ALISS Quarterly

Association of Librarians and Information professionals in the Social Sciences

Special issue: Supporting the new research environment.

Data support

data.bris at the University of Bristol;

Research Data Management Training for Librarians

University of Edinburgh, DataCite.

Supporting research

Support Unit for Research Evidence (Cardiff University),

Northampton Open Journals.

Supporting teaching and learning

Reusing qualitative archived materials at UK Data Archive;

Glasgow Caledonian University and the PILOT tutorial.

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Special issue: Supporting the new research environment.

Editorial

Welcome to the latest edition of ALISS Quarterly. It has been published by ALISS (Association of Librarians and Information Professionals in the Social Sciences).

This special issue was inspired by the contents of the recent RLUK report Reskilling for research http://www.rluk.ac.uk/content/re-skilling-research which was conducted by Mary Auckland, and published in January 2012. The 115 page report can be downloaded from the website. The survey focussed upon 23 academic libraries in the UK, exploring the information needs and seeking behaviours of researchers and mapping the role of Subject Librarians to these needs. Its key findings identified a potential skills gap in the ability of subject librarians to assist researchers in a number of emerging areas. Several of these related to data support: including knowledge of data management and curation, data manipulation tools and data mining. Other areas of concern included metadata knowledge, preservation of research outputs and knowledge of research funding sources. The report discusses current sources of training available for library staff in these areas and future needs.

Following on from this, this issue focusses upon good practice in the perceived areas of weakness.

A major sector highlights data. John Kaye writes about the British Library involvement in the Datacite project which aims to encourage and develop standards of data citation, Stuart Macdonald and Robin Rice write about developing a toolkit of data management tools for training library staff at the University of Edinburgh and David Boyd about the development of a data management service at the University of Bristol.

In terms of other areas, the University of Cardiff write about their efforts to support researchers in conducting systematic reviews and Miggie Pickton speaks about the work of the University of Northampton in preserving research outputs by supporting the publication of open access journals. In the final section we focus upon teaching and learning. Dr Bethany Morgan Brett provides case studies of how archived qualitative data can be used by researchers and Marian Kelt describes how the Pilot online tutorial for postgraduate researchers was reused at Glasgow Caledonian University

We hope you enjoy the issue.

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data.bris : towards a research data management service for the University of Bristol

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Introduction

Bristol is a large, research-intensive university that supports both individual scholarship and interdisciplinary or thematic research across a wide variety of disciplines. The *data.bris* project[1] was funded by Jisc as part of its Managing Research Data programme[2], over 18 months from October 2011 to March 2013. The central aim of the project was to establish a research data repository service at the University of Bristol, building on the investment already made in research data storage through the University's existing Research Data Storage Facility (RDSF). The service was piloted within the Faculty of Arts and as part of the project a business plan developed to extend the model across the University.

This paper will consider the background to the *data.bris* project, its outputs and achievements, and conclude by reporting on some of the open questions around research data management and the potential role of the Library Service in this area.

Project drivers

Having made a significant investment in physical data storage by way of the RDSF the University of Bristol is in a good position to meet the demands of its researchers who are working in an increasingly data intensive environment. However, the majority of funding bodies now require research institutions to actively manage their research data, beyond simple storage. Researchers themselves are also driving activity in this area and are increasingly requesting help and advice at all stages of the research project lifecycle, i.e., pre-award (preparation and completion of data management plans), throughout the course of the project (creation and organisation of data), and post-project (selection and archiving of data). Like most, if not all UK universities, no coordinated approach to supporting University researchers with the management of research data existed, and to a greater extent, individual researchers and project teams were left to their own devices at various stages of the lifecycle. It was felt that the current facilities, including the RDSF, needed to be extended and supported by a proper, integrated service where data would be created, stored, shared and preserved in order to meet both the needs of the immediate researchers and the ongoing needs of secondary data users. The need to develop policies and work processes that address the wider issues of data curation, sharing and preservation, through more effective management of research data, was seen as a significant challenge that needed to be addressed.

Project background

The *data.bris* project originated in the University's IT Services R&D/ILRT division[3] and following a successful bid for funding from Jisc a project team was formed, including

1   data.bris project: data.bris.ac.uk/jisc-project/
2   Jisc Managing Research Data programme, 2011-2013:
     www.jisc.ac.uk/whatwedo/programmes/di_researchmanagement/managingresearchdata.aspx
3   IT Services R&D / ILRT: www.bris.ac.uk/ilrt/

members of R&D/ILRT and the University's Advanced Computing Research Centre who manage the RDSF. At the time, wider discussions concerning the role of libraries in support of research, and the challenges libraries faced in the sphere of research data management (RDM) had begun to emerge, therefore at its inception I joined the project by way of a half-time secondment, with a view to helping the Library Service assess how it might begin to support the evolving information needs of researchers in this area. A Steering Group consisting of senior managers from around the University, including the Pro Vice-Chancellor for Research, and the Head of Information Management and Library Development, was also set up to oversee the project, support the development of new RDM policies, and monitor delivery of the service.

Project outcomes

The Jisc funded project was successful in allowing the institution to begin to develop several components of a RDM service, one built around the existing storage infrastructure. On the technical side, work involved the development of web-based software services to help improve the practice of data sharing and citation by enabling University researchers to deposit research datasets (or create a 'skeleton record' if data is to be held elsewhere) and the capture of associated metadata; to allow those deposited research datasets to be made publicly available; and to provide open, public access to Bristol research datasets via a web-based catalogue. Policy work involved the extension of existing University policies to embed relevant aspects of data management and the development of a set of high-level, multi-agency Research Data Management Principles for the University. On the training and awareness front, work involved the development of a series of disciplinary
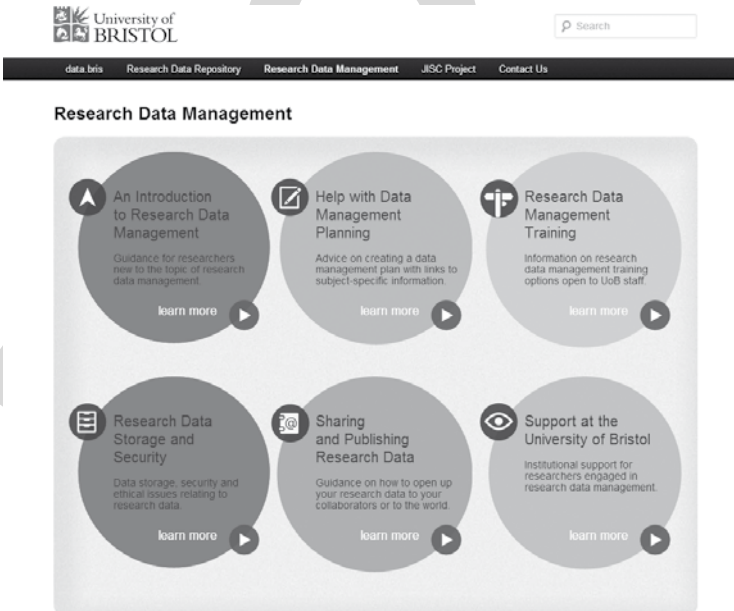
University of Bristol, Research Data Management website

focused guidance and training materials for research staff; the provision of one-to-one surgeries to support researchers in practicing good data management, and to advise on the development of data management plans; the development of a research data 'nexus' intranet website[4] to help research staff find appropriate support and co-ordinate the input of different University agencies.

Another key deliverable of the Jisc funded project was the development of a business plan to roll-out a University-wide RDM pilot service. The case was subsequently approved by the University and the *data.bris* service pilot will be developed on a phased basis, over two and a half years.

