

University College Worcester (UCW): Promoting shared use of digital content repositories across the West Midlands Region

JISC Distributed E-Learning Programme

Project Plan

Overview of Project

1. Background

The collaborative creation, use and reuse of digital content, (including learning objects), has long been seen as a highly beneficial opportunity provided by the widespread use of information and communication technologies (ICT) in support of learning, teaching and assessment. Regional priorities include a need for institutions to collaborate effectively, and mechanisms are needed to enable this. The first step towards facilitating collaboration on learning objects is the creation or provision of a repository and a catalogue of that repository to enable resource discovery. There are many examples of sophisticated repositories already in evidence, and many are well populated with resources, however use of these repositories remains at low levels and the impact on learning, teaching and assessment is still minimal. Experience in some quarters suggests that key barriers to the use of digital repositories are quantity and relevance of material, access management, intellectual property rights, time to create and describe shareable resources and expertise in the creation and manipulation of resources. Some experience suggests an unwillingness amongst academics to contribute to certain types of repository.

The West Midlands town meeting identified that though there is support for a single regional repository, there was a desire to explore how access to existing resources might be shared and enhanced. There is an opportunity in the region for institutions to share the content they develop to learners in HE, FE and the schools sector, either by enabling access to their own repositories and /or contributing to regional or national systems, thus facilitating wider participation and lifelong learning. The project seeks to gather evidence from staff and students who are piloting repositories about the barriers they experience, and the models of working with and organising repositories they would prefer.

For example, a group of tutors working collaboratively in different HE and FE institutions developing a Foundation Degree face difficult choices about how to organise the sharing of the digital resources they develop. Do they use one of their institutional repositories, or a regional one, or set up their own? Where do they obtain resources from in order to repurpose them? Should they allow students direct access to the repository? How does the repository structure help meet institutions' widening participation policies?

The proposed project seeks to suggest the best way of working to give enhanced facilities for staff and for the students together with a demonstrable mechanism to achieve it (Shibboleth). All members of the consortium have such examples or similar situations to hand. Shibboleth is seen as the likely way forward for the region, and so the project will pilot its implementation in the context of access to digital learning resources.

2. Aims and Objectives

The project seeks to enable educational institutions within the region to make more effective use of their existing digital assets by promoting shared, open and accessible use of digital content across the region. In particular the project will:

- Provide and pilot a framework for managing cross-institutional authentication and authorisation of access rights to shared resources.
- Initiate sustainable and scalable collaborative projects that utilise the authentication and authorisation framework.
- Link existing collaborative projects and repositories into the authentication and authorisation framework.
- Investigate issues that need to be addressed in the collaborative use of digital repositories, making specific recommendations for further work to help overcome any barriers.
- Investigate alternative models of repository development and use, leading to a proposed strategy for the Region
- Carry out a needs analysis of potential repository users in the Region

3. Overall Approach

There are two strands to the project:

- usage pilots, needs analysis and comparison of repository models
- technical implementation and evaluation

Usage pilots, needs analysis and comparison of repository models

Pilot use of repositories will provide an opportunity to carry out an investigation of users and potential users in the region to find out how they might best work with repositories. This will involve surveys, use case studies, etc amongst lecturers, students and course developers. It will explore how repositories can be used and identify issues to be addressed if the institutions in the region are to further collaborate on the development and roll-out of such systems.

Some existing repositories will bring an existing customer base, which can be sampled. In addition, we propose to focus attention on three subject areas which could later be scaled up to include other areas:

- A. *Health Care* – at HE and FE level
- B. *Higher Level Teaching Assistants and Foundation Degrees in Learning Support and Early Years* – These courses are taught across HE and FE sectors to practitioners working in schools.
- C. *Enterprise Education* Based around the TE3 Project.

All three areas are strongly engaged with professional development, and have a significant part to play in promoting and supporting lifelong learning; they are areas in which collaboration, sharing and re-use of resources have a major role to play. As the project develops other subject areas may be included, but the above will form a substantive core of project activity.

Examples of the models to be tested include: the new West Midlands regional repository (NTI Coventry), institutional repositories at City College Coventry, Worcester College of Technology, Birmingham University, Kidderminster College; multi-institutional repositories such as Birmingham Technology Enhanced Enterprise Education (TE3), ARCHES (Warwick University), UCW Partner Colleges Repository; and JORUM. Some of these are well established, others just about to start pilot use. The project will work with samples of users from these organisations plus additional users from Bournville College, Sandwell College and Birmingham College of Food, Tourism and Creative Studies.

