and included an FOI form in the attached bid (Tick Box)</b>		<input checked="" type="checkbox"/>	<b>YES</b>
<b>I have read the Circular and associated Terms and Conditions of Grant at Appendix B (Tick Box)</b>		<input checked="" type="checkbox"/>	<b>YES</b>

## FOI Withheld Information Form

We would like JISC to consider withholding the following sections or paragraphs from disclosure should the contents of this proposal be requested under the Freedom of Information Act.

We acknowledge that the FOI Withheld Information Form is of indicative value only and that JISC may nevertheless be obliged to disclose this information in accordance with the requirements of the Act. We acknowledge that the final decision on disclosure rests with JISC.

Section / Paragraph No.	Relevant exemption from disclosure under FOI	Justification
None		

# **EdSpace – An Educationally focussed Repository for the University of Southampton**

## **1 Fit to the Programme Objectives**

### **1.1 Introduction**

1. Like many institutions, the University of Southampton identified the need for an educational repository for learning resources a couple of years ago. It has carried out extensive trials on two commercial content management systems. The first product was found to be wanting in many respects, but the trial did reveal the range of differing expectations of such a repository. The second product broadly met the specified requirements. However, during this period the institutional understanding of the drivers and barriers to e-learning had matured. It had become evident that the challenges that would need to be confronted in implementing such a fundamental piece of infrastructure were largely concerned with understanding and shaping user expectations, whilst oiling the wheels of cultural change, and less focused on the functionality of the technical features.
2. At the same time the University is the home of the EPrints repository software. EPrints is a well established repository platform for research artefacts (primarily publications), currently installed at 220 institutions world-wide, and funded originally by the JISC. More recently a commercial service (EPrints Services) has been established, receiving income from universities and commercial research organisations. EPrints is well embedded at Southampton hosting two of the country's largest research repositories. For the one-off cost of entering a publication and associated metadata into the system, a research-active academic gains the benefit that all future requests for details or lists of publications can be handled automatically, saving a great deal of duplication of effort. Furthermore services such as INTUTE and Google index the archive, leading to higher visibility and consequently improved citation and useful information for both individuals and the institution can be derived from the download metrics.
3. At its heart EPrints is simply a store for version-managed items, conforming to selected metadata schemas, allowing users to define access policies. Since EPrints is agnostic about the type of materials it manages there is no reason why the system should not equally be used as a repository for learning resources. Various projects have already started to use EPrints in this way. The JISC funded ClaRE learning object repository used by the Southampton and developed by the e-Languages team and a local consortium of universities is based on EPrints. It provides an innovative contextual metadata front end alongside an Eduserv funded user toolkit. In the School of Electronics and Computer Science an experimental "educational ontology" has been used with an EPrints repository to semantically annotate educational artefacts (lecture resources, programme specifications, modules, assessments etc.), and has recently been extended to provide ePortfolio facilities for students.
4. In March of 2007 members of the e-learning strategy and implementation committees took the decision that, rather than investing in a commercial repository, we would invest in growing EPrints into an educational repository to be known as "EdSpace". The primary motivation behind this choice was that it is most likely to be this very process of implementing change and building on established practice in a manner sympathetic to the institutional culture, developing appropriate multi-functional teams and establishing proven case-studies of successful use that will foster the necessary adoption by the user communities and establish the required community of practice. This University is fully committed to this process; the added value provided by JISC funding will be faster implementation, more diverse participation, dissemination and exemplars for the wider community, structured evaluation. The product of this project will be open source code supported and distributed through the established EPrints communities, JISC Repository Support Project (RSP) and by EPrints Commercial Services.
5. The world of Learning Object Repositories has begun to divide between those who take a firm quality controlled attitude to depositing tightly specified and classified items, and those who take a more open "Web 2.0" like approach. Such repositories are active spaces where people (including students) may put *any* item they wish in order to share it according to their chosen policy and preferences with other people. They should be living and dynamic repositories which may be interconnected by the semantic descriptions and their patterns of use, rather than "left luggage lockers" for static, "completed" items held in inaccessible fortresses. The proposed project takes this dynamic approach; we do not take a view on what objects may be deposited, and we certainly expect more than simply "learning objects". However a spectrum of approaches should be supported, depending on the purpose of the item being saved.

### **1.2 Reasons for Adopting the EdSpace approach**

6. There is a paradigm shift in scholarly communications; the repository is a focus for engagement with scholars (data gathering, collaboration, article preparation, archiving, reporting, research assessment,

profile building, marketing) rather than a simple storage service. Comparable benefits of process can be foreseen adopting a similar approach for education. Since the lecturers and researchers are typically *the same people*, familiarity with the one, prepares the way for the other.

7. The rationale for adopting the EdSpace approach is predicated on the institutional need for a single shared storage location for all manner of educational artefacts. Such artefacts include not only packaged learning objects but also simple educational resources, and all the supporting documentation, such as programme and module specification, assignments and feedback to students, QA documentation and evidence, student portfolios etc. Some of these documents, such as programme specifications, must be formally quality controlled and must be annotated carefully to define their position within some institutional organisational schema or ontology. Others are much less formal and have no need of quality control measures, for example the reading list for a particular module. Our experience is that heavily quality controlled, strongly licensed and prescriptive repositories tend to lock users out rather than encourage participation; our objective is to develop a repository and processes which cultivate network effects thereby establishing a broad user-base.
8. Furthermore, there should be no technical barrier to anyone tagging a document (for example a student may wish to tag a particular module to comment on their view of its value); rather policies should be used to decide who is allowed to tag with certain schema, so, for example, possibly only members of the QA team might be allowed to annotate an object using the organisational ontology, and only librarians and academics have use of the LOM tools.
9. The University of Southampton created its most recent e-learning strategy in June 2006. This strategy links directly to the 5 core themes of the Learning and Teaching Enhancement Strategy (LTES) as shown below, and the italics are used here to emphasise where the work of this project will contribute to the aims of this strategy.

LTES Theme	e-learning strategic objectives	How this bid will support these objectives
Building the infrastructure for education	The University will foster the networks and provide the physical and digital infrastructure, the support and the funding to enable Schools and their academics to engage with the Professional Services in producing world leading e-learning resources and activities.	This bid will provide the environment and context in which the library and Information Services can engage with academics. The repository <i>is</i> the infrastructure for digital resources.
Staff development and reward	Staff will be confident and suitably skilled to deploy e-learning, and should be motivated to provide excellent educational experiences, using e-learning as appropriate.	A significant portion of the funding requested will be used to employ dedicated learning and teaching advocates to develop staff competencies.
Student-centred, research-led learning	The University will <i>promote the changes in academic practice</i> and learning services necessary to advance evolution of curricula using e-learning to support <i>student-centred and research-led learning</i>	A student-centred research-led experience depends on open and timely access to learning materials.
Employability	All students who graduate from the University will have the <i>confidence and skills to operate optimally in the knowledge society, and to operate as independent learners</i> throughout their careers, both within their chosen discipline, and in the workplace generally.	The information seeking skills that students will acquire in using the repository will be transferable to the workplace. The repository will be an excellent vehicle for ePortfolios.  Furthermore the visibility of learning resources and programme and module specifications to the outside world will aid employers' understanding of the learning outcomes.
Inclusivity	E-learning will help remove barriers to learning, by allowing access to learning resources and activities, regardless of time of study, place of study, learning style preferences, cultural background or disability.	Open and timely access to digital learning resources is an essential prerequisite of any programme to facilitate independent and personalised learning.