From project to pilot service

The *data.bris* pilot service will be a Library-led collaboration with IT Services and the University's Research Enterprise Development section. In taking the pilot service under its wing the Library has recognised that as the nature of research within the University evolves so must the role of the Library in support of research. The service pilot will aim to support research staff from PhD level onward. Phase 1 will continue to develop the work of the Jisc funded project until July 2013; phase 2 from August 2013-July 2015 will gradually extend the service pilot and will address the issues around developing the full service (phase 3) from August 2015, including scoping how the ongoing service should be structured and staffed, and investigate any opportunities for shared services with collaborating Universities or consortia. The service pilot will begin to promote a new culture of active research data management across the University, with a vision that by 2015 *data.bris* will be a focal point for 'all things RDM' at the University of Bristol.

The business plan attempted to take a realistic approach to resource requirements, seeking a small team of staff in 2013-2015 to create the foundations of a viable service and recognising that by 2015 we will be able to draw on experience from the service pilot to more fully understand the part to be played by the Library in supporting RDM, and the role of Library staff members in particular. The core activities of the pilot service team will be: assisting with data management planning; delivering training in research data management; advocating the opening up of research data across the University and managing the new Research Data Repository. With a relatively small team, expectations will need to be managed as to the level of support which can be given to individual researchers. It is likely that members of the team will focus their attention on particular faculties and begin to build up discipline specific knowledge. The faculty-specific liaison activities piloted during Phase 2 will aim to inform the definition of a new role(s) of Research Data Librarians.

In developing a business plan to scale up data.bris to a pilot service, the question of how the University undertakes long term curation of its digital assets still needs to be addressed to a large extent. There are a number of issues to which we do not yet have full answers, though it is likely that a number of agencies from around the University will be need to be involved if the service is to be successful.

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4   University of Bristol, Research Data Management website: data.bris.ac.uk/research

Research Data Management Training for Librarians – An Edinburgh Approach

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Stuart Macdonald (stuart.macdonald@ed.ac.uk), Associate Data Librarian, University of Edinburgh

There is an abundance of pointers in recent literature for academic libraries to move "upstream" in the publication process and work more closely with researchers at the pre-publication stages (Gold, 2007). For example, LIBER (Association of European Research Libraries) set down " Ten Recommendations for Libraries to Get Started with Research Data Management" in 2012, including providing support services for data management plans, metadata and data standards, developing staff skills in data librarianship, encouraging open data policies, supporting the entire research data lifecycle and promoting data citation. This is reinforced by the JISC Managing Research Data programme[1] (2011-1013) in particular the Research Data Management Training strand whose aim was to increase research data management skills in UK higher education and research organisations by providing high quality training materials developed to serve the needs of a variety of roles and stakeholders.

During autumn and winter 2012-13, data librarians at the University of Edinburgh led a pilot course on Research Data Management (RDM) based on the research data MANTRA course[2] originally developed by Edinburgh University Data Library for early career researchers. Materials from the course were subsequently assembled to produce the 'Do-It-Yourself Research Data Management Training Kit for Librarians'.

The training kit uses a blended learning approach and is designed to contain everything needed for academic librarians in small groups to get themselves up to speed on five key topics in RDM. It makes no assumptions about the role of librarians in supporting research data management, but aims to empower librarians to support each other in gaining confidence in this area of research support. It also provides some training in three of the identified skills that are named as gaps in the RLUK report, Re-skilling for Research (Auckland, 2012):

- Knowledge to advise on data management and curation, including ingest, discovery, access, dissemination, preservation, and portability

- Knowledge to support researchers in complying with the various mandates of funders, including open access requirements

- Knowledge to advocate, and advise on, the use of metadata

and touches on some others, such as the "Ability to advise on preserving research outputs."

The training comprises five 2-hour face-to-face sessions. These open with short talks followed by group exercises from the UK Data Archive with discussion in a private collegiate setting. Emphasis is placed on facilitation and individual learning rather than long

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1   http://www.jisc.ac.uk/whatwedo/programmes/di_researchmanagement/managingresearchdata.aspx
2   http://datalib.edina.ac.uk/mantra/

lectures and passive listening. MANTRA modules are used as reading assignments and reflective writing questions are designed to help librarians 'put themselves in the shoes of the researcher'. Learning is reinforced and put into practice through an independent study assignment of completing and publishing an interview with a researcher using the Data Curation Profile framework developed by D2C2 at Purdue University.

Topics

The training kit focuses on learning objectives for the following topics:

Data management planning

Including an understanding of appropriate data management in accordance with responsible conduct of research, an awareness of good practice in managing research, and an understanding of what constitutes a data management plan.

Organising & documenting data

Combining two MANTRA units to provide an understanding of why it is important to organise and document research data including managing data file versioning, naming and re-naming conventions, and an appreciation of why and when to use metadata.

Data storage & security

Providing an awareness of secure data storage options and the importance of regular data backups.

Ethics & copyright

Focusing on the ethical requirements that apply to the collection and management of data involving human subjects, and providing an appreciation of the difference between privacy and confidentiality and how they apply to the management of research data. It also explains what IPR is and how it applies to research data as well as how Freedom of Information and related legislation affects access to research data.

Data sharing

Introducing the benefits, challenges and drivers associated with sharing research data as well as the raising awareness of the risks to the longevity of digital data. The topic also introduces the basic concepts of digital preservation and trusted repositories, and data licensing.

Training kit contents

- Promotional slides for the RDM Training Kit
- Training schedule
- Research Data MANTRA online course by EDINA and Data Library, University of Edinburgh: *http://datalib.edina.ac.uk/mantra*
- Reflective writing questions
- Selected group exercises (with answers) from UK Data Archive, University of Essex - Managing and sharing data: Training resources. September, 2011 (PDF). Complete RDM Resources Training Pack available: *http://data-archive.ac.uk/create-manage/training-resources*

- Podcasts for short talks by the original Edinburgh speakers if running course without 'live' speakers (Windows or Quicktime versions).

- Presentation files (pptx) if learners decide to take turns presenting each topic.

- Evaluation forms

- Independent study assignment: Data Curation Profile, from D2C2, Purdue University Libraries. Resources available: *http://datacurationprofiles.org/*

Independent study: Data Curation Profiles
In the University of Edinburgh pilot training, the evaluations indicated that overall the librarians considered what they were learning was of value to them. However, there was no ready way to apply their knowledge in their day to day work. In order to test their knowledge and also increase the confidence of the librarians to engage in discussions with researchers about data management, a post-training independent study was assigned. Data Curation Profiles, hosted by the Distributed Data Curation Center at the Purdue University Libraries, were the chosen method for the independent study work.

Data Curation Profiles provide a complete framework for interviewing a researcher in any discipline about their research data and their data management practices. Register on the DCP Toolkit website, *http://datacurationprofiles.org* to download the user guide, interviewer's manual, interview worksheet and template, as well as to access the user support forum.

The pilot course was deemed successful by participants and Information Services managers, and another round of training with another small group is about to begin. Meanwhile, the first group of librarians are in the process of pursuing their independent studies - interviews with researchers from liaison constituencies resulting in new public Data Curation Profiles.

The DIY Training Kit is designed to contain everything needed to complete a similar training course independently (in small groups) and is based on open educational materials.

Users can apply their own creativity to reshape the course as they wish. For example, there are a number of group exercises available from the UKDA training resources pack, many of which are not included here.

