

Overview of Project

1. Background

CIRCLE stands for Common Institutional Repositories in Collaborative Learning Environments.

The project responds to three related challenges facing Oxford Brookes University.

- The need to make a start in establishing “repositories” to address a range of needs both internally and externally facing, including Learning Object Management and specialised document archives;
- The provision of technical infrastructure to support and amplify the benefits to be gained from work to advance e-Learning both within Brookes, nationally and internationally, especially through Brookes HEA Pathfinder project;
- The need to rationalise an increasingly diverse range of solutions to content management and collaboration, including the relationship to corporate content management strategy.

A number of University initiatives in areas such as e-Learning, EDM, Web Content Management and Collaboration are currently active and to some extent addressing these challenges. But funding has been limited, due in no small part to uncertainty about the role and value of repositories and similar technologies, augmented by concerns about the organisational, sociological and psychological barriers to the effective sharing of digital content. Problems which, it is conjectured, will affect many institutions, but to which Brookes does have an encouraging opportunity of addressing, given its strong e-Learning culture, the impetus of its HEA Pathfinder Project, supportive information systems and student experience strategies, plus the active participation of Intrallect Limited.

2. Aims and Objectives

The Aims of the Project are to:

1. explore the organisational, cultural, procedural and technical challenges in creating a singular repository to fulfil the roles usually provided by discrete Learning Object Management, Open Archive and scholarly repository systems;
2. deliver these systems into live operation;
3. collaborate with Intrallect to accelerate development;
4. synergise this work through the University’s family of related Projects including -
 - HEA e-Learning Pathfinding
 - The Reinvention Centre for Undergraduate Research
 - The University’s Student Learning Experience Strategy
 - The University’s emergent EDM and Content Management Strategy
5. advance understanding and acceptance by the dissemination of the results of our work through the JISC programmes structures.

The practical priorities for the project are to establish a Learning Object Repository, for which there is an emergent operational requirement and a standards compliant Open Archive. Undertaking these activities will necessarily address the issues listed above and require the involvement of the interests and parties noted. The project Gantt chart details specific project objectives as discrete tasks.

3. Overall Approach

The project will be conducted primarily within the framework of Brookes Information Processes and Systems Strategy (IPSS). This is essentially a governance strategy conducted with the active involvement of University Senior Management. It ensures both awareness and commitment at a senior level in the University and provides policy and procedures for the approval and provision of resources. Organisationally, the primary locus of the project will be the Learning Resources Directorate under the direction of the Deputy Director and Head of Corporate Information Systems. Complementary to this, the Brookes Centre for e-Learning, which is a cross-organisational group will provide important linkage to other interests both within the University and nationally.

Critical success factors include:

- the timely appointment of technical staff;
- commitment and contributions from Academic staff as content contributors;
- protection of key staff resources from non-project based demands on their time;
- successful technical implementation of IntraLibrary software and related hardware infrastructure;
- resolution of Rights issues relating to Open Archives publications;
- identification and exploitation of effective communications channels for dissemination.

4. Project Outputs

- An IntraLibrary based Learning Object Management repository interoperating with Blackboard Campus Edition Version 6.
- Several Learning Object Repository “early adopter” initiatives located within Academic Schools’ Informed and capable academic contributors participating in the “early adopter” initiatives.
- Processes and procedures to mediate to use of the LOM.
- An IntraLibrary based Open Archive acting as a repository for Brookes scholarly and research publications;
- An agreed institutional process for deposition and exploitation of the Open Archive.
- Informed and capable contributors to the Open Archive.
- Case studies describing the experience and lessons learned from the LOM and Open Archive developments.
- A final reporting to complete the documentation of the project and assess the over-arching objectives of the project.

5. Project Outcomes

List the outcomes you envisage, including their impact on the teaching, learning, or research communities, and what change they will stimulate or enable.

An important outcome will be to established a first Learning Object Management repository for Oxford Brookes University, including procedures for its exploitation developed with early adopters among academic staff, but providing guidance and an example for the wider academic community. It is expected that this will enhance the quality of e-Learning through the promotion of advanced object based concepts and will also lead to long term efficiencies in the management of learning materials.