Technical implementation pilots (Shibboleth)

The project will include piloting the use of Shibboleth for sharing repositories and accessing external repositories, resources and systems. The project seeks to extend the use of Shibboleth to remove technical barriers to identity management, user authentication and authorisation; this will facilitate a range of collaborative pilots and projects promoting and embedding the collaborative use of digital content.

The project's work will be based on the developments at Kidderminster College working together with Birmingham University to pilot use for resources within WebCT, and the TE3 repository. Other organisations amongst the partners will provide "testbed" access to their systems in order to evaluate and prepare a technical framework.

Shibboleth pilots will therefore be carried out for example at Kidderminster College (Moodle), Birmingham University (WebCT), the TE3 repository, the new regional repository, Sandwell College (Moodle), and the LEA schools system “Virtual Workspace”

Techniques piloted can be scaled up to other institutions and online environments. It is felt that Shibboleth is the likely way forward for a regional policy and this project will confirm or moderate that policy. If the pilots prove positive, then the project will instigate a region wide adoption. The project will include reference to access to e-portfolios and will work in close collaboration with the regional project proposed and led by Wolverhampton University which also involves Shibboleth testing. This will enable a full range of different types of access to be tested out.

4. Project Outputs

The project members will work with JISC in both evaluation and dissemination of deliverables which will include:

- A written contribution to JISC dissemination for the wider programme
- A Shibboleth framework for different VLEs and repositories
- Evaluation reports from Shibboleth testbed sites
- A proposed strategy for the region in terms of a range of possible repository models
- A recommendation on the feasibility of Shibboleth as regional policy
- Evaluation report from the analysis of users needs, attitudes and models of working
- Case studies of good practice

5. Project Outcomes

We intend for the project to have the following impact:

- Continued implementation of Shibboleth in the test bed institutions
- Rolling out shibboleth testing to other institutions in the region
- The adoption of a more coherent approach to repository use and development in the region:
- A consultative network through the creation of a repositories user group facilitated by JISC RSCWM

6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
Partner institutions	Information to inform decisions about repository selection Knowledge about implementing/interoperating with repositories Frameworks for supporting staff usage Staff access to a wider body of quality content	High
West Midlands Higher Education Consortium	Information to inform decisions about repository selection / implementations at a regional level Information about managing a distributed repository environment	High
Repository owners in the region, both institutions and project-based owners	Information to inform repository development	Medium

	strategy Potential for growth in usage	
National repository owners	Information to inform their promotional activities Frameworks for supporting staff usage Knowledge about institutions implementing/interoperating with repositories	Medium
Heads of IT/LearningResource/E-Learning Units	Information to inform decisions about repository purchasing Knowledge about implementing/interoperating with repositories Frameworks for supporting staff usage	Medium

7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staffing: Unavailability of suitable staff in the project team and partners	2	4	8	Ensure commitment from partners institutions Ensure project team is run effectively Invest in staff development where necessary
Organisational: Lack of engagement of academic staff in use of repositories	4	3	12	Effective marketing and use of network contacts from project partners Extend scope by introducing additional subject areas Include engagement issues in project scope
Organisational: Lack of engagement of students in use of repositories	4	2	8	Effective marketing and use of network contacts from project partners Extend scope by introducing additional subject areas
Organisational: Partner withdrawing	2	3	6	Ensure relevance of project to individual institutions Redistribute role amongst remaining partners Recruit new partners through JISC RSC WM or current established networks at HEIs.
Technical: Technical problems implementing Shibboleth	3	5	15	Ensure good communication and support mechanisms between members of the Shibboleth implementation team Institutional review of resource allocation
External suppliers: Problems implementing Coventry College repository at UCW	2	3	6	Start implementation in good time, secure support, ensure knowledge transfer

Legal: IPR/usage restrictions result in some content not being shared	2	2	4	Include IPR issues in project scope
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8. Standards

The repositories included in the study will be evaluated according to standards for accessibility, metadata and interoperability. Considerations around usability will be taken into account.

The user data collected will be managed in line with data protection guidelines.

The project website will be accessible.

9. Technical Development

The Shibboleth implementation project will adhere to best practice.

The project website will be accessible.

