



IMPLEMENTING A DIGITAL REPOSITORY AT YORK ST JOHN UNIVERSITY

Helen Westmancoat, Deputy University Librarian,
York St John University, Library and Information Services, Fountains Learning
Centre, Lord Mayor's Walk, York, YO31 7EX
h.westmancoat@yorksja.ac.uk

Context

Germany has a well developed digitisation programme thanks to funding provided by the Deutsche Forschungsgemeinschaft and the Bundesministerium für Bildung und Forschung, as well as initiatives such as the Deutsche Initiative für Netzwerkinformation (DINI) and the Network of Expertise in Long-Term Storage of Digital Resources (NESTOR). In order to strengthen the position in the UK the Joint Information Systems Committee (JISC) itself funded by the Higher Education Funding Council for England (HEFCE) began a Digital Repositories and Preservation¹ programme to include the setting up of digital repositories in higher education institutions as well as the actual digitisation of collections. The programme ran from April 2006 formally finishing in March 2009 and has invested £14 million (€15.6 million) in digital content and repository infrastructure within higher education in the UK. It encourages both improved access to research material and also better exploitation of learning and teaching materials. The programme as a whole funded projects in digital preservation, digital asset management, tools and innovation, shared services and interoperability, as well as the setting up of institutional digital repositories. At the formal ending of the programme there are now 97 higher education institutions who have implemented digital repositories, with 72 who have not.

The Start Up and Enhancement programme (SUE) that forms one strand of the whole programme has as its aim "to stimulate the population of existing repositories, enhance interoperability and embed repositories within institutional working practices such as research and learning as well as supporting the establishment of repositories where this will be sustained in to the future."² Under this funding call institutions were invited to bid for matched funding to set up an institutional digital repository or to enhance an existing one. This paper describes the experiences of one project under the SUE strand, when in September 2007 York St John University was successful in being granted almost £30,000 (€33,610) to set up a digital repository. It charts the implementation of the repository, the investigation of issues surrounding it, for example intellectual property and copyright issues, the material to be held in the repository, the exploitation of other materials held by

the university for potential deposit in the repository, usability of the software and the sustainability of the repository within the institution beyond the life of the project.

Background

York St John University is a small university located in the centre of York. York St John University can trace its roots back 168 years when it started life as a Church of England Teacher Training College in 1841. It still has a strong reputation for teacher training but only 25% of current students are training to be teachers. The university offers a wide range of programmes, and has particular strengths in Education and Theology, Sports Science and Psychology, Health and the Creative Arts. In 2006 York St John received approval from the Privy Council of the United Kingdom to become a University and took up the title of York St John University.

The university is the largest Church higher education provider in the Northeast England region and the only Church University serving the region north of Leeds. Formerly on two sites, York St John withdrew from Ripon in 2001 and is now investing substantially in its York presence. The university has approximately 6,000 students, 72% of whom are following full-time programmes of study and the remainder on part-time programmes; 86% study at undergraduate level and 14% at postgraduate.

The university hosts the Centre for Excellence in Teaching and Learning, *C4C: Collaborating for Creativity*, the aim being to enhance learning opportunities for students through creative collaboration. C4C consists of a pyramid of developing learning and teaching projects including: *Living Writers in the Curriculum*, *Enabling E-Learning*, *Arts insights into health, illness, disability and social care*. It engaged with more than 2700 students from across the university. Working from the central concept that creativity is enhanced through participation in collaborative activity, this initiative built outwards from existing excellent creative and collaborative practice in English and Theatre Studies at York St John to incorporate projects across all the faculties. C4C was, from the beginning, framed to document not just the end result of a project but importantly also the process of getting there. It was intended not just to produce a written document at the close of funding but to also provide tangible and practical visual records of the development of the projects and teaching methodologies. To this end C4C has designated photography and film technicians with the skills to create innovative and engaging documents of the wide range of project activity.

The digital products of the C4C CETL required cataloguing, and processing in a suitable format for retrieval, a digital repository being a means of doing this.