The public release of the Do-It-Yourself Research Data Management Training Kit for Librarians is now available under a CC-BY licence: *http://datalib.edina.ac.uk/mantra/ libtraining.html*.

Recommendations for further study
- MANTRA has software modules in data handling using one of four common data analysis packages. You can print off the user guide, download the dataset and work through the exercises at your own pace (some familiarity with each software package is suggested as a pre-requisite).

- *Data Intelligence 4 Librarians* is another online course, developed by data librarians

at 3TU.Datacentrum in the Netherlands - available in Dutch and English. Their "Data management" unit is similar to MANTRA, but you could investigate more librarian-specific advanced topics by working through "Technical Skills" and "Acquisition and Advice" on your own.

- The UK Digital Curation Centre (DCC) website provides a clearinghouse of valuable information. In particular, browse their Resources for digital curators to find useful and up to date reading material.

- The DCC also hosts a relevant email discussion list with subscribers from around the world. Join Research-dataman on JISCMail.

- Last but not least we encourage anyone whose job involves academic data support to consider joining IASSIST, the international professional organisation for data professionals from all sorts of environments dealing with social and other types of research data. IASSIST hosts a vibrant annual conference - normally in the US, Canada or Europe. Their Fellows awards provides international travel stipends to selected applicants to broaden attendance from other countries.

References

Gold, Anna. Cyberinfrastructure, Data, and Libraries, Part 2: Libraries and the Data Challenge: Roles and Actions for Libraries. Dlib Magazine, September/October 2007. *doi:10.1045/september2007-gold-pt2*

LIBER Working Group on E-science. Ten Recommendations for Libraries to Get Started with Research Data Management The Hague, Netherlands: LIBER, 2012. *http://www.libereurope.eu/sites/default/files/The%20research%20data%20group%202012%20v7%20final.pdf*

Auckland, Mary. Re-skilling for Research London: Research Libraries UK (RLUK), January 2012. *http://www.rluk.ac.uk/files/RLUK%20Re-skilling.pdf.*

British Library DataCite

John Kaye, Lead Curator – Digital Social Science, The British Library

"Datasets are a significant part of the scholarly record and are being published more and more frequently….They need to be integrated into the scholarly information system so that authors, readers and librarians can use, find and manage them as easily as they do working papers, journal articles and books" Toby Green, Head of Publishing, OECD (2009)

DataCite is a response to the need to integrate datasets into the scholarly information system. It is an international consortium, founded in 2009, of 17 institutions from 12 countries worldwide. DataCite aims to increase acceptance of research data as legitimate, citable contributions to the scholarly record. To enable these goals, DataCite assigns persistent identifiers for research datasets and manages the infrastructures that support simple and effective methods of data citation, discovery and access. DataCite uses the Digital Object Identifier (DOI) infrastructure, which is already well established. A DOI is used to cite and link to electronic resources (text as well as research data and other types of content). DOI names are the mostly widely used identifier for scientific journal articles, so researchers, authors, and publishers are familiar with their use. To date DataCite has assigned nearly 1.4m DOI's. DataCite takes an open approach and considers and works with other identifier systems and services that help forward its objectives. An example of this open approach can be seen in the 'ODIN: ORCID and DataCite Interoperability Network' project, which is outlined later in this paper.

DataCite is represented in the UK by the British Library (BL), which serves as the registration agent for UK data centres. The BL DataCite service works with UK data centres to enable them to assign DOIs to their collections. At the time of publication, BL DataCite has assigned 24,000 DOIs to datasets from 7 organisations, including over 5,700 DOIs assigned to social science datasets made available via the UK Data Service. Currently, BL DataCite, in partnership with JISC, is working with UK university institutional repositories to provide workshops and learning materials in order to encourage and allow institutions to assign DOIs to their dataset holdings and make them discoverable, accessible and citable.

Data are a vital part of the scientific research process and proper citation should be a significant feature of research publications. Data citation acknowledges the author's sources, makes identifying data easier, promotes the reproduction of research results, makes it easier to find data, allows the impact of data to be tracked and provides a structure which recognises and can reward data creators. The Economic and Social Research Council (ESRC) acknowledges these factors:

"The ESRC emphasises the responsibilities that data sharing places upon those who plan to re-use existing data for research purposes. Where such data sharing leads to publication of related research findings in any format, full and appropriate acknowledgement, via citation, should be made of data sources."

ESRC Research Data Policy (2010)
A short guide on information and best practice for data citation called 'Data Citation: what you need to know' has been produced by ESRC, UK Data Service and BL.

Assigning DOIs to data, accompanied by proper data citation, helps and supports researchers in a number of important ways. With the ever-expanding mass of different types of digital data, libraries cannot be expected to hold and make available copies of everything, but should be able to provide researchers enhanced support for access and discovery of digital research resources. As Jan Brase of DataCite states:

"In a nutshell, the library of the future should be able to answer the query of a user with the statement: We do not have what you are looking for, but we know where it is, and we can offer you a link to it." Jan Brase (2013)

DOIs provide persistent pathways for these research objects, so researchers encounter fewer broken links and 404 errors during their research activities. When a DOI is assigned, metadata about the dataset is collected by DataCite which can then be viewed in the DataCite metadata store, which has currently catalogued over 1.4 million datasets and is growing every day. This open access metadata store and search functionality has the potential to enhance the discovery and accessibility of data for researchers. Proper citation of datasets within articles and other research outputs can allow primary and secondary data sources to be linked to their outputs, allowing for credit to be assigned to the original data creators and improved resource discovery through this additional link to the primary research resource.

DataCite's open infrastructure and application programming interfaces (apis) can allow integration of dataset metadata into library catalogues and can help create and enhance other scholarly communication services. One example of this integration can be found in a BL coordinated, European Commission financed project called 'ODIN: ORCID and DataCite Interoperability Network'. This project involves the BL Social Sciences team working with its consortium partners at CERN, ORCID DataCite, Dryad, arXiv and the Australian National Data Service and has the the aim of linking up unique researcher identifiers, such as ORCID, and digital object identifiers. The Social Science team at BL has taken up the challenge of producing a proof-of-concept model linking data creators, authors and research objects in the UK social science sphere and is looking at the use, re-use and citation of British Birth Cohort Studies and their outputs. This proof-of-concept will be contrasted with a High Energy Physics proof-of-concept from Large Hadron Collider (LHC) data that CERN is working on. Commonalities and differences across the disciplines will be identified during the project.

Linking researchers and data creators with their outputs and citations has huge potential to improve research resource discovery and can also attribute credit to data creators, curators, contributors, researchers and authors where it may have been previously overlooked. It would be ideal to have the ability to be able to track the impact of a data creator by following the linked citations from their dataset(s) into other research objects such as journals, working papers, derived data, secondary data and maybe into policy and legislation. This could be an important development for researchers and service providers who increasingly have to demonstrate the impact of their work to research funders. It could also incentivise researchers into making their research data available openly as the credit and citations attached to the data will be visible and traceable.

Librarians and information professionals are key to making these initiatives a success as they have central roles in some important areas. If they are making datasets available, or planning on making datasets available through their institutional repositories, then they should ensure that this data is preserved and accessible in a citable state and should consider the use of persistent identifiers (such as DataCite DOIs). They can also work with researchers and data users by making recommendations on appropriate ways to cite data, including the use of persistent identifiers (such as DOIs). They can also make their users aware of researcher and author identification schemes, such as ORCID, which provide unique IDs for researchers. In encouraging schemes where researchers can use and build up open profiles of persistent digital objects and research outputs important links may be created that can enhance resource discovery and could allow improved tracking of the impact of data creation, curation and re-use.