10. As well as facilitating these central components of the University Learning and Teaching Enhancement Strategy (LTES), there are a number of other reasons for taking this approach:

#### **1.2.1 Experiences of VLE only approaches**

11. VLEs have proved to be useful tools in facilitating staff in organising educational resources and activities in a hierarchical structure representing the structure of programmes and modules. At the University of Southampton we have a mature, established and centrally supported Blackboard installation.
12. While VLEs are excellent vehicles for *delivering* materials, they are not in themselves ideal mechanisms for *managing* and *curating* materials. What we require is a repository of educational materials that can be used to populate VLEs.
13. VLEs exhibit a number of practical shortcomings. It may not be possible to rely on them to provide a permanent URL for the resource (e.g. every new build of Blackboard issues new URLs to the resources). Similarly, if modules are built so that they may only be accessed by the people that are currently involved in the module, this presents barriers of access to internal materials to students who took the course in previous years and to staff and external examiners involved in QA of the modules. There are also issues to do with replication and version control when a resource is used in multiple modules or multiple VLEs. While none of these problems are insurmountable, a far neater solution is to deposit all items in a repository, with appropriate version control and access policies, and then to *reference* these from the VLE.

#### **1.2.2 The Emerging Importance of Open Access**

14. The movement towards open access to educational resources is ever increasing. Some governments assert that all resources produced by publicly financed universities should be publicly available; MIT announced its Open Courseware initiative in 2002, predicated on the belief that the value of an MIT degree is in the educational processes and not the content alone. A number of other universities, notably the Open University in the UK are now following. While most universities, including Southampton, are a long way from fully understanding the IPR issues involved, it is clear that a repository which allows individuals to publish selected resources to the outside world is a necessary component to enable this initiative to evolve. Open Access in the research domain has already made progress towards developing more sophisticated approaches to IPR, copyright and access by developing dialogue with publishers about copyright contracts.

#### **1.2.3 The Affordances of Metrics**

15. One of the enormous benefits of the EPrints research repository is the ability to measure the accesses to a given item. We would like to leverage the same benefits in the educational world. For example, the University of Southampton has recently introduced new educationally focussed promotion routes; traditional metrics that might be used to evidence educational excellence might include the number of textbooks published and sold. The repository provides the opportunity for teachers to demonstrate similar metrics (downloads of educational resources) with a much lower production threshold.

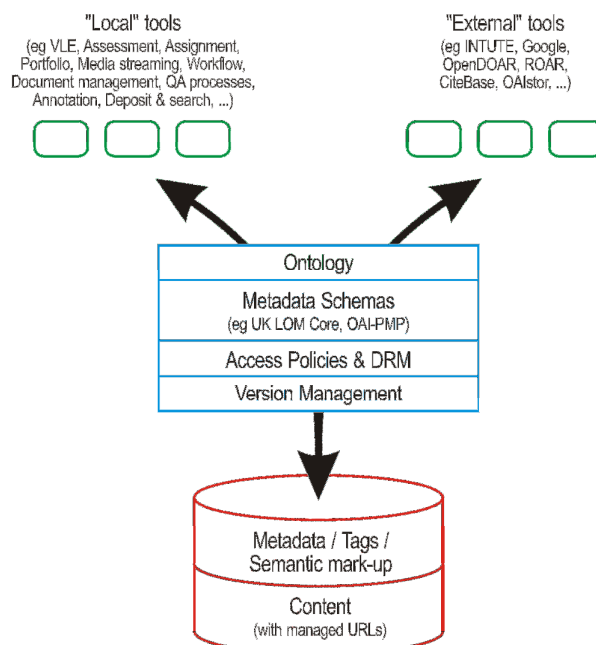
#### **1.2.4 The benefit of the process as a change agent**

16. It is the community's experience that immediate introduction of technical solutions with the highest possible technical specifications do not enable the cultural change necessary to ensure adoption; it is the process of collaborating in the specification of the appropriate schemas, policies and workflows that will ensure buy-in to the resulting system. Furthermore we anticipate that the project will act as a "Trojan horse", facilitating our educational providers (faculties / schools, programme teams and professional services) to re-evaluate and develop their e-learning provision.

### **1.3 The Proposed System**

17. Our vision is of an integrated repository of educational artefacts, as shown in Figure 1. At the bottom of this diagram is the actual repository, where items and associated metadata, tags and semantic mark-up can be stored. The URLs of items stored will be "managed", meaning that once assigned they will always point to something, even if it is a message explaining why the item has been removed.
18. At the top of the diagram a range of tools both provided locally and externally, will act as user agents to access the repository using services interfaces. Between the tools and the repository are various layers, all of which are optional, which allow users to annotate items according to an educational ontology or according to other metadata schemas, to set the access policies which will apply to items, and to create and access versions of items.
19. At its simplest this repository will provide content management and permanent storage for educational artefacts that can be shared with students, colleagues and the outside world, either via direct access or via suitable tools.
20. At its most sophisticated the repository will implement an educational semantic web, building annotation, discussion and collection services on top of the stored items.

21. The system will need to interoperate with other LORs which adhere to standards, including particularly the national JORUM repository.
22. The current EPrints system implements some part of all the layers in Figure 1, in a manner suitable for a specific research repository; the requirement will be to implement further policies, schemas and tools suitable for educational purposes.



**Figure 1 Proposed repository architecture**

#### 1.4 Scenarios of Use

23. It is our intent that the repository will be used for storing and sharing educational artefacts of many sorts, incorporating items needed for (e-)administration, quality control, course organisation, learning and teaching and assessment. The Ontology in Figure 1 is expected to represent all these classes of objects and the relationships between them (e.g. modules belong to one or more programmes. Thus when a course manager tags a new item in the repository as a module specification, they will be prompted to link to the programme specifications). The scenarios below are intended to demonstrate how the vision is much more than simply sharing learning resources.