There is already some limited use of the national Jorum service within Brookes and the project is expected to clarify the role of this in relation to an institutional repository and stimulate the appropriate use of both.

This experience will feed into Brookes HEA funded Pathfinder project, which is concerned with identifying and exploring the means by which e-Learning may be enhanced within Brookes and other Universities.

The results expected from the Open Archive branch of the project parallels that on the LOM in so far as a working system, with procedures and an initial body of capable users is expected. And this will act as a spur for the more general adoption of the repository in the University.

At a more technical level the project is intended to counter the proliferation of similar and overlapping repository systems.

6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
Oxford Brookes University		
Learning Resources Directorate	Owner and locus of project	High
IPS Executive	Strategic and senior management oversight, with capability to resolve high level management issues.	Med
Centre for E-Learning	Influences and benefits from project, especially in relation to HEA Pathfinder work and other related projects.	High
Academic Staff	Benefit from LOM and Open Archive and contribute to development and operation.	High
Intrallect Limited	Supplier; will also benefit from advances in product functionality and application.	High

7. Risk Analysis

List factors that could pose a risk to the project's success, assess their likelihood and severity, and how you will prevent them from happening (or manage them if they if they occur). Cover the types of risks listed and any others that apply.

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staffing	5	5	25	This risk has already occurred in that difficulty appointing technical staff has delayed project. This has now been overcome through secondment.
Organisational	3	3	15	Influence of Centre for E-Learning and, if necessary, senior management.
Technical	2	4	8	Support from supplier and option to involve additional Brookes based expertise.
External suppliers	1	5	5	Alternative supplier could possibly be adopted, but would cause extreme delay.
Legal	2	3	6	Best efforts of Brookes and Intrallect legal advisers should secure contractual agreement.

8. Standards

Name of standard or specification	Version	Notes
IEEE Learning Object Metadata		Used internally in IntraLibrary. Also provides an interface (harvesting) standard.
Dublin Core Metadata		Also available through internal mapping in IntraLibrary. Provides interface standard too.
Open Digital Right Language		Rights management: Since the existing metadata standards are inadequate for rights management the repository also supports a subset of ODRL (Open Digital Rights Language) to provide flexible support for any rights model, including, for example Creative Commons
IMS Content Packaging standard	1.2	
SCORM	1.2	
SCORM	2004	
Open Archive Initiative - Protocol for Metadata Harvesting		Interface standard
Search and Retrieve Web Service/URL		Interface standards
JISC SWORD project		Parallel development project involving Intrallect; working on a deposit API for repositories

9. Technical Development

Technical development involving Brookes is limited to configuration of supplied products. Any internal development by Intrallect will conform to the company's development standards and is out of the scope of the project.

10. Intellectual Property Rights

The JISC expectations in respect of sharing of intellectual property will present no problem with the caveat that any special development of the intraLibrary product by Intrallect will become part of that product and remain the property of Intrallect Limited.

Project Resources

11. Project Partners

List all project partners (including subcontractors), their roles, and the main contact. Indicate the date a consortium agreement was signed (or will be signed), and send a copy to the programme manager.

Apart from Oxford Brookes University, the only other formal partner in the project is Intrallect Limited. A consortium agreement is expected to be signed by mid-September.

12. Project Management

The project team including their role in the project and contact details are as follows.

For Oxford Brookes University.

Stuart Brown, Deputy Director of Learning Resources and Head of CIS; chair of Steering Group and main project contact; sbrown@brookes.ac.uk

The budgeted time for Project Management is 10 days.