Further information and useful websites:
DataCite Website: *www.datacite.org*

DataCite Metadata Search *http://search.datacite.org/ui*

International DOI Foundation *http://www.doi.org*

BL DataCite Information and Workshops *http://www.bl.uk/aboutus/stratpolprog/digi/datasets/index.html*

ESRC/ESDS/BL: Data Citation: What You Need To Know *http://www.esds.ac.uk/news/publications/data_citation_online.pdf*

UK Data Service Data Citation *http://ukdataservice.ac.uk/use-data/citing-data.aspx*

ESRC Data Citation *http://www.esrc.ac.uk/funding-and-guidance/guidance/grant-holders/data-citation.aspx*

ODIN: ORCID and DataCite Interoperability Network *http://odin-project.eu/*

ORCID: Open Researcher and Contributor ID *http://orcid.org/*

British Library Social Science Research Blog: 'Identifiers': Creating a network of researchers and research objects *http://britishlibrary.typepad.co.uk/socialscience/2012/10/identifiers-creating-a-network-of-researchers-and-research-objects.html*

References
Brase, Jan, Datacite - A Global Registration Agency for Research Data (July 1, 2010). RatSWD Working Paper No. 149. Available at SSRN: *http://dx.doi.org/10.2139/ssrn.1639998*

Wilkinson, Max, Datacite: The International Data Citation Initiative: Datasets Programme (November 19, 2010). RatSWD_WP_ 163. Available at SSRN: *http://dx.doi.org/10.2139/ssrn.1743431*

ESRC/ESDS/BL: Data Citation: What You Need To Know (2012) *http://www.esds.ac.uk/news/publications/data_citation_online.pdf*

Brase, J. "DataCite and linked data". JLIS.it. Vol. 4, n. 1 (Gennaio/January 2013): Art: #5493. DOI: *http://dx.doi.org/10.4403/jlis.it-5493*

Support Unit for Research Evidence - supporting staff and students conducting systematic reviews

Mala Mann, Alison Weightman

Background

The Support Unit for Research Evidence (SURE) [1] is a grant funded unit that sits within the library service at Cardiff University. The unit was established in 2000 to continue the development of an evidence based project signposting the best available evidence across a broad spectrum of public health topics and evidence types. Since then the SURE team have played a major role in promoting and supporting evidence-based practice (EBP), particularly in conducting systematic reviews that are used in producing practice guidelines. The unit undertakes a wide range of nationally funded projects for a variety of health and social science topics, partnering with organisations nationally and internationally.

In addition the SURE team is involved in teaching systematic review methods and supporting staff and students undertaking reviews across the University. Throughout the early years increasing numbers of University researchers requested systematic review related help and advice. This was becoming a challenge due to SURE staff being grant funded and time constraints attached to working on various project grants.

Establishing research support for systematic reviews

In 2008 the University Library Service Review was undertaken. SURE's unique role was noted along with the increased need for supporting researchers conducting systematic reviews. The implementation group within the Library Service Review invited SURE to explore the possibility of establishing an infrastructure to support staff/students undertaking systematic reviews. In March 2010 a university-wide questionnaire survey was conducted among research groups to establish the need for systematic review support and to develop a list of priorities.

In September 2010 the Cardiff University Systematic Review Network (SysNet) [2] was launched. SysNet has been funded by the healthcare Schools within the University. The funding covers the costs of the Network Coordinator, within SURE, supported by a research administrator and a small budget for meetings and invited speakers.

Systematic reviewing in Cardiff University is truly interdisciplinary, even though more than 80% of the Network's activity involves staff and students from medicine and healthcare disciplines.

The objectives of the Network are as follows:
1. To provide advice to interdisciplinary systematic review groups within Cardiff University;
2. To provide and regularly update links to systematic review methodology handbooks and other key resources;
3. To set up training workshops related to undertaking systematic reviews;
4. To notify the Network on funding opportunities, events, conferences and training;
5. To arrange opportunities for Network members to meet and discuss a call for funding relating to a review programme;

6. To further develop the All Wales Systematic Review Register and support relevant collaborations beyond the University.

The coordinator's work involves one-to-one research support in the areas of protocol development, writing grant applications, developing a focussed question, literature searching and critical appraisal as well as advice in other areas relating to reviewing. In addition, events and workshops are organised relating to systematic reviews to promote high quality systematic reviews.

Furthermore two guides have been developed and made available to Network members:

- Beginning a systematic review of the healthcare literature

- The REF and systematic reviews (questions to consider when writing up systematic reviews and selecting outputs for REF submission)

Systematic review research support process
When a researcher contacts SysNet either by phone or via email, they are sent a checklist to assess whether important components of a systematic review have been considered. This is followed by one to one meeting to discuss any issues relating to the review protocol which includes the importance of inclusion/exclusion criteria and other aspects of the systematic review process.

One of the common difficulties faced by researchers is often in relation to constructing a systematic review search strategy. If the researcher has no experience in searching he/she is sent to the subject librarian for a training session on advanced searching. This training is followed by the Signet Coordinator, checking and guiding the researcher through developing their search strategies for each of the bibliographic databases.

After searching the databases and relevant sources help is often sought with regard to importing search results. The subject librarians are able to offer training in the Endnote reference management software tool used within the University. Furthermore advice is given by the SysNet Coordinator on search documentation, critical appraisal and data extraction.

Other SURE activities
In addition to the SysNet activities, SURE held its first ever Systematic Review Short Course in September 2012. The course was attended by researchers from across Welsh Universities and the Welsh Government. This was such a success that the course will be repeated in June 2013.

Since 2000, staff in SURE have co-authored over 60 publications, including 45 systematic reviews, and been awarded more than £2,000,000 in grant income. Engagement and collaboration with key stakeholders within and beyond the home University, and the expertise of its staff, appear to be fundamental to success.

Key messages documented in the report commissioned by Research Libraries UK and the Research Information Network [3] clearly describes the developing new roles for libraries and librarians.

SURE staff, as part of the University Library Service, has demonstrated an enormous contribution to the research process; the ability to use our skills to conduct systematic reviews as well as supporting researchers undertaking systematic reviews

[1] http://www.cardiff.ac.uk/insrv/libraries/sure

[2] http://www.cardiff.ac.uk/insrv/libraries/sure/sysnet/

[3] http://www.rluk.ac.uk/files/Value%20of%20Libraries%20TG_0.pdf

Northampton Open Journals: a publishing service for researchers

Miggie Pickton, University of Northampton

Northampton Open Journals (http://journals.northampton.ac.uk/) is a small collection of peer reviewed scholarly journals edited by staff at The University of Northampton and hosted and supported by the university library. This article will describe the development of the collection and the role played by the library.

Creating a new open journals collection

From the point of view of the library there were several good reasons for developing a journal publishing service:

- Interest in open access was growing, nationally and institutionally. By 2008 the University of Northampton could already offer researchers the 'green' route to open access through its institutional repository NECTAR, but had made no provision for open access via the 'gold' route. An in-house journal publishing service would fill this gap and extend the university's portfolio of open access services;
- The development of the service, including aspects of policy and procedure, would enable library staff to engage with the research community in a new arena. Library staff had a professional interest in the scholarly communication process and welcomed the opportunity to demonstrate this to researchers;
- Within the library we already had some editorial expertise in creating and developing a new journal using one of the most popular open source journal publishing products: Open Journal Systems (http://pkp.sfu.ca/?q=ojs); we were confident that our technical expertise was also more than sufficient to support a journal publishing service;
- At that time, the library was part of 'Information Services', a converged library and Information Technology department. This gave us access (following negotiation) to the server space that we would need.