##### Scenario 1: Options selection

24. A student needs to select which options to study. She starts with the programme specification and follows links to the allowable module specifications, then on to lecture notes, assignment instructions, past papers etc. She can then use an options selection tool which links to the information in her PDP to flag modules which are particularly relevant, or else unsuitable as she has not satisfied the pre-requisites.

##### Scenario 2: Coursework and assessment

25. The teaching repository contains a reading list for one of the MSc modules. Each student creates their own version of the reading list in the repository and annotates it with summaries and notes of their reading. They also submit a review paper for assessment, with citations and internal links to each of the items of the reading list. The lecturer marks the papers, and the marks are uploaded to the student record system. The marked papers are then imported by the students into their E-Portfolio collections back in the repository.

##### Scenario 3: Complex Objects in Teaching and Admin

26. To mark a piece of submitted work, a lecturer stores a digitally signed clone of the submission and creates annotations against the marking scheme previously submitted to the repository and correlated against the coursework description and the coursework, module and programme specifications also in the repository.

##### Scenario 4: Shared Learning Resources

27. A lecturer discovers a useful coursework resource at Leeds University, and requests a copy from the author for use within a module at Southampton. The copy is deposited in the local repository's collection of

assessment resources for the appropriate module and linked to Southampton's Blackboard VLE. Because Southampton teaches a number of shared courses with Penn State it is also linked to the ANGEL VLE at psu.edu. Comments and feedback from the from students at both institutions are collected as annotations in the repository and shared with the original author at Leeds.

### **1.5 Embedding the Implementation within the Institution**

28. The team understand that embedding a repository is not a simple matter of implementing some technology; it is the process of engaging the stakeholders in specifying the wider requirements that will most likely facilitate adoption and build the community of practice.
29. The project team includes all the parties responsible for all aspects of the educational process. It will be directed by a Project Steering Committee drawn from the eLearning Strategy and Implementation Committees
  - Project Director: The University Director of Education responsible for e-learning strategy (Hugh Davis)
  - the Learning and Teaching Support Services Manager from ISS (Bob Price)
  - the Librarian (Mark Brown)
  - the librarian responsible for e-learning (Debra Morris)
  - the director of the EPrints team (Les Carr from the School of Electronics and Computer Science).
  - the director of student services (Marion Philips)
  - the educational representative from the Student Union (currently being re-elected)
  - the Chair of the e-Learning Implementation Group (Rosalynd Jowett)
  - Su White (ECS), who will be responsible for the evaluation and dissemination.
  - Jessie Hey (ECS and the library) will advise on user engagement and community.
  - Tim Miles-Board (Manager of EPrints Services)
30. The JISC funding will enable the Steering Committee to employ a Project Implementation Team of 4 people
  - **1 project manager**, whose job will be to supervise the day to day technical output, while managing the internal liaison and advocacy and external dissemination and reporting. In the first instance we will seek to fill this post using existing staff.
  - **1 technical staff** who will be jointly employed by the EPrints team in ECS and by ISS. This post will be advertised externally in order to increase capacity in the EPrints team,
  - **2 “L&T” advocates** who will be responsible for detailed liaison and requirements elicitation and later training of staff in the participating schools. In the first instance we will attempt to fill these posts using existing staff.
31. The team will engage with academics within schools that have already expressed an interest in using an institutional repository. These schools include the following (along with the champion within the school), but all schools will be encouraged to participate.
  - School of Chemistry (Jeremy Frey – Reader in Chemistry)
  - Electronics and Computer Science (Andy Gravell – Director of Undergraduate Studies)
  - Geography (David Martin – Professor of Geography, past Head of School and Co-Director of the ESRC National Centre for Research Methods.)
  - Languages (Vicky Wright – Director of the Language Centre and Senior Academic Coordinator for Strategy for the HEA Subject Centre for Languages, Linguistics and Area Studies.)
  - Nursing and Midwifery (Rosalynd Jowett – Deputy Head of School (Education) and Chair of the e-learning Implementation Committee)
  - Oceanography and Earth Sciences (Rachel Mills – Deputy Head of School (Education))
  - Winchester School of Art (Paul Whitaker - Deputy Head of School (Education))
32. Fit within the overall University IT strategy will be central for the long term embedding of the repository. The University already handles some of its web content and other data through commercial document and content management systems, student records are managed by Banner, Blackboard and QuestionMark Perception form the backbone of our educational provision, and access is provided by the SUSSED portal. It will be a primary objective of this project to identify how the repository should interface with these existing components. Furthermore we need to develop a business model for the continuation of the repository that moves the software from the “project” stage to the point where there are clear lines of responsibility and accountability for the system.
33. We understand the requirements for continuing the work after the project funding completes. Aspects of this project are already underway. JISC funding will be highly beneficial in advancing the project, but this work is central to our e-learning strategy, and we will be investigating business models for embedding and continuation indefinitely after the funding finishes, as we have previously successfully demonstrated in embedding the institutional research repository on completion of JISC funding.

## 2 The Workplan

This workplan is based on a methodology that the University of Southampton has developed over the TARDiS and KULTUR repository projects.

Scoping Study and Work Packages (WP)	Objectives and Main Outputs
<p><b>WP 1: Project Management</b> <i>Time scale:</i> 18 months</p>	<p><b>Scope:</b> The Project Director will represent the project on University committees and to senior university management. The Project will be managed on a day to day basis by the Project Manager using JISC project management guidelines.</p> <p><b>Objective:</b> to ensure that all the Work Packages of the project are managed coherently, that institutional embedding of the project objectives is achieved and that all the project outputs are delivered within the agreed deadlines and budget.</p> <p><b>Main outputs:</b> detailed work plan; liaison and coordination with schools, central information and library services and technical team; regular reporting; editing of the project web site; dissemination programme.</p>
<p><b>WP 2: Environmental Assessment</b> <i>Time scale:</i> 3 months</p>	<p><b>Scope:</b> This will provide a scoping study outlining the range of disciplines and their perception of access to educational resources, current and anticipated practice (especially with respect to the existing VLE), key barriers to participation, and success criteria. This will determine the range of material to be included, and provide a basis for advocacy throughout the institution. The assessment will be based on existing experience at Southampton in terms of engaging with the academic community for research purposes.</p> <p><b>Objective:</b> to assess potential barriers and incentives to participation and to provide a solid basis from which to determine priorities and workflow.</p> <p><b>Main output:</b> environmental analysis report.</p>
<p><b>WP 3: Establishing Pilot Repositories</b> <i>Time scale:</i> 6 months</p>	<p><b>Scope:</b> This Work Package will set up pilot repositories based on the existing repositories at Southampton (the Institutional Research repository, the experimental ECS teaching repositories and the CLARE project repository) to facilitate the development of repository practice, and to act as a showcase for early advocacy within the institution.</p> <p><b>Objective:</b> to make pilot repositories available early in the project to aid advocacy and provide the basis for metadata analysis.</p> <p><b>Main output:</b> two early prototype (one demo, one pilot) repositories established.</p>
<p><b>WP 4: Designing Metadata Analysis and Structures</b> <i>Time scale:</i> 12 months</p>	<p><b>Scope:</b> One of the principal objectives of the project is to pilot appropriate metadata structures for the different type of educational output created by lecturers and students. This will provide a framework for outputs based on discipline perceptions of use and re-purposing, and will be linked to policy frameworks for input, rights management, access and preservation. This framework will be developed reflecting local policies. The implications for repository structure will be reviewed as part of WP5.</p> <p><b>Objective:</b> to provide a framework of outputs based on discipline need and responsive to local policies for input and retrieval.</p> <p><b>Main output:</b> Metadata structure for teaching and learning outputs scoped.</p>
<p><b>WP 5: Software enhancement and integration</b> <i>Time scale:</i> 12 months</p>	<p><b>Scope:</b> This will build on the metadata schemas established in WP4, produce the information access mechanisms to support WP6 and develop the implications for repository structure in managing teaching and learning materials in conjunction with a VLE (Blackboard) and other institutional systems. This will include both interface design and usability assessment based on user feedback.</p>