The aim of the project therefore was to establish a repository of university published teaching and learning material, initially largely material already available in digital format, focussing initially on the output from the C4C CETL as a pilot project, but extending to other material, such as theses, exam papers, special collections (Rees-Williams Victorian children's books and Theatre Royal archive) and research output. This is intended to disseminate the information to as wide an audience as possible, including the wider

community beyond higher education. The plan was to use the digital archive module of the Library Management System as software for the repository, i.e. commercial rather than open source software. The link that this had with the Library OPAC was felt to be of importance in the dissemination of material in the repository.

In order to embed the digital repository within the institution we envisaged working closely with faculties and within the senior management structure to establish necessary policies and procedures. The C4C CETL already had a well-developed dissemination strategy, employing as appropriate its web site, conferences and special interest groups. We envisaged that further dissemination would occur through the existing University and C4C Fellowship programmes, whereby staff are able to submit projects for approval and funding from senior management in order to enhance Learning and Teaching in the institution. An example of an existing C4C Fellowship that will also promote the digital repository in the institution is the exploitation of the Rees-Williams collection of Victorian Children's Books. Digitisation of extracts from this collection were a wider high priority for the Project, but efforts to attract funding for digitisation have so far been unsuccessful. However, this remains an ongoing objective.

At commencement of the project the University was at an advanced stage in the drafting of an Intellectual Property Rights (IPR) policy with approval by Senior Management Team anticipated in the Autumn term 2007. This provided a context for tackling many of the legal issues that might arise and informed the general direction of digitisation and the project. The IPR policy was agreed and is in place and forms the basis for advising staff and students on depositing to the repository. Other institutions had already faced similar situations in implementing policies and strategies for effective management of IPR in relation to the setting up of a digital repository, and we were able to make use of other JISC projects, for example, the Repositories Support Project, the Start Up and Enhancement Training (SUETr) project and SHERPA: Securing a Hybrid Environment for Research Preservation and Access project for advice and guidance.

Project progress

The project followed JISC Project management guidelines³, that were a requirement of the funding, but also proved extremely useful in keeping it on track. We were assigned a programme manager who helped us at stages in the project when we experienced problems, or was simply there to offer advice. It began with the appointment of a Digital Archive Development Coordinator for 2 days per week, to manage the day-to-day running of the repository, and the setting up of regular monthly meetings of the Project Board, which oversaw the progress of the project, and offered advice as necessary throughout it. As stated above the original intention had been to use the digital archive module of the Library Management System as repository software. Problems were then encountered in that the software company announced that the proposed software was no longer being developed, nor was it sufficiently standards compliant for our purposes. Alternative software had to be found quickly to keep the project on track, and

this came in the form of PTFS ArchivalWare, a well-established product in the US, now being marketed in the UK by PTFS Europe⁴. Open source software was not then an option for us since we did not have the staff support for it. Help in assessing the suitability of ArchivalWare came from another JISC project, MIDESS⁵, that had done an evaluation of both open source and commercially available software. We were able to benchmark PTFS ArchivalWare against the same criteria. The software and additional server hardware was installed in January 2008, with members of the Project Team and some Library staff taking part in an implementation workshop and training. Issues surrounding the implementation were discussed. PTFS Europe had already seen the project plan, and configuration options were discussed, including document types, metadata, browse structure and user requirements. Customisation work on the archive interface then began. We began loading the C4C pilot data, but overran our deadline, partly due to constraints on time, issues with production of the final images, videos, etc. from C4C and because we were developing the processes for collection at the same time as collecting the material itself. However, negotiating with project managers and with academics helped to define the required metadata.

Operational policies were developed, including submission, notice and take-down and accessibility policies, using the OpenDOAR⁶ tool. These were discussed at project board meetings and passed to senior management for approval. After some delay they were finally approved and are now on the website.

The university approved an IPR policy for staff and students shortly after the start of the project and we used this as the basis for further work done on copyright and IPR by the archive project, including the development of basic guidelines for deposit. We investigated licensing issues early on and have been using Creative Commons⁷ licenses for the pilot data, having gained approval from the contributors to do so. It is intended to use these licenses for other material to be loaded, but we have still to resolve other copyright and IPR issues in relation to student work. We intend, for example, to develop a specific license for the deposit of electronic theses in the archive.