From the university's point of view the service would provide another opportunity to showcase our research and enable university staff to develop skills and experience in the journal publishing process.

Implementation of the software

As noted above, library staff already had some experience of using Open Journal Systems (OJS) software but, to be thorough, we scanned the internet for other options. We did not have the resource to write our own software from scratch, nor did we have a budget to purchase software, so we limited our search to open source solutions.

The products we investigated (in 2008) included HyperJournal (http://www.hjournal.org/); ePublishing Toolkit (https://dev.livingreviews.org/projects/epubtk/) and Scholarly exchange (http://www.scholarlyexchange.org/). We were also aware of several from the SourceForge.net website: 'Online Journal Project', 'Paradigm digital journal', 'DPubS' (Digital Publishing System) and 'zdesk', but were unable at that time to gather sufficient information to pursue these options.

The SPARC website (SPARC, 2013) was then, and continues to be, a useful source of information about journal management systems. The FAQs on the OJS website (Public Knowledge Project, 2012a) also cover this topic and provide links to a number of current publishing solutions.

We eventually chose OJS because it offered:

- A web-based workflow that supported the entire journal publishing process, from submission of a paper by the author, through peer review and editing, to presentation on a professional looking website;
- The ability to host the journal ourselves, on university servers;
- A high degree of flexibility, both in the functionality of the software (there are many user definable options) and in the visual design of the journal (OJS software uses cascading style sheets (CSS) to define the style and layout of the website). Although OJS offers a perfectly acceptable interface straight 'out of the box', we knew that we wanted to redesign it to match the styling of the university website. The ability to customise the software was therefore essential;
- A substantial number of existing implementations of the software (in 2008 there were around 1000 OJS-based journals; this number has since increased rapidly: as of October 2012 there were 14,700 (Public Knowledge Project, 2012b));
- An active user community with Editorial and Technical Support Forums;
- Compliance with Open Archive Initiative standards and, via plugins, the ability to integrate a range of useful tools.

Defining policy and procedure

As with our institutional repository, we were keen to ensure that our new open access journal collection was 'owned' by the research community. To this end we consulted with university research leaders in developing a policy and procedure for the creation of new university journals and sought approval for these from the University Research and Enterprise Committee.

The outcome was a Northampton Open Journals user guide for staff (Pickton, 2009). The guide covered the journal approval process; the constitution of an 'Open Journals working group' to oversee this process; and several pages of notes to support prospective editors in creating a journal. The guide served a dual purpose: to state the expectations of the university in establishing a high quality journals collection and to advise new editors of the issues they would need to consider in creating a journal.

It is not the intention of this article to replicate the detail of the guide, but some of the issues it addresses may be of interest.

Journal approval process

A two stage approval process was defined; this enables prospective editors to establish whether the proposed journal is acceptable in principle before they put in significant effort to meet the requirements of full approval.

The guide specifies the information required for full approval and the criteria for acceptance. For example, under 'Focus and scope of journal' editors are expected to

include a justification of need for a new journal in this area; to state the position of the new journal within the sector; to state its anticipated contribution to knowledge and to avoid partisanship – journals should welcome academically rigorous contributions from all philosophical and intellectual positions.

Additionally, new journals are expected to conform to a series of standard requirements (for example they should be peer reviewed, open access, inclusive and must in no way adversely affect the reputation of the university).

The guide outlines the various possible outcomes from the approval process and criteria for continued inclusion within the collection. A process for appeals is also described.

The Open Journals working group
New journals are approved and monitored by a working group of the University's Research and Enterprise Committee. The group comprises the Executive Dean with responsibility for research, the research leader from the School to which the editor belongs and a representative from the library. Provision is made for the group to meet up to three times per year, as necessitated by the creation of new journals. However, in practice we have found that this frequency of meetings has not been necessary.

Journal creation and management
The largest section of the guide covers the process of setting up and managing the journal. In brief, the site administrator (from the Scholarly Systems team in the library) creates the journal and nominates a 'Journal Manager' i.e. the member of staff at Northampton who is the editor and 'owner' of the journal. The Journal Manager may then 'set up' the journal by defining basic journal details (such as name, ISSN, contacts etc.); policies; submission guidelines; several aspects of journal management (e.g. access and security, scheduling) and the look and feel of the journal. They may then create or modify journal sections, user roles and an extensive set of prepared emails.

One of the benefits of the OJS software is that it provides example text for a wide range of purposes; all editable by Journal Managers. At Northampton it was agreed that, in order to ensure consistency across the collection, certain text should follow an agreed format, so standard text is given in the guide for the copyright notice, competing interest statement, open access policy and author self-archiving policy. Other text, such as the review policy, author guidelines, article layout template and submission preparation checklist will normally be amended by the Journal Manager

Editing the journal
There are eight basic steps in publishing a journal article:

- Author submits an article (includes creation of appropriate metadata; agreement with submission checklist; acceptance of copyright statement; and upload of text and (optionally) supplementary files)
- Editor receives submission
- Editor initiates peer review
- Reviewer performs review
- Editor records decision and notifies author

- Submission is edited (by editor or nominee)
  - Copy editing (optional) – editors can make changes to the text and, if they wish, return the article to the author for checking
  - Layout editing – to conform to the journal's 'house style' – this includes creation and upload of 'galleys'
  - Proof reading by editor and/or author (optional)
- Editor assigns the article to an issue
- Editor publishes issue (includes ordering of papers and page numbering)

The OJS software supports each of these steps.

The role of the library

Library staff provide technical support, training and advice to editors throughout the process of journal creation.

The library's Scholarly Systems team were responsible for the initial implementation of the OJS software and undertake necessary software upgrades. A multiple journal installation was chosen so that all the university journals could be accessed from a single web address (http://journals.northampton.ac.uk/); however, editors are free to promote the URL of their own journal's home page if they prefer.

University branding was applied to the Northampton Open Journals home page and the collection was linked to from the 'Research' section of the university website. Again, this was to ensure that the collection was owned by the research community rather than the library.

Editors are free to choose the 'look and feel' for their own journal's interface. The CSS approach means that editors with some experience of writing HTML code are able to make changes for themselves; otherwise, the Scholarly Systems team will support the design process. Advice can be taken from the Marketing department if necessary.

Enquiries from prospective editors are usually passed from the Academic Librarians to the library's Research Support Team. With several years' experience of supporting open access through the institutional repository, a professional interest in scholarly publishing and practical journal editing experience, this team is well placed to advise new editors.

The team offer training on demand in the use of OJS software. Both one-to-one and small group sessions can be arranged. The software is very comprehensive and the learning curve can be steep, so editors seem to value support from a colleague on the end of a telephone. We have noticed that as more academic staff gain expertise in using the OJS software, they have increasingly turned to each other for support, rather than to the library.

Despite offers of formal roles in Northampton Open Journals (for example, membership of the editorial team), library staff make it clear that their role is to support the creation of journals and not to be involved in an ongoing editorial capacity. We draw a distinction between supporting the research process and contributing to it, and our view is that the role of library staff in this instance should be professional rather than scholarly. From a practical point of view, we do not have the resource to be actively engaged with every

journal. It is policy that once launched, each journal is the full responsibility of its editor or editorial team.

As a by-product of this work, the Research Support Team is increasingly called upon to advise on other matters related to publishing. Typical questions include: Can I have an ISSN for my journal? How can I assign DOIs to my articles? Will my journal be indexed by Google Scholar, Web of Science or Scopus? Can I apply for an impact factor? The team has recently been invited to speak to the committee of a Learned Society about ways to increase citation counts for its articles.