Richard Francis, Head of e-Learning and Learning Technologist; techno-pedagogic lead; rafrancis@brookes.ac.uk

Steve Burholt, Computing Officer; developer and assistant project manager; srburholt@brookes.ac.uk

Jan Haines, Head of Academic Library Services; research repository lead; jan.haines@brookes.ac.uk
Anne Gray, IT Development Librarian; research repository developer; anne.gray@brookes.ac.uk

Ruth Ross, Technical Services Manager; IT infrastructure liaison; ross@brookes.ac.uk

George Roberts, Educational Development Consultant; HEA Pathfinder Project liaison; groberts@brookes.ac.uk

For Intrallect Limited

Peter Douglas, Director of Operations; Intrallect Lead; p.douglas@intrallect.com

Other Intrallect personnel available to contribute to the project include Sarah Currier, Product Manager, Martin Morrey, Product Director, plus development and consultancy staff.

The core steering group membership comprises:

Stuart Brown (chair)
Richard Francis,
Jan Haines,
Ruth Ross,
George Roberts
Peter Douglas.

Other personnel listed above will be co-opted as necessary as will academic personnel from the Brookes e-Learning Forum. This is a relatively small project and much will be achieved through informal and regular networking among participants. The steering group is expected to meet as required, with decision making by consensus. In the absence of consensus the Chair will propose a solution and if this meets with strong resistance, the matter will be referred to the University's Information Processes and Systems Executive Team.

At a more tactical level work will be directed according to Brookes Project Management procedures, which are similar to those advocated by JISC. An overview Gantt chart is provided as an appendix to this document.

13. Programme Support

No specific requirements at present. Steve Burholt and Richard Francis are actively engaging in the Programme support activities, which are valuable.

14. Budget

The project budget is presented as Appendix A.. The only change from that originally submitted is that Richard Francis replaces George Roberts in the Directly Allocated Staff. The reflects revised priorities in their roles.

Detailed Project Planning

15. Workpackages

This is a relatively small project and at the present stage of development the enclosed Gantt chart constitutes the reference work breakdown. Percentage staff loadings are based on Full Time Equivalents. The reporting tasks are shown as task 32 – 36.

16. Evaluation Plan

The tasks noted below relate to Revision 2.2 of the Gantt chart.

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
Tasks 32 - 38	Exploring the organisational, cultural, procedural and technical challenges in creating a singular repository to fulfil the roles usually provided by discrete Learning Object Management, Open Archive repository systems;	Organisational, cultural, procedural and technical challenges		
Task 32	As above	As above in relation to LOM	Report	Internal approval of report by Brookes Centre for e-Learning and publication.
Task 33	As above	As above in relation to Research Repository	Report	Internal approval of report by Brookes Centre for e-Learning and publication.
Task 36	As above	Organisational, cultural, procedural and technical challenges, including a summary of the LOM and Research Repository reports.	Report	Internal approval of report by Brookes Centre for e-Learning and publication.
Task 37	As above	Organisational, cultural, procedural and technical challenges	Internal seminars and discussion papers within the Brookes Centre for e-Learning.	Review materials and data to feed into tasks 32, 33 and 36.

17. Quality Plan

The tasks noted below relate to Revision 2.2 of the Gantt chart. Note that this is not a software development project and the QA environment must be seen in that light.

Output Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
Task 4	Satisfactory Appointment.	Brookes recruitment and selection policy and procedure.	Recruitment documentation.	Recruitment lead (Richard Francis); Project Manager.	
Task 8	Project Plan	Project Steering Group Approval	Project Plan and Steering Group Minutes.	Project Manager (Stuart Brown)	
Task 12	Intrallet operational	Technical testing.	Report to Steering Group.	Developer (Steve Burholt) Project Manager.	
Task 13	Standards compliant LOM	Acceptance testing during tasks 19 and 20.	Report to Steering Group	Developer (Steve Burholt). Project Manager.	
Task 21	Standards compliant Open Archive Repository.	Acceptance testing during tasks 26 and 27.	Report to Steering Group.	Developer (Steve Burholt). Project Manager.	
Tasks 32 and 33.	Satisfactory Report	Project Steering Group Approval. Centre for e-Learning Approval.	Steering Group Minutes. Minutes of Centre for e-Learning Meeting.	Project Manager	
Task 36	Satisfactory Report	Project Steering Group Approval. Centre for e-Learning Approval. JISC Approval	Steering Group Minutes. Minutes of Centre for e-Learning Meeting. JISC Acceptance.	Project Manager	

18. Dissemination Plan

The tasks noted below relate to Revision 2.2 of the Gantt chart.