	<p><b>Objective:</b> to match the metadata structure with appropriate repository structure and to establish interoperability with the VLE.</p> <p><b>Outputs:</b> working institutional repository model for educational outputs based on local policies.</p>
<p><b>WP 6: Liaison and Advocacy</b> <b>Time scale:</b> 12 months</p>	<p><b>Scope:</b> This is one of the key activities of the project – engagement with and support for the end-user lecturers across selected schools and centres. This is achieved by an intensive schedule of meetings with individuals and groups, managers, administrators and practitioners.</p> <p><b>Objective:</b> to develop the community of practice, build capacity and to refine the user requirements for the repository software.</p> <p><b>Outputs:</b> community of practice and advocacy materials</p>
<p><b>WP 7: Rights issues</b> <b>Time scale:</b> 6 months</p>	<p><b>Scope:</b> This WP will review rights issues in educational resources, and determine a best practice method for optimising repository content. This will concentrate on practical options such as Creative Commons and Take-Down policies.</p> <p><b>Objective:</b> to provide an acceptable use model for rights issues which can be included in institutional policies.</p> <p><b>Outputs:</b> a rights framework for policy.</p>
<p><b>WP 8: Evaluation and Assessment of author behaviours</b> <b>Time scale:</b> 6 months</p>	<p><b>Scope:</b> An evaluation plan will be developed and recommendations included in the Final Report.</p> <p><b>Objective:</b> to ensure that the repository is responding to potential users and to develop policies suitable for the management, promotion and populating of the repository.</p> <p><b>Outputs:</b> report on cultural motivators, moderators and barriers.</p>
<p><b>WP 9: Data Curation and Preservation</b> <b>Time scale:</b> 3 months</p>	<p><b>Scope:</b> This will scope a model for long-term data curation and preservation for these repositories in line with current guidelines being developed by the DCC, and reflect practical options being scoped by JISC preservation standards.</p> <p><b>Objective:</b> to outline the key elements for a sustainable model for educational curation and preservation.</p> <p><b>Outputs:</b> effective modelling of curation and preservation, and contribution to developing national models for data curation for educational material.</p>
<p><b>WP 10: Publicity, Dissemination and Impact</b></p>	<p><b>Scope:</b> This will disseminate the findings of the evaluation in WP8, including the technical, cultural and political lesson learned from the implementation stage of this project.</p> <p><b>Objective:</b> to spread good practice through the community</p> <p><b>Outputs:</b> workshops, papers, presentations, briefing papers etc.</p>

## 2.1 Deliverables

34. There are two top level deliverables of the proposed project:

- The EdSpace repository with services for annotating items, incorporating an educational ontology or other metadata schemas, setting access policies, and defining version management policies. As well as providing significant value to the University of Southampton this will be an exemplar for such installations or other universities.
- Dissemination material for the wider sector in the form of reports which will identify, discuss, evaluate, and draw conclusions around the issues involved in the project, such as, the process of co-design and involvement of all stakeholders in order to ensure buy-in leading to institutional cultural change. As partners in the Repository Support Project we will be actively involved in producing briefing materials and training activities of exemplary practice.

## **2.2 Project management**

35. Cycle-by-cycle management will be undertaken by a Project Steering Committee, comprising all the project Investigators and the project implementation team meeting at least every three months. The Project Steering Committee will report into the relevant University Committees periodically.
36. Day-to-day and week-to-week management will be undertaken by the full-time Project Manager, working in consultation with and under the strategic direction of the Project Steering Committee.
37. The project will use the JISC guidelines on quality assurance, project management, and open source software development. Quality and project management will include the development of project standards for documents (e.g. requirements specifications, project glossaries; non-functional requirements); version, configuration, and change management; requirements tracking; quality reviews of software, models, and documentation (including design reviews and code walkthroughs); and maintenance of an issues log and tracker.

## **2.3 Risk management**

38. Appendix C contains the espida impact scorecards which examine the possible positive and negative outcomes in some detail. This section identifies the top level sources of risk considered most significant, estimates the project's exposure to the risk, and describes the project's approach to addressing the risk. Risk exposure (ie significance) is expressed as the product of estimated risk probability, P: 1 (low) .. 5 (high), and risk severity, S: 1 (low) .. 5 (high), to yield a risk exposure score, E: 1..25.
39. **Lack of institutional engagement** P:1 S:5 E:5. The project's Principal Investigator is the University's appointed Director of eLearning, mandated by the University's Senior Management Team to introduce appropriate institutional infrastructure, with the support of the University's central services for Computing Services and the Library.
40. **Lack of school and departmental engagement** P:2 S:5 E:10. The Project Steering Committee has been constructed to draw essential support from a wide cross-section of academic users within the University. Each member is a champion of technology-enhanced learning and has the support of their Heads of School to take forward the University's policy on eLearning and associated infrastructure. The project development approach is specifically constructed to engage all stakeholders by consultation and co-design.
41. **Difficulty developing** within the eFramework and the Information Environment P:3 S:3 E:9. While issues are expected around the appropriateness of the eFramework and its maturity during the life of this project, and around the relationship between the two over-arching architectures of the JISC eFramework and the JISC Information Environment, the project team has excellent experience of contributing to the eFramework development and is capable of defining and implementing alternative development and integrating approaches.
42. **Loss of key personnel** P:2 S:2 E:4. The project team has strength in depth and full institutional support. Relevant experience and expertise is widely available within the University's central Computing Services and the School of Electronics and Computer Science.