The loading of the C4C material as a pilot process enabled us to look at procedures and establish what worked and what did not. We identified material suitable for digitisation, e.g. Women's Voices⁸ project material, theses already in digital format, past exam papers, and other learning materials. Some items have been loaded but others require more detailed handling particularly with regard to IPR and copyright issues, and in the case of Women's Voices require a separate project to deal with them. Research material has yet to be loaded in any great quantity. We intended to load some staff research articles but none were acceptable for open access under RoMEO⁹ guidelines. We have not yet established procedures for using the repository as a research publications database but this will form an ongoing element of the further development of the repository.

An unforeseen use of the repository is as a base for an online publication (*EnquireOnline*¹⁰) to publish pedagogic research and examples of student

research projects, arising from a separately-funded Enquiry Based Learning and Research-Informed Teaching project being run simultaneously in the University. The publication will be stored in the digital archive, although we will use open source software to manage the editorial process and present the publication through a distinct web interface. The first issue was launched at the beginning of March.

We had intended to digitise the Rees-Williams Victorian Children's book collection in order to make this more accessible, but funding was not forthcoming internally, and a bid for external funding was unsuccessful. However, we have recently begun a small project to investigate the feasibility of digitising a portion of the York Theatre Royal Archive, specifically playbills, with collaboration from other institutions and organisations in the local area. The resulting small collection of playbills and its associated website will be launched at the Theatre Royal at the beginning of June.

Dissemination within the university was steady beginning with a poster at the University Learning and Teaching Conference, and articles in *YorkTalk*, the staff magazine. Lunch time sessions were held in April 2008 and again in January 2009, aimed at academic staff and particularly with a research focus in mind. Presentations have been made at Faculty Quality Enhancement Committee meetings, and internal e-learning events. Externally, PowerPoint slides were produced for the OR08 Conference in Southampton, and a paper on PTFs ArchivalWare was jointly presented with the software suppliers at the SirsiDynix user group conference in May. Again in May a presentation was made at the DRaW event *Repositories for learning and teaching materials: our recipe for success*¹¹. Whenever we have presented the response has been positive. However, in common with other institutions, we feel there is some way to go in getting the message across. We have only been partially successful in partnering with the academic liaison librarians and using their information literacy skills sessions to promote the repository, in part because those parts of the project (e-theses and staff research outputs) where we will benefit most from their help are still being developed. We have found, however, that within those faculties where the academic liaison librarians have been actively promoting the archive service, the process of advocacy has been much easier. There has been higher attendance at faculty-specific workshops and sessions and a greater general awareness of the aims and progress of the project.

Initial response from staff to advocacy in the institution was good, and new areas for eventual deposit in the repository were identified – the Women's Voices fishing community project, the PLACE publications project, and the products of the Enquiry-Based Learning/Research Informed Teaching project, as mentioned above. This provided an extra day's funding for the repository project, and the publication, *EnquireOnline*, is being developed, eventually using open source software to manage the editorial process. The repository was launched in November 2008 with associated publicity disseminated within and outside the university. The Vice-Chancellor made a

speech that recognised the importance of a digital archive in the learning landscape.

The project conducted two small usability sessions, the first with a small group of students in the art and design department; the second with users of the Fountains Learning Centre. The first session, which was run shortly after the software was initially installed, was used to make a preliminary assessment of the archive interface. The second was a small-scale usability evaluation, and aimed to explore to what extent the effectiveness of the PTFS ArchivalWare software is affected by the elements of the interface and, where the interface is identified as being ineffective, to suggest ways in which the user interface might be improved. The objective of the study was to provide material which could then be used to develop an informed plan for making changes to the interface.

Sustainability has been an issue and it has proven difficult to resolve. This was all the more surprising because of the investment made by the institution in the project in addition to the JISC funding. We lobbied for continuation of the Digital Archive Development Coordinator post as early as May 2008 but were only granted permission to take the post forward towards the formal end of the project. Due to institutional financial constraints it is now being funded for 2 days per week from within the Library and Information Services budget from monies released by the resignation of another member of library staff, although it is now a permanent post. The post also includes other elements of library work in relation to web development and systems work. An additional one day per week continues to be funded from the Enquiry Based Learning project for the operation of the online publication until June 2010.

The server continues to be managed and maintained by ICT Services with the Digital Archive Development Coordinator having access via remote desktop for the purposes of configuration and database maintenance.