It is clear that librarians have much to offer in this area.

Reflections

The first Northampton Open Journal, 'Enhancing the Learner Experience in Higher Education' (ELEHE), was launched in 2009. To date, this is our only live journal.

Over the last few years a number of Northampton staff have shown an interest in creating a new electronic journal. Some have come to fruition, but not as part of the Northampton Open Journals collection; others have fallen by the wayside. So for example, a journal developed as part of a collaboration with an institution in the Middle East collapsed after one issue when the political situation there deteriorated; another was under development when the editor left Northampton for employment elsewhere; a third journal, featuring the best dissertation work from our School of Education, is being developed as a separate instance of OJS because it is not appropriate for it to fulfil the fairly strict requirements of the collection (one requirement of Northampton Open Journals is that each journal should have international representation on its Editorial Board).

In a number of other cases prospective editors have chosen not to proceed with their plans for a journal. The editorial workload in creating and maintaining a brand new self-hosted journal is huge. The OJS software supports the process extremely effectively but the large administrative element is a deterrent. An editor of a commercially published journal will probably be expected to allocate papers to referees and undertake some copy-editing; they will not normally be required to manage the entire publishing process.

Sustainability is a challenge. ELEHE has already undergone a complete change in its editorial team, following the move of its original editor to another institution. Succession planning is now one of the criteria for full approval of a new journal.

Since the collection was first created, the university website has been through three re-brandings. Since our policy has been to replicate university branding on the Northampton Open Journals website, this involves significant extra work for the library's Scholarly Systems team. As of March 2013 we are awaiting an upgrade to the latest branding.

The library's capacity to provide technical support and software training for the Northampton Open Journals collection depends on skills residing in a relatively small number of staff. Sharing that skill set among a broader group is a challenge which has yet to be addressed.

Conclusion

The process of developing an open journals collection for the University of Northampton has been valuable in many ways. In terms of skills development, reputational benefit (internally for the library and externally for the institution), and service provision, the outcomes have been extremely positive. The facility plugs a gap in our open access services and enables library staff to say "yes, we can help with that". I believe that is justification enough.

References

Pickton, M. (2009) *Northampton Open Journals: a guide for University of Northampton staff* [online]. Available from: http://journals.northampton.ac.uk/public/site/NorthamptonOpenJournalsGuide1_1.pdf [accessed 27.03.13].

Public Knowledge Project (2012a) *PKP Frequently asked questions* [online]. Available from: http://pkp.sfu.ca/wiki/index.php/PKP_Frequently_Asked_Questions#What_other_open_source_journal_management_and_publishing_systems_are_available.3F [accessed 27.03.13].

Public Knowledge Project (2012b) *OJS User numbers* [online]. Available from: http://pkp.sfu.ca/ojs-user-numbers [accessed 27.03.13].

SPARC (2013) *Journal management systems* [online]. Available from: http://www.arl.org/sparc/publisher/journal_management.shtml [accessed 27.03.13].

Reusing qualitative archived materials in creative research and innovative teaching

Dr Bethany Morgan Brett, UK Data Archive Service

The reuse of archived qualitative research data is becoming increasingly prevalent in the social sciences. Recent changes such as journal publishers' requirements to expose data, the open data movement, research funders' policies supporting data sharing, and researchers seeing benefits of sharing all manner of resources through social media, have encouraged qualitative secondary analysis. This article will use two case studies to illustrate the creative ways in which data can be reused in research and then demonstrate how data has been reused in innovative research-led teaching.

Reusing qualitative archived data

The UK Data Service is dedicated to providing access to an extensive range of high quality economic and social data. Our archived data can be, and have been, reused in a number of different ways. They can be used to describe the attributes, attitudes and behaviour of individuals, societies, groups or organisations at the time of the original project. They can be used to provide a comparison over time or between social groups or regions etc. Re-analysis can ask new questions of the data and make different interpretations from the original researcher. Re-analysis approaches the data in ways that were not originally addressed, such as using data for investigating different themes or topics of study. Data can be reused for the purposes of research design and methodological advancement which involves designing a new study, developing a methodology or research tool by studying sampling methods, data collection and fieldwork strategies and topic guides. Finally data can be used for learning and teaching. Real life data collections can provide rich case material for learning and teaching in both research methods and substantive areas across a range of social science disciplines. Presented below are some of the ways in which our data have been reused.

Reusing the Last Refuge Collection

In the late 1950s, Peter Townsend conducted a major investigation of long-stay institutional care for old people in Britain. He employed a range of qualitative methods in this study including in-depth interviews with 67 local authority chief welfare officers and with serving staff and residents of 173 institutions. He took photographs, made field notes and drew sketches about the condition of the buildings, the facilities and of the residents and staff. He conducted a short qualitative survey and also asked a number of staff and residents to complete daily diaries about life in the homes. In 2005, Julia Johnson, Sheena Rolph and Randall Smith carried out a review of Townsend's research material, subsequent findings and recommendations. They conducted a tracing study to find out and document what happened to the institutions visited by Townsend. They found that of the original 173 institutions, 25 still existed as registered care homes and these were investigated further. This follow-up study broadly replicated Townsend's method allowing the researchers to analyse and comment on the continuity and change which occurred in residential care provision over time.

Reusing the School Leavers Study

In 2009, Dawn Lyon and Graham Crow accessed Ray Pahl's archived collections, which comprised several sub-projects including the *School Leavers Study, 1978*. In this study Pahl asked teachers at a comprehensive school on the Isle of Sheppey to set an essay task to groups of students aged 15 and 16 years old, ten days before they were due to leave school. The students were asked to imagine that they were nearing the end of their life and to write a retrospective account of what happened to them over their lifetimes.

The resulting 141 handwritten essays highlighted the different features of life and work on the Isle of Sheppey in the 1970s, and were reflective of the chronic economic challenges on the island at the time. However, Lyon and Crow found that very little preliminary analysis or follow up research had been done with the essays. Pahl had written a short article 'Living without a job: how school leavers see the future' published in *New Society* in 1978 (2 November: 259-62), but little else. He acknowledged in the article that in fact his analysis did not do full justice to the essay material. Lyon and Crow recognised the potential for re-analysis and realised that these data presented an exciting research opportunity as part of their *Living and Working on Sheppey project* http://www.livingandworkingonsheppey.co.uk/

They digitised the 1978 collection of essays and repeated the exercise with students of the same age, in schools on Sheppey, in 2010. Although the original student instruction was not recorded, they were able to consult Pahl about what he asked students and repeated this instruction. Lyon and Crow collected a further 110 essays (55 boys and 55 girls). They then coded and compared the data across time. Together, these two sets of essays gave a rich insight into the aspirations of Sheppey's young people and young people generally. The essays shed light on the young people's views on a range of topics including health, education, career, family and leisure.

The longitudinal element of the research meant that they were able to compare how attitudes had changed over time. For example, in 1978, Sheppey's young people often envisaged mundane and grounded jobs with a gradual and perhaps more realistic career progression. They also considered that there would be periods of unemployment in their futures. In Essay 27 one boy said that "It was hard finding a job, I failed a few chances, but eventually got what I wanted locally, a craft apprenticeship", and in Essay 42 another boy said "I was on the dole for six months after leaving school, until I got a job in a garage". The young people seemed to rein in their aspirations if they felt they were too grandiose, for example in Essay 56 a boy said "When we found a house it was a semi-detached in Sittingbourne. I wanted to live in Italy but that was asking for too much" and in Essay 104 a girl said "I longed for something exciting and challenging. But yet again I had to settle for second best. I began working in a large clothes factory".