## **2.4 IPR**

43. The code will be made available under an appropriate open source agreement and may be used within any educational establishment in line with JISC's requirements, as per the terms and conditions of JISC grants. The University will retain IPR on the learning content, the software artefacts, and associated documentation.

## **2.5 Technical Sustainability**

44. Sustainability is ensured by providing access to the code and documentation for EdSpace through LGPLM or GPL licences. Quality factors built in to EdSpace will ensure successful Open Source life through achievement of a good OSMM rating and meeting community stated needs.
45. All reports, tools and code from the project will remain on the project server for a minimum period of 3 years following the end of JISC funding, and will be archived in the institutional repository (EdSpace) and any appropriate JISC repositories such as Jorum.
46. EPrints Services will undertake to provide commercial support options for the software deliverables.

### 3 Engagement with the Community

47. Southampton has built up a body of experience in repository advocacy and engagement, both at the individual and political levels that came initially from the JISC TARDiS project, funded as part of the FAIR programme. As a result, the stakeholders are already engaged in using a repository *for research purposes*. We intend to capitalise on our processes and our existing user practice to establish a new repository in the educational domain. A significant portion of the funding requested will be used to employ dedicated learning and teaching advocates to apply tried and tested methodologies in this new domain.
48. EPrints is a highly successful, low impact and well-supported repository platform, using open source code and supporting Open Access protocols for building novel information services. The team are regularly asked by other universities whether the system can support educational materials. This project will develop interfaces to an educational repository that will be able appropriate reuse for many purposes across the JISC educational community.
49. The project will include a dissemination phase that will ensure that both the institutional, cultural and technical results are reported. Project findings and the developed system will be promoted through national and international forums, workshops, and conferences, JISC meetings and the Repository Support Project. EPrints Services will provide the necessary services for those institutions that prefer an outsourced solution. A project Web site will be created at the start of the project and will contain current information on activities, reports on the infrastructure, toolkit architecture and tools, and review and evaluation reports. Links to relevant articles and projects relating to the project will be added. Presentations and publications derived from project work will also be available on the site. The project investigators have excellent experience of dissemination via these routes as exemplified by the University's involvement in previous projects funded by JISC, EU, EPSRC, ESRC, and NSF.

### 4 Budget

50. The budget is summarised in Figure , and provides for 4.54% indexation in years 2 and 3 of the project. The detailed budget is provided in Appendix C.

	Ytd Mar08	Apr08-Mar09	Apr09-Mar10	<b>Total</b>
	<b>Yr1</b>	<b>Yr2</b>	<b>Yr3</b>	<b>FEC £</b>
<b>Directly incurred costs</b>				
<b>Personnel</b>				
Staff	68,800	143,844	-	212,644
<b>Equipment</b>	9,000	-	-	9,000
<b>Travel &amp; subsistence</b>	1,900	7,045	-	8,945
<b>Other</b>	4,350	4,250	-	8,600
<b>Total incurred</b>	<b>84,050</b>	<b>155,139</b>	<b>-</b>	<b>239,189</b>
<b>Directly allocated costs</b>				
	<b>Yr1</b>	<b>Yr2</b>	<b>Yr3</b>	
<b>Personnel</b>	29,984	62,688	59,962	152,634
<b>Institutional estate</b>	41,109	89,852	19,254	150,215
<b>Total allocated</b>	<b>71,093</b>	<b>152,540</b>	<b>79,216</b>	<b>302,849</b>
<b>Indirect costs</b>				
General services	100,394	209,903	43,026	353,323
<b>Total FEC</b>	<b>255,537</b>	<b>517,582</b>	<b>122,242</b>	<b>895,361</b>
<b>JISC contribution</b>	99,148	200,822	-	299,970
<b>Institutional contribution</b>	156,389	316,760	122,242	595,391

Figure 2 Proposed summary budget

## 5 Previous Experience of the Project Steering Committee

51. **Hugh Davis** is the University Director of Education responsible for e-learning. He has significant experience of directing JISC projects concerned with institutional change, including the DialogPLUS project (DLIC) and currently the mPLAT project (XINSTIT eLearning). He leads the Learning Societies Lab within the School of Electronics and Computer Science, and he is a member of the JISC Learning and Teaching Committee. He has a particular interest in Institutional Change.
52. **Ian Tebbett** is the Director of Information Systems Services (ISS).
53. **Bob Price** is the Education Service Manager for ISS. He is responsible for strategic leadership in the development and deployment of systems and services to support the University's Teaching and Learning activities. The scope and involvement is at University level with Education Policy Committee, Academic Quality and Standards Committee and E-learning groups to deliver business objectives through the effective deployment of ICT. ISS are responsible for the support of the institutional EPrints repository. His team have carried out trials on various content management systems and will be responsible for the educational repository
54. **Mark Brown** is The Librarian, and has a considerable experience of directing repository projects. Has was Project Director for the JISC funded TARDIS project in the FAIR Programme to develop an institutional repository at Southampton, and currently leads the Institutional Repository Steering Group. He is currently Project Director for the JISC funded *KULTUR* Project,
55. **Debra Morris** is the curriculum resources lead in the Health Care Innovation Unit (HCIU) of the University of Southampton, the eLearning lead for the University of Southampton Library and the liaison librarian for the School of Psychology. In addition, she is the Library representative on the University eLearning Implementation Group. Debra's development plans lie in working to enhance the eLearning aspects of the work she is involved in, and to develop the contribution of the Library to eLearning within the University
56. **Marion Philips** is the Director of Student Services. She is concerned with the availability of information for students, the interfaces between various institutional systems and accessibility issues.
57. **Les Carr** is the Director of EPrints at the University of Southampton. As well as directing strategy for the EPrints platform and its community of users, he has been responsible for the development of the ECS School Research Repository and also sits on the Steering Board of the Institutional Repository. He has managed a number of JISC projects which have deployed repositories in research assessment, e-science and preservation.
58. **Rosalynd Jowett** is University Director of Education responsible for Assessment and also Director of Learning & Teaching and Quality Enhancement in the School of Nursing and Midwifery. She chairs the E-learning Implementation Committee, and brings both an institutional and School Administrative perspective to this Steering Committee.
59. **Tim Miles-Board** received his PhD on the subject of digital scholarly communication at Southampton in 2004, Tim Miles-Board has been the manager of the EPrints Services initiative since it was launched in 2005, upholding the mission to provide commercial consultancy, development, hosting and support options alongside the open-source EPrints software. He also supplies support and expertise to several research projects using EPrints, including the JISC-funded CLaRE learning object repository, R4L crystallography data repository and KULTUR consortium, and will provide similar support to this project.
60. **Su White** is a senior lecturer within the Learning Societies Lab in Electronics and Computer Science. She works with colleagues across the faculty as the school's Learning and Teaching co-ordinator. Su has considerable experience of technology enhanced learning projects, particularly from an institutional change perspective (the subject of her PhD thesis). And has made significant contributions to evaluation and dissemination activities to HEFCE and JISC funded projects in this area.
61. **Jessie Hey** has worked on a wide variety of electronic library projects including the JISC projects ERCOMS, MALIBU, PRESERV and CLADDIER which explored a range of repository services. Her PhD was in resource discovery in digital libraries and the TARDIS project work, which followed, gave an opportunity to investigate institutional repositories, make environmental assessments and create a model exemplar. A researcher in the School of Electronics and Computer Science and University of Southampton Libraries, she also explored e-learning metadata issues in the EDUSERV funded MURLLO project. She bring expertise

## **Appendix A**

### **CV's of Senior Staff Involved**

(removed)

## Appendix B

**Detailed project budget**

The budget provides for 4.54% indexation in years 2 and 3 of the project.