Other library staff have taken on cataloguing duties in respect of material deposited and for ensuring linkages with the OPAC. It is proposed, however, to purchase federated searching software so that the repository and library catalogue can be searched at the same time, and removing the need for cataloguing items in both the library catalogue and the repository, as had been envisaged originally. In addition, it has become clear as the project has progressed that not all material added to the repository is suitable for inclusion on the library catalogue.

Further developments

Now that the initial project is complete and methods have been established enabling deposit of learning and teaching materials in the repository, it is intended to focus on research material. The university is in the process of applying for Research Degree Awarding Powers, and storage, dissemination and retrieval of its research output is an important element in that process. There is also a great emphasis on research-informed teaching and Enquiry Based learning involving students as well as staff in research so the repository is an ideal means for storage of that research material. As mentioned above it is intended to use the repository as a research

publications database, providing open access where licensing permits to the full text of research papers. This will also help the institution with its assessment and funding under the national Research Excellence Framework. Additionally we shall continue with the York Playbills Project, in the hope that we can attract funding for a full-scale project. Electronic theses will be loaded, and copyright clearance gained where possible for those currently in a “dark” part of the archive.

With regard to the technical operation of the repository, we intend to work with the software suppliers, or to apply for further JISC funding, to develop an interface for the automated deposit of material, and for its retrieval in a format that is acceptable to the Research Excellence Framework. We shall also investigate batch input of records in XML format.

Conclusions

Gaining JISC funding enabled the establishment of an institutional repository at York St John University for the storage and dissemination of learning and teaching materials, in particular C4C CETL material. It has provided a base for developing digital content in the university, whether born digital or in need of digitisation. It has established a platform for developing access to and control of research materials. It has also enabled us to link with other projects in the university for mutual benefit.

Working with a commercial software supplier has provided experience that may be useful to other institutions.

The project team learned a lot from following JISC Project management guidelines that will be useful in setting up other projects in the university, or for acquiring further JISC funding. We also learned much about institutional processes and the time they can take. In common with other institutions we understand better the need to proactively promote the repository in order to win hearts and minds and mainstream the repository in the institution and beyond.

¹ Joint Information Systems Committee Repositories and Preservation Programme. [Internet] Available from: <http://www.jisc.ac.uk/whatwedo/programmes/reppres.aspx> [Accessed 9 May 2009]

² <http://www.jisc.ac.uk/whatwedo/programmes/reppres/sue.aspx> [Accessed 9 May 2009]

³ JISC Project management guidelines. [Internet] Available from: <http://www.jisc.ac.uk/fundingopportunities/projectmanagement> [Accessed 12 May 2009]

⁴ PTFS Europe Limited [Internet] Available from: <http://www.ptfs-europe.com/> [Accessed 13 May 2009]

⁵ MIDESS (2007) MIDESS Functional and Technical Requirements Specification. [Internet] Leeds, University of Leeds. Available from: <http://ludos.leeds.ac.uk/midess/MIDESS%20workpackage%20%20-%20Functional%20and%20Technical%20Requirements%20Specification.pdf> [Accessed 28 October 2008]

⁶ OpenDOAR: the directory of open access repositories [Internet] Available from: <http://www.opendoar.org/> [Accessed 9 May 2009]

⁷ Creative Commons [Internet] Available from: <http://creativecommons.org/> [Accessed 10 May 2009]

⁸ Women’s stories [Internet] Available from: <http://www.fishingarts.co.uk/womensvoices.html> [Accessed 10 May 2009]

⁹ SHERPA/RoMEO: publisher copyright policies and self-archiving. [Internet] Available from: <http://www.sherpa.ac.uk/romeo/> [Accessed 9 May 2009]

¹⁰ EnquireOnline [Internet] Available from: <http://www2.yorks.ac.uk/EnquiryCommons/eonline.html> [Accessed 9 May 2009]

¹¹ DRaW (Developing Repositories at Worcester) (2008) Using Repositories for Learning and Teaching: Can we find a recipe for success? [Internet] Available from: <http://www.worc.ac.uk/drawproject/99.htm> [Accessed 23 February 2009]

York St John University, May 2009