These accounts can be compared to the essays written in 2010 where the young people wrote about having extremely well-paid, instantaneous jobs. They envisaged a plurality of choice in terms of their careers but also had a sense of uncertainty. There was also evidence of a strong influence from celebrity culture. In Essay 30, for example, the young male wrote "I was 20 now living the dream I had a (sic) amazing band...I had toured the world 3 times sold 4 million records" and in Essay 61 the young girl said "In my future I want to become either: a dance teacher, hairdresser, or a Professional Show Jumper/horse

rider. If I do become a dancer my dream would be to dance for Beyoncé or someone really famous".

Creative innovative teaching materials from archived data

Introducing students to data from interesting current or classic social sciences research projects can really bring the learning experience to life. Using data in learning and teaching enables students to critically engage with their literature sources by evaluating the strengths and limitations of particular collections and their methodologies. Moreover, students are able to follow a piece of academic research all the way through the data life cycle, from conception, to publication, to archiving. The UK Data Service supports learners and teachers, and as such has developed a range of open-access, free, online teaching resources.

Resource 1: Exploring Diverse Interview Types showcases seven distinct qualitative interviewing types: structured, unstructured, semi-structured, feminist, psycho-social, oral history and life story interviews. The resource also includes activities based on real life examples taken from the collections.

Resource 2: Exploring Non-Interview Methods offers descriptions and examples of other types of qualitative methods including focus groups, diaries, online research methods and visual methods.

Resource 3: Re-using Qualitative Data: The Last Refuge incorporates a selection of the ground-breaking qualitative material taken from Peter Townsend's 1950s Last Refuge study. The resource includes activities which can be used in the classroom or as self-paced learning activities, enabling students to think critically about a real life research project.

Resource 4: Teach with Pioneers is a range of worksheets accompanying *The Pioneers of Qualitative Research resource*, which is a collection of in-depth life-story interviews with 34 pioneers of British social research. The worksheets help focus teaching on selected themes: women and social research, poverty and inequality in the UK, community studies, pioneering research methods and reusing archived data.

Resource 5: Using Psychosocial Approaches is a teaching resource which showcases two archived collections which have used a psychosocial method: Hollway and Jefferson's *Gender Difference, Anxiety and the Fear of Crime* and Hollway's *Becoming a Mother*. The aim of the resource is to familiarise both instructors and students with psychosocial methods and show how other researchers have used these approaches empirically and theoretically in their research projects. The resource contains extracts from the user guides, interviews and contextual notes from each of these studies, as well as a series of activities.

6. *Teaching sociology with archived data*: In 2010 ESDS Qualidata collaborated with the Department of Sociology at Essex University to create a teaching resource which was funded by Essex's Teaching and Learning Innovation Fund (TALIF). We designed as a course assignment for undergraduates in Crime and Social Control which enabled students to explore, access and assess archived collections. The project resulted in a final portfolio of resources which includes two model assignments, a generic template, a marking template for tutors, a tutor's guide and a range of thematic guides. The assignment has since been

implemented by courses in Health and Social Policy and Youth Studies. We have also had interest from courses in visual methods and media studies.

Conclusion

Archived data can be used in imaginative research and creative teaching. By engaging with real life research collections, reusers can discover out how data was originally conceived, collected and analysed and use this to inform their own research ideas. It can lead to new insights about old data, illuminate interesting methodological techniques, and ultimately generate new and innovative research ideas.

Selected References

Bishop, L. (2012) 'Using archived qualitative data for teaching: practical and ethical considerations', *International Journal of Social Research Methodology*, 15(4) [Special Issue: Perspectives on working with archived textual and visual material in social research], pp.341-350. doi: 10.1080/13645579.2012.688335

Corti, L. and Thompson, P. (2012) 'Secondary analysis of archive data' in J. Goodwin (ed.) *SAGE: Secondary Data Analysis* London: Sage Publications Ltd

Crow, G., Morgan Brett, B., Winterton, M. (Eds) (2011) 'Young Lives and Imagined Futures: Insights from Archived Data', *Timescapes Working paper*.

Johnson, J., Rolph, S. and Smith, R. (2010) *Residential care transformed: revisiting 'The Last Refuge'*, Basingstoke: Palgrave. http://www.open.ac.uk/hsc/research/research-projects/the-last-refuge-revisited/the-last-refuge-revisited.php

Johnson, J., Rolph, S. and Smith, R. (2007) 'Revisiting "The Last Refuge": present day methodological challenges' in M. Bernard, T. Scharf (eds) *Critical perspectives on ageing societies*, Policy Press, pp. 89-104.

Lyon, D., Morgan Brett, B., and Crow, G. (2012 forthcoming) 'Working with Material from the Sheppey Archive: Exploring Formal and Contextual Data' in *Special Issue of International Journal for Social Research Methods: Perspectives on Working with Archived Textual and Visual Material*.

Morgan Brett, B., and Turton, J. (2013) 'A Collaborative Challenge to the Traditional Essay: Developing a Research Methods Assignment for Sociology Students with the Economic and Social Data Service', In Practice Vol1. No.1

Morgan Brett, B. (2012) 'Liven up your teaching: Teach using real-life data', The Sociology Teacher, BSA Teaching Group Journal

Pahl, R.E., *School Leavers Study*, 1978 [computer file]. *2nd Edition*. Colchester, Essex: UK Data Archive [distributor], June 2012. SN: 4867 , http://dx.doi.org/10.5255/UKDA-SN-4867-1

The UK Data Service http://ukdataservice.ac.uk/

Weddell, E., Lyon, D., Crow, G., Morgan Brett, B. (2012 forthcoming) 'Imagining the Future: What can the aspirations of school-leavers in 1978 and 2010 tell us about the changing nature of society?' *Sociology Review*.

Adapting PILOT for use at Glasgow Caledonian University using Open Educational Resources and existing material.

Marion Kelt, Senior Librarian: Digital Development and Information Literacy

PILOT (Postdoctoral information literacy online tutorial) was originally developed by Imperial College, London to support the information training needs of their researchers. I saw it demonstrated at a Research Information Network meeting in London where I was speaking on research support at GCU (Glasgow Caledonian University).

At GCU we had produced a number of online resources to help with our information literacy training. We linked from the subject guide sections of our web pages, but had not gathered them together in one place with a distinct identity. At the same time, GCU was developing more PhD courses, such as the Professional Doctorate, and was seeking to raise its research profile. This led us to think about how we provided research support in the library. We did not want to replace face to face support, as our researchers appreciated it, and receiving support from the same librarians over the life of their project. However, we began to look at our current online support, and how we could use these resources to better support the existing service. We also wanted to provide support for researchers who were not on campus full time. The popular Professional Doctorate is aimed at professionals who are already working full time. Students attend campus in the evenings and for some set tuition days. Tutors on this course already had strong links to the library, so were a natural choice for discussion and feedback on how we could develop our online provision.

Our previous Director of Library Services, Debbi Boden, worked on the original development of PILOT. She suggested that we adopt a similar approach to the one taken with SMILE (our undergraduate information literacy course) whereby we take the files, update them and repurpose them for use at GCU (Kelt, 2012).

PILOT was originally created to meet the information needs of off-campus researchers, incorporating multimedia content where appropriate. It aimed to allow researchers to develop a personal development plan and give a good grounding on the publication process (Boden, 2007). PILOT has a strong visual identity and is written in HTML using Dreamweaver. This allows it to be transferred between different VLEs (Virtual Learning Environments). We have found it easy to integrate into our own VLE (BlackBoard) at GCU.