<b>Directly incurred costs</b>	<b>Mnths</b>	<b>Util</b>	<b>Spine</b>	<b>Gross £</b>	<b>FEC £</b>	<b>Totals</b>
Personnel year 1						
Project manager	6	100%	34	37,553	18,777	
LPrints RF ECS/ISS	6	100%	32	35,368	17,684	
Acad Engagement LSL 1	6	100%	28	31,367	15,684	
Acad Engagement LSL 2	6	100%	30	33,309	16,655	68,800
Personnel year 2						
Project manager	12	100%	34	39,258	39,258	
LPrints RF ECS/ICS	12	100%	32	36,974	36,974	
Acad Engagement LSL 1	12	100%	28	32,791	32,791	
Acad Engagement LSL 2	12	100%	30	34,821	34,821	143,844
Personnel year 3						
-						
Equipment year 1						
	<b>Qty</b>		<b>Unit £</b>			
Laptop & software	1		1,500		1,500	
PC & software	3		1,500		4,500	
Server & software	1		3,000		3,000	9,000
Equipment year 2						
-						
Equipment year 3						
-						
Travel & subsistence year 1						
	<b>Qty</b>			<b>Rate £</b>		
Local meetings	70			10	700	
UK meetings	6			200	1,200	1,900
Travel & subsistence year 2						
Local meetings	140			10	1,400	
UK meetings	12			209	2,509	
European conference	2			1,568	3,136	7,045
Travel & subsistence year 3						
-						
Other year 1						
	<b>No.</b>	<b>Grade</b>		<b>Rate £</b>	<b>FEC £</b>	
Dissemination	1				750	
Recruitment advertising	3	2		1200	3,600	4,350
Other year 2						
Dissemination	1				1,250	
Evaluation	2				3,000	4,250
Other year 3						
-						
<b>Total incurred yr1</b>					<b>84,050</b>	
<b>Total incurred yr2</b>					<b>155,139</b>	
<b>Total incurred yr3</b>					<b>-</b>	

<b>Directly allocated costs</b>	<b>Mnth</b>	<b>Util</b>	<b>Spine</b>	<b>Gross £</b>	<b>FEC £</b>	
Personnel year 1						
Principal investig LTG	6	20%	56	70,432	7,043	
Chemistry	6	10%	44	50,979	2,549	
ECS	6	20%	44	50,979	5,098	
Geography	6	10%	44	50,979	2,549	
Languages	6	10%	44	50,979	2,549	
Library	6	10%	44	50,979	2,549	
Nursing	6	10%	44	50,979	2,549	
Oceanography	6	10%	44	50,979	2,549	
Winchester So Art	6	10%	44	50,979	2,549	29,984
Personnel year 2						
Principal investig LTG	12	20%	56	73,630	14,726	
Chemistry	12	10%	44	53,293	5,329	
ECS	12	20%	44	53,293	10,659	
Geography	12	10%	44	53,293	5,329	
Languages	12	10%	44	53,293	5,329	
Library	12	10%	44	53,293	5,329	
Nursing	12	10%	44	53,293	5,329	
Oceanography	12	10%	44	53,293	5,329	
Winchester So Art	12	10%	44	53,293	5,329	62,688
Personnel year 3						
Principal investig LTG	12	20%	56	76,972	15,394	
Chemistry	12	10%	44	55,713	5,571	
ECS	12	10%	44	55,713	5,571	
Geography	12	10%	44	55,713	5,571	
Languages	12	10%	44	55,713	5,571	
Library	12	10%	44	55,713	5,571	
Nursing	12	10%	44	55,713	5,571	
Oceanography	12	10%	44	55,713	5,571	
Winchester So Art	12	10%	44	55,713	5,571	59,962
				<b>Rate £</b>	<b>FEC £</b>	
Institutional estate yr1				16,121	41,109	
Institutional estate yr2				16,853	89,852	
Institutional estate yr3				17,618	19,254	
<b>Total allocated yr1</b>						<b>71,093</b>
<b>Total allocated yr2</b>						<b>152,540</b>
<b>Total allocated yr3</b>						<b>79,216</b>

<b>Indirect costs</b>		<b>Rate £</b>	<b>FEC £</b>
General services yr1		39,370	100,394
General services yr2		41,157	209,903
General services yr3		43,026	43,026
	<b>Total indirect yr1</b>		<b>100,394</b>
	<b>Total indirect yr2</b>		<b>209,903</b>
	<b>Total indirect yr3</b>		<b>43,026</b>
			<hr/>
	<b>Total FEC yr1</b>		<b>255,537</b>
	<b>Total FEC yr2</b>		<b>517,582</b>
	<b>Total FEC yr3</b>		<b>122,242</b>
			<hr/>
	<b>Total project FEC</b>		<b>895,361</b>
			<hr/>
JISC contribution yr1	38.8%		99,148
JISC contribution yr2	38.8%		200,822
JISC contribution yr3	0.0%		-
		<b>Total JISC contribution</b>	<b>299,970</b>
			<hr/>
Institutional contribution yr1	61.2%		156,389
Institutional contribution yr2	61.2%		316,760
Institutional contribution yr3	100.0%		122,242
		<b>Total institutional contribution</b>	<b>595,391</b>
			<hr/>

## Appendix C

### espida impact scorecards

#### Balanced score card analysis

This is a complex project, for the purposes of the bid it was felt that objectives could best be articulated by a large number of score cards from a range of overlapping perspectives. Like many institutions the University of Southampton has a complex management structure. Although educational interactions are primarily between academics and individual students or groups of students, many different interactions – especially with professional services shape the nature of the learning experience. In addition responsibilities for quality assurance processes extend throughout the institution. Perspectives explores are thus structured in two parts:

#### 1) Most close to the educational activities

Academic -> Professional Services -> Institutional Manager -> Student ->

#### 2) Additionally from the immediacy of running the project/achieving higher level outcomes.

Innovation and development -> JISC -> Stakeholders

These perspectives will inform the structure and progress of evaluation of the project which will need to be formative, integrative and summative; internal and external (via critical friends).