Timing	Dissemination Activity	Audience	Purpose	Key Message
Task 31	Project web site	Public	General awareness.	Existence of project and its aims.
Task 32	LOM Case Study	Stakeholders and interested parties.	Review achievement and identify issues and lessons learned.	Pros and Cons of LOM in the context of this project.
Task 33	Repository Case Study	Stakeholders and interested parties.	Review achievement and identify issues and lessons learned.	Pros and Cons of Open Archive repository in the context of this project.
Task 36	Final Report	Stakeholders and interested parties	Summary of 32 and 33 and assessment of the viability of delivering both on a common	What has been achieved. Agenda for the future.

			platform. Future planning.	
Task 38	Ad-hoc Conference / Seminar contributions.	Stakeholders and interested parties	Share experience and also gain feedback and information from other e.g. Other repository projects.	Objectives of project. Pros and Cons. Relationship to other projects and initiatives.

19. Exit and Sustainability Plans

Explain what will happen to project outputs at the end of the project (including knowledge and learning). Focus on the work needed to ensure they are taken up by the community and any work needed for project closedown, e.g. preservation, maintenance, documentation.

Project Outputs	Action for Take-up & Embedding	Action for Exit
Project Web Site	Keep available as a reference.	Maintain and update as appropriate.
LOM	Incorporate into operational service.	Maintain and extend at University expense, subject to funding.
Research Repository	Incorporate into operational service, including resolution of any outstanding Open Archive policy, regulation and legal issues.	Maintain and extend at University expense subject to funding.
Skills and expertise.	Exploit and develop to further enhance social and collaborative learning.	Post Pathfinder HEA funded projects expected to maintain impetus in this area. Other institutional and external drivers also expected.

List any project outputs that may have potential to live on after the project ends, why, how they might be taken forward, and any issues involved in making them sustainable in the long term.

Project Outputs	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Project Web Site	Low effort to maintain.		
LOM	Known demand for this application.	Part of Brookes e-Learning environment.	Funding for hardware maintenance and software licence. Staff resources to cover.
Research Repository	Policy demand for this application.	Part of Brookes research publication process.	Funding for hardware maintenance and software licence. Staff resources to cover. Acceptance by academic staff. Possibly IP issues.
Skills and expertise.	E-Enabled social and collaborative learning expected to remain a developing requirement.	Brookes continues to engage with national e-Learning initiative and sponsor related internal programmes.	Funding to maintain involvement of key staff.

Appendixes

Appendix A. Project Budget

**CIRCLE Project Funding
FEC Derived Table Incorporated in Bid**

Directly Allocated Staff	Jan 07– March 07	April 07– March 08	April 08– March 09	TOTAL £
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
The project will be steered by the Brookes Centre for eLearning (C4eL)				
Total Steering Group	£0	£0	£0	£0
Total Staff (Directly Allocated)	£12,014	£40,227	£1,237	£53,478
Directly Incurred				
Software Licenses (IntraLibrary)	£23,500	£11,750		£35,250
Server Hardware (inc 3yr maint)	£25,000			£25,000
Dissemination & Evaluation	Through Pathfinder			
Travel and reimbursibles	£0	£560	£280	£840
Total Directly Incurred	£48,500	£12,310	£280	£61,090
Overheads				
Estates	£1,183	£3,960	£122	£5,265
Indirect costs	£3,856	£12,910	£397	£17,163
Total Overheads	£5,039	£16,871	£519	£22,428
Total Project Costs	£65,553	£69,408	£2,035	£136,996
Total requested from JISC	£7,500	£22,500		£30,000
Partners Contributions	£3,819	£14,156		£17,975
Institutional contribution	£54,234	£32,751	£2,035	£89,021
Percentage contribution over life of Project:			JISC =	22%
			Partners =	78%

Appendix B. Workpackages

See Gantt Chart Version 2.2 (enclosed).