10. Intellectual Property Rights

IPR issues arising from this project will be handled in accordance with the 'JISC Copyright and Licensing Guidelines'.

http://www.jisc.ac.uk/index.cfm?name=projman_copyright

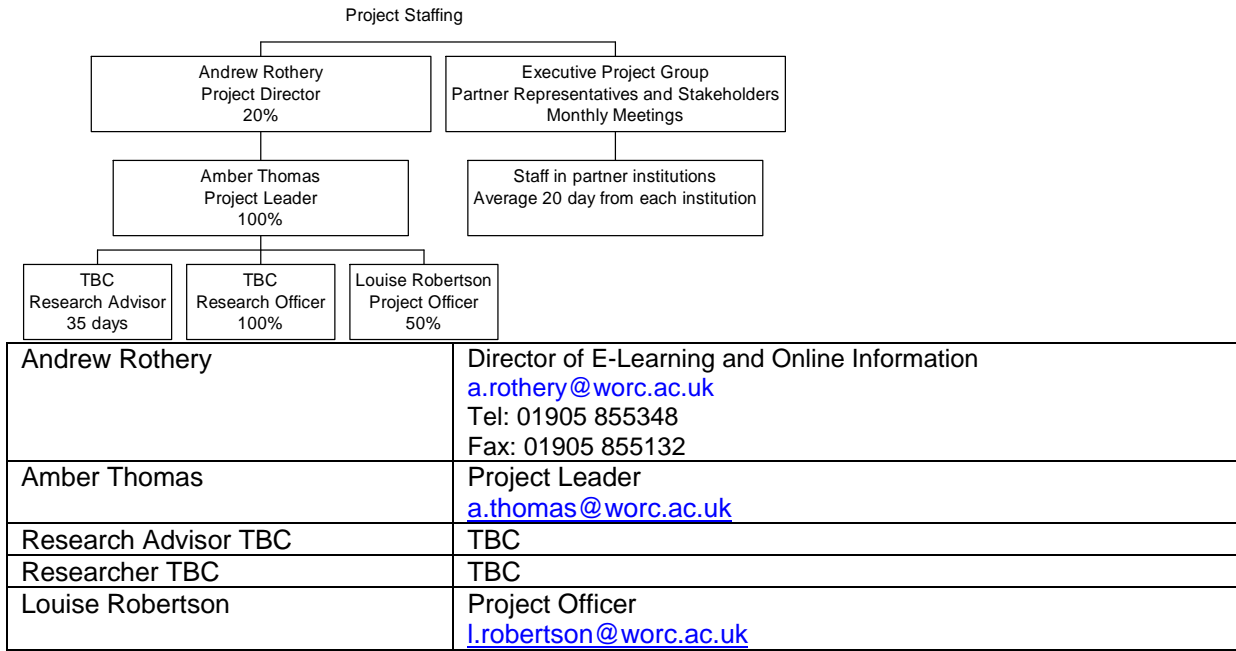
Project Resources

11. Project Partners

The Consortium Agreement has been prepared and will be signed in Mid April following the first Executive Group Meeting (21st April).

Partner	Key contact
University of Birmingham	Kelly Smith, Steven Clarke
Kidderminster College	Graham Mason
City College Coventry	Rob Talbot
Sandwell College	David Cockayne
New Technology Institute (NTI) Coventry	Adam Rugg
JISC Regional Support Centre West Midlands (RSCWM)	Peter Kilcoyne
Worcester College of Technology	Phil Cheeseman
Bournville College	Anne Goldman
Warwick University	Mark Childs
Birmingham College of Food, Tourism and Catering	Saima Akhtar

12. Project Management



Postal Address: University College Worcester, Henwick Grove, Worcester WR2 6AJ

13. Programme Support

Indicate if there are specific areas where you would like support from the programme or programme manager.

We would appreciate updates on other projects under the Programme, to ensure that we can benefit from the experience of other projects, and keep our partners briefed on the regional e-learning agenda.

In addition, we would like to be involved in the Digital Repositories Programme. The overlaps with our project are clear, and we would like to both inform the programme of our progress and findings, and also ensure that our project is situated in the context of other projects. Ideally, we would wish to be recognised as an associate project and involved in Programme Meetings and events.