The perspectives will also inform the dissemination activities. Dissemination will address the three objectives of knowledge, understanding and use. It is recognised that the success or otherwise of Internal dissemination will of itself affect the ultimate success of the project.

### 1.1 Academic Perspective

The contribution which will be made to academics engaged in teaching and the support of learning.

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
A1	Sharing of good practice (student-centred, research-led education) LTES	Inter departmental collaborations/usage	Increase in shared courses/resources	P	Med	+	Mid	Long term
		Collaborations with colleagues beyond UoS	WUN teaching activities, European collaborations	P	Med	+	Mid	Long term
A2	Motivation, fulfilment and satisfaction of staff ; development of climate of continuous improvement. (LTES)	Learning repository embraced by staff	System metrics; Use of repository evidenced in cases for promotion on educational route; Repository linked from module descriptions	P	Probable	+	Short	Long term
		Time spent on deposit demoralises staff	Tail off in numbers of items deposited; Increase in complaints about time spent depositing	S	Probable	-	Short	First year only
A3	Quality and potential of teaching achieved	Staff/Student engagement increases	Student feedback (evaluation, SSLC, NSS)	P	Probable	+	Short	Long term
		Changes in study patterns predominance of surface learning	Student feedback (evaluation, SSLC, NSS, examinations and coursework marks)	S	low	-	Mid	Mid term
A4	Increased academic expertise and scholarly approaches to education	Scholarly activities related to education	Participation in conferences, invited presentations	S	Probable	+	Mid	Long term
		CoP emerges, academic expertise recognised	Increase in scholarly publications as research outputs	S	Probable	+	Mid	Long term
A5	Inclusivity and accessibility for students	Accessible resources are consolidated	Audit of resources for case studies	P	Probable	+	Short	Long term
		Greater diversity of learning resources multiple perspective possible	User annotations and additions	P	Probably	+	Mid	Long term
EVALUATORS' SUMMARY								

### 1.2.1 Professional Services (Library) Perspective

The Library are key participants in this project. The repository its associated services and resultant metrics are all designed to enhance

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
L1	Enhanced usage of subscribed materials improved value for money	Improved Integration between subscribed resources and teaching materials	Referenced within module specifications and online reading lists; Increased access to subscribed resources	P	Med	+	Mid	Long term
L2	Better informed decision making for Library purchasing	Greater understanding of usage patterns of subscribed resources for education; Improved library collection effectiveness	Analysis of data on access to subscribed resources	P	Probable	+	Short	Long term
L3	Visibility of library resources	Improved student and staff awareness of subscribed services and online library resources	Increase in access to subscribed resources	P	Probably	+	Short	Long term
L4	Educationally driven usage of subscribed materials	Research output (local and national repositories) contributes to teaching base; developing applications of research-led teaching/learning	Academics set assessments which require use of recently deposited/subscribed materials	P	Probable	+	Short	Long term
		Reduced opportunity for student plagiarism	Decline in plagiarism detected via turnitin	P	Probable	+	Short	Long term
L5	Improved institutional pedagogical engagement with information literacy	opportunities for specialist library staff to link curriculum development and delivery	Module specifications and curriculum	P	Med	+	Mid	Long term
		Links to and support of the institutional employability agenda						
L6	Role of specialist Library staff within the academic team	Improved recognition of role of specialist library staff in contributing to student learning	Specialist library staff engaging more actively in curriculum development, design & delivery	P	Med	+	Mid	Long term
L7	E-learning enhancement strategy	Broader range of e-services	More integration of e-resources and service	P	Probable	+	Short	Long term
	<b>EVALUATORS' SUMMARY</b>							

### 1.2.2 Professional Services (ISS) Perspective

ISS are core partners in this bid. We rely on their active participation to ensure that project outputs are available across the campus. They have understandable concerns that the university uses reliable robust systems which can be effectively managed in the short and long term.

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
ISS1	Provision of seamless services that exploit relevant information system technologies	Folks always have access to the information they should have and not what they should not	Audit and case studies	P	Med	+	Mid	Long term
ISS2	Managing and helping to protect the University's information capital	Appropriate DRM	Audit and case studies	P	Med	+	Mid	Long term
ISS3	Effective educational software infrastructure	System welcomed by users and preferred to existing alternatives	Decrease in overall logged support requests/user	P	Med	+	Mid	Long term
		Widespread use generates unexpected costs	Increase in overall logged support requests/user	P	Low	-	Mid	Short term
ISS4	Rich portfolio of reusable educational resources which supports student learning	Widespread use of learning repository	Count of deposits and access analysed by school/faculty	P	Probable	+	Short	Long term
		Consistent Interoperable format for all user generated educational resources	Publication of specifications	P	High	+	Short	Long Term
ISS5	Enhanced ability to deal with future technology changes	Routinely using open systems to store data	Migration of educational resources from blackboard and QuestionMark to ed-space	P	Med	+	Mid	Long term
ISS6	Agile services, future proofing, coping with complexity	Ability to plan with confidence in future configurations – trust established		P	Med	+	Mid	Long term
		Support needs generate additional workload and unexpected costs – trust undermined		P	Low	-	Mid	Short term
	EVALUATORS' SUMMARY							

**1.2.3 Professional Services (Quality Assurance and Quality Enhancement) Perspective**

Significant effort is expended to assure quality of educational activities and to provide an audit trail and evidence of quality processes. The perspective relates to individuals in central services and faculty offices as well as academics and support staff with specific QA and QE responsibilities within schools. The electronic educational space has special strengths when supporting students who are off site either on placements or studying via collaborative provision.

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
QA1	Evidence base for educational processes	Single location for documents	Used within LTERAP	P	Med	+	Mid	Long term
QA2	Materials visible for auditors, external examiners	Repository assists in audits, exam boards	Used in quality processes	P	Probable	+	Short	Long term
		Issues with access rights Careless use results in public visibility of below standard documentation	Problems for external viewers/ All material visible	S	Possible	-	Short	First year only
QA3	Single source for mission critical quality documents	Handbooks, regulations, calendar located in repository	Evaluation and case studies	P	Probable	+	Short	Long term
		Definitive versions, and Version control assured	Evaluation and case studies	P	Probable	+	Short	Long term
	<b>EVALUATORS' SUMMARY</b>							

### 1.2.4 Student Support Services Perspective

Areas covered include learning support, assistive technology, learning differences. It will incorporate objectives which are also intrinsic to the technical specification and desired outcomes – eg usability etc

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
SS1	Definitive source of support information for students	Used by students, tutors and professional services	Audit of support documentation	P	Med	+	Mid	Long term
			Reduced requests monitored at enquiry points	P	Low	-	Mid	Short term
SS2	Well informed provision of student support services	Used by students, tutors and professional services	Evaluation and case studies	P	Probable	+	Short	Long term
				P	High	+	Short	Long Term
SS3	Usable resources which help university meet requirements of legislation	University meets expectations of legislation	Audits, evaluations and case studies	P	High	+	Short	Long Term
		Some materials fail to meet requirements	Audits, evaluations and case studies, appeals	S	Possible	-	Short-Mid	Mid Term
	<b>EVALUATORS' SUMMARY</b>							

### 1.3 Institution Managers

All institution managers especially, Deputy vice chancellor L&T, Deputy Deans (Education) Heads of Schools, Deputy Heads of School Education, Directors of Education, Heads and managers within professional services. These individuals will also be responsive to feedback in their specific specialist areas.

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
IM1	Organisational Knowledge	Gathering of institutional data on educational processes	New data will be available for analysis	P	Med	+	Mid	Long term
IM2	Achieving cultural change	Engaging cross institutional teams	Reported progress by project teams	P	Probable	+	Short	Long term
		Technical issues mar progress. Hostility to process outwith the teams	Teams fail to achieve cultural objectives (evaluation, case studies) Negative response from institutional managers	P	Low	-	Mid	Short term
IM3	Paradigm shift in usage of online educational resources	Novel experiences	Identified through evaluation processes Reported in scholarly publications	P	Probable		Mid	Long term
IM4	Inclusivity and accessibility of learning resources	Routine solution to publication of resources	System metrics, evaluation case studies	P	Probable	+	Short	Long term
		Insufficient resource committed, few accessible/usable resources deposited	System metrics, evaluation case studies	S	Possible	-	Short	Mid-term
	EVALUATORS' SUMMARY							

#### 1.4 Student Perspective

Considered from the perspective of the individual student, and the student cohort. These outcomes are concerned with objectives within the Learning and Teaching Enhancement Strategy particularly those concerning student centred and research led learning, inclusivity and employability.

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
S1	Engagement in learning through Web 2 approaches	Richly annotated educational resources	Large tag clouds for resources	P	Med	+	Mid	Long term
		Interest groups emerge	Patterns emerge in tag creation	P	Med	+	Mid	Short term
S2	Useful complement to existing educational approaches	System discussed in SSLC	System metrics - growing number of registrations	P	Probable	+	Short	Long term
		Usage tails off	System metrics	S	Probable	-	Short	First year only
S3	Familiar and comfortable environment	Students develop regular usage patterns	System metrics - usage logs	P	Probable	+	Short	Long term
		System discussed in SSLC						
S4	e-portfolio building	Institution wide tool to support portfolio building	Case studies	P	Probable	+	Short	Long term
S5	Inclusivity and accessibility	Resources available in range of formats which can address individual learning preferences	Usage metrics, use case studies	P	Probable	+	Short	Long term
		Greater diversity in learning resources, All learning resources published to all students						
EVALUATORS' SUMMARY								

## 2.1 Innovation and Development Perspective

The project has at its core issues of cultural change, however technical and developmental issues will be important in supporting success in the cultural arena

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
ID1	Overcoming shortcomings of VLEs	Improved processes and understanding	Evaluations, case studies, project review	P	Med	+	Mid	Long term
		Technical issues mar progress	Failure to meet deadlines	P	Low	-	Mid	Short term
ID2	Open access	Developing existing model from e-prints	Evaluations, case studies, project review	P	Probable	+	Short	Long term
ID3	Metrics	Tools to analyse usage for range of users	Evaluations, case studies, project review	P	Med	+	Mid	Long term
ID4	Process as a change agent	New behaviours/scholarships emerge	Evaluations, case studies, project review	P	Med	+	Mid	Long term
		Users fail to engage, Disinterest, hostility	Evaluations, case studies, project review	P	Low	-	Mid	Long term
ID5	Educational semantic web	New behaviours/scholarships emerge	Evaluations, case studies, project review	P	Med	+	Mid	Long term
	EVALUATORS' SUMMARY							

## 2.2 JISC Perspective

Contributions which will be made to the JISC as the primary funder

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
J1	Organisational understanding	Enhanced understanding of experience of cultural change	Evaluation reports, case studies	P	Med	+	Mid	Long term
			Dissemination activities	P	Med	+	Mid	Long term
J2	Repository Support Project (RSP) and JISC InfoNet	Active participation via partnership in RSP	Provide Briefing materials and training activities	P	Probable	+	Short	Long term
J3	Metrics and process as a change agent	New behaviours/scholarships emerge	Evaluations, case studies, project review	P	Med	+	Mid	Long term
J4	Reusable outputs for wider community	Open source	Downloads of tools and toolkits	P	Probable	+	Short	Long term
J5	Value for money	Active participation in JISC community	Meeting stated project objectives	P	Probable	+	Short to Long	Long term
		Shaping for future programmes	Collaboration with programme managers, JISC executive					
	EVALUATORS' SUMMARY							

### 2.3 Stakeholders Perspective

The contributions that will be made to the funding council(s), potential and existing students, their parents prospective employers etc. These are all of benefit to the University as an institution

	Contribution to:	Outcome	Outcome Indicator How will you know that it has happened?	Category	Likelihood	+ / -	Timescale	Longevity
ST1	Enrichment of local, national and international culture, the community, and a reflection of these within the University (mission)	Giving increased access to the public	System metrics	P	Probable	+	Short	Long term
			External users of the repository increase month on month	P	Probable	+	Short	Long term
ST2	Recognition of, and confidence in the University's brand and a reputation as being among top 10 for education in the world (corporate strategy)	Higher profile of educational activities at Southampton	Increase in donations and endowments (for educational purposes)	P	Probable	+	Short	Long term
		Exposure of poor quality learning materials	Adverse comment on teaching activities	S	Low	-	Short	Relatively short
ST3	Strong customer satisfaction and high quality service delivery (students, parents, public, etc.) (LTES)	Positive feedback directly and reported	Positive comments in NSS and module evaluations	P	Medium	+	Short	Long term
			Positive comments in media, official reports	P	Medium	+	Short	Long term
ST4	Educational attractiveness to potential students, staff, academic partners and funding agencies (LTES)	Increase in student applications	Increased competition for student places	P	Medium	+	Short	Long term
ST5	Reputation and value of Southampton to potential employers, sponsors and collaborators (LTES)			P	Medium	+	Short	Long term
	EVALUATORS' SUMMARY							

## **Appendix D – Letters of Support**

(removed)