14. Budget

Attached

Detailed Project Planning

15. Workpackages

Attached

16. Evaluation Plan

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
April05 – July05	Research Approach	Are we asking the right questions in the right	Executive Group	Executive group sign-off

		way?	discussion	
Nov05	Open Workshop	Was it well run and managed?	Participant evaluation forms	Over 60% satisfaction with event
Nov05	Shibboleth Evaluation reports	Are they sufficiently detailed and do they address the key issues?	Project leader feedback	Project leader signs them off
Jan05	Case studies	Are they representative and truthful?	Project leader feedback	Executive group judges them satisfactory
March05	Usage evaluation report	Does it address the key issues and is it robustly evidence-based?	Executive group discussion. Possibly external review	Executive group signs the report off Report well received by JISC Report well received by sector and West Midlands HE Association

17. Quality Assurance Plan

Explain the quality assurance procedures you will put in place to ensure that project outputs comply with JISC technical standards and best practice, and what will constitute evidence of compliance.

Technical quality assurance managed within Shibboleth subproject.

18. Dissemination Plan

Explain how the project will share outcomes and learning with stakeholders and the community. List important dissemination activities planned throughout the project, indicating purpose, target audience, timing, and key message.

Timing	Dissemination Activity	Audience	Purpose	Key Message
May05	Website launch	Partners, JISC, WM, special interest groups	Inform people the project is taking place	We want to find out the truth about repository use, and help you choose the best models for your institution/course
Nov05	IWorkshop	Partners, invited users	Report emerging findings and test hypotheses	Tell us if our data matches your expectations and experiences
March06	Project report published	Special interest groups	Inform people of key findings, advise on repository projects	The key message will depend on the project conclusions
March 06	Project reports provided to JISC	JISC	Project assurance	The key message will depend on project conclusions
April 06	Workshop/Conference	Open to all	Present guidelines, explain	We can help you choose the best models for your

			shibboleth, launch WM regional network in collaboration with WM RSC.	institution/course.
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19. Exit/Sustainability Plan

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
A written contribution to JISC	Disseminate via project workshop, to all partners and workshop attendees etc.	Inclusion on relevant JISC webpages Links on project website etc
A shibboleth framework for different VLEs and repositories	Invite technical staff / managers from HE and FE institutions and Athens to attend workshop - Disseminate via project workshop, send final report to workshop delegates and other VLE managers	Document and include on project website Send copies to all HE and FE institutions (VLEmanagers) , Athens etc
Evaluation reports from Shibboleth test bed sites	Distribute to partner institutions, technical/authentication community, RSC WM	Send copies to RSC technical staff, UKERNA and technical special interest groups
A proposed strategy for the region in terms of a range of possible repository models	Gain ownership of recommended strategy within project group, communicate to WMHEA, explore at end of project workshop	Formal reporting to WMHEA and relevant FE bodies. Establish WM Regional Network of repositories with RSCWM.
A recommendation on the feasibility of Shibboleth as regional policy	Gain ownership of recommended strategy within project group, communicate to WMHEA	Formal reporting to WMHEA and relevant FE bodies.
Evaluation report from the analysis of users needs, attitudes and models of working	Ensure report is relevant, well-presented and presents substantial "food for thought". Disseminate as widely as possible.	Publish to project website, seek opportunities to promote at events and conferences. Seek publication through relevant channels.
Case studies of good practice	Ensure availability beyond the project through offering to other services/projects. Gain ownership within project group to ensure they continue referencing them.	Publish to project website, seek opportunities to promote at events and conferences. Seek publication through relevant channels.

Project Outcomes	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Continued implementation of Shibboleth in the test bed institutions	Once users are expecting access to services, it should be maintained	Ensure knowledge transfer/staff development within testbed institutions	Need to identify/fund support for technical staff in test bed institutions
Rolling out shibboleth testing to other institutions in the region	Drivers external to the project: need for authentication solutions	Via WM Regional Network of repositories Kidderminster College to set up service	Funding for Kidderminster College team, in liaison with RSC WM

The adoption of a more coherent approach to repository use and development in the region	Repository use is rising up the agenda of senior managers	UCW to remain a hub of expertise in repository use, to provide independent advice and support to institutions	Funding for UCW staff
A consultative network through the creation of a repositories user group facilitated by JISC RSCWM	Shared interests within the institutions	UCW and JISC RSCWM could agree the structure and purpose of the group	JISC RSC / UCW to be adequately resourced

Appendixes

Appendix A. Project Budget

Appendix B. Workpackages

Amber Thomas, Andrew Rothery, University College Worcester
March 2005