The original structure was made up of three general units:
- Welcome
- Contacts
- IL pilot's licence

and six learning units:
- Information
- Search and retrieve
- Databases
- Acquiring and managing information
- Publication process
- New technologies

My first task was to go through the tutorial and fix any basic problems such as broken links and missing files. Then I needed to go through it in detail and look at the actual wording. I asked what needed updating or rewriting in plain English. The next step was to look at the resources mentioned and make sure that they accurately reflected what was on offer at GCU. This had three stages:

- Deletion of non-GCU databases and electronic resources

- Addition of GCU databases and resources, plus our own online tutorials and training guides

- Addition of referencing guides on the "GCU Harvard" format (an amended form of Harvard used in our School of Health and Life Sciences)

When updating SMILE, we mapped it against the National Information Literacy Framework Scotland (NILF, 2011), GCU's 21st Century Graduate Attributes, the CBI (Confederation of British Industry) Graduate Attributes (CBI, 2011) and those outlined in the British Psychological Society's The Future of Undergraduate Psychology in the United Kingdom report (BPS, 2012). Although PILOT was aimed at the postgraduate audience, we applied the same mapping. We also looked at the Vitae Researcher Development Framework (Vitae, accessed 11.3.13).

This highlighted two areas which needed attention. Part of the original development plan for PILOT was to add in a section on copyright. We contacted Dr Jane Secker from the LSE (London School of Economics) and asked her to develop pages for us on a short-term consultancy basis. This worked well and allowed us to incorporate a new section to the main menu of PILOT. We also created a second new section called "Your digital footprint" to help researchers think about their own internet presence as research professionals.

In addition to these sections, I used open educational resources (OERs) and information from our own academics to add content to the following sections:

Information (Unit 1)
- Research Ethics – in two parts, how to act when on placement and a generic guide to research ethics. Pages were adapted from the GCU code of good practice in research (1), the GCU research ethics booklet (2), the BPS Code of Human Research Ethics (3) and the HPC guidance on conduct and ethics for students (4).

Search and retrieve (unit 2)
- Practice based questions: using PICO and SPICE (useful to health and social science students). These pages were developed with the help of Jamie Frankis, Lesley Price, Pauline Hamilton, and Ima Jackson of the School of Health and Life Sciences, GCU
- Writing up your search strategy: using PRISMA. Suggested by Physiotherapy lecturers who use it as standard. The pages were based on the PRISMA web site (5) and developed in house with the help of Larissa Kempenaar from the School of Health and Life Sciences.
- Systematic reviewing. A real growth area! Systematic reviews are carried out mostly in health and life sciences, but are now also used in social sciences and

engineering. This section is based on pages which I developed for our main library web site with input from Dr Helen Marlborough of Glasgow University Library.

Databases (unit 3)

- This section now includes our split screen online tutorials, developed for use on our old web site, and now included in SMILE and PILOT. They have a similar format to the one used by the Informs tutorials. (Kelt, 2003)

Acquiring and managing information (unit 4)

- Research ethics – so good we linked to it twice! One of the problems with slotting new content into an existing structure is where you put it. In this case I was unsure of the user path, so put the links in two different places. This will be reviewed in the light of user statistics.
- Writing a research proposal, developed from material provided by the Learning Development department of the University of Leicester. (6)
- Writing a data management plan, based on Mantra by Edina, University of Edinburgh (7). I realised that there was a real need for this section after attending the Data Curation Roadshow held by the Digital Curation Centre. Provision of a data management plan is now a legal requirement for some funding bodies as part of the research proposal.
- Research design, developed from the University of Plymouth, Learning from WOeRk project (8) and The Multimedia Training Kit (9). The section includes questionnaire design, which was adapted from Questionnaire Design, by Student Services, University of Bath (10).
- Writing a critical review. There was high demand for clear guidance on this topic, but no one OER gave complete coverage. As a result, this section is a combination of resources by Dr Jane MacKay, GCU, Steve Draper, Psychology Department, Glasgow University (11), and the University of Plymouth, Learning from WOeRk project (12)
- APA referencing based on Cardiff University Information Services tutorial (13).
- OSCOLA referencing, also based on a tutorial by Cardiff University Information Services (14).
- "GCU Harvard" referencing. At GCU we have an amended Harvard system which is used in the School of Health and Life Sciences. This is based on pages developed for SMILE.

The publication process (unit 5)

- Technical writing. This was not an easy topic, again no one OER gave me all that I needed and there was no consistent guidance on the topic. Developing this section required liaison with the Engineering lecturers to clarify what was required. Based on Top tips for technical writing by Vince Ricci CIEE (15), Technical report writing by Joe Schall, Penn State University (16) and Style for Students from Glynis Perkin of Loughborough University (17).

New technologies (unit 6)

- Using Twitter in an academic environment. Adapted from: Using Twitter in

university research, teaching and impact activities: a guide for academics and researchers. LSE Public Policy Group 2011 (18).

Digital footprint (unit 6)
- A whole new section. This contains content developed in house for a similar module in SMILE, but also contains MyRI which discusses a researchers' research impact, produced by University College Dublin, Dublin City University, Dublin Institute of Technology, The National University of Ireland, Maynooth and the NDLR (19). It helps researchers to understand bibliometrics and why it is important, thus helping them prepare for the REF.

Copyright
- Another new section, produced by Jane Secker of the LSE.

The amount of new content added shows how useful OERs can be when updating or creating any type of content for academic use. Even if you don't use the whole item in its original format, it can give you a framework to develop something more suited to your needs. The other thing to remember is that you don't have to use just one resource, you can do your own "mashup", license permitting. Looking at PILOT, we have 16 new sections, but counting GCU as one source, we have 23 sources. Some sources were used more than once, many thanks to Cardiff University for their excellent referencing tutorials, and the University of Plymouth, *Learning from WOeRk* Project.

Where did they come from?
- Scotland 4
- Wales 2
- Ireland 5
- England 11
- USA 2

I'm surprised that the majority of my sources came from close to home. This wasn't intentional when I chose them. However, it may reflect the similarities in our educational system and subjects taught. It may also be that when I look for items, I start with Jorum, so that will naturally point me to UK resources.

So, now that I have PILOT up and running, how do I engage potential users? I have given our users several options. The whole tutorial is available on the library tab in our VLE, GCULearn (running on Blackboard). The content section of BlackBoard allows deep linking to individual sections within PILOT. Use of SMILE has shown that users prefer to go directly to the resource they need, rather than navigate sequentially through the package. However, postgraduate, postdoctoral and staff researchers are not so tied to individual modules on the VLE, so this makes it hard to find the best place to store the links. It is embedded in one module so far, our Professional Doctorate programme, and our Graduate Centre have also devoted a page of their web site to our links (20). Over the next academic year, I plan to talk to more individual academics to get their feedback, suggestions for additional content and modules which could include links to PILOT.

We have not formally promoted the use of PILOT. I have emailed round all researchers at

GCU introducing it and sent them a set of deep links. I have asked for feedback and ideas for new sections. I will present it to our University Research Committee and am working closely with our Academic Liaison Librarians to incorporate it into our research support provision.

Usage so far:
This chart reflects page views as at 7th March 2013. However, PILOT was made available while some of the content was still being developed, and this is reflected in the usage statistics. Some sections, such as writing a data management plan are so new that few people have had the chance to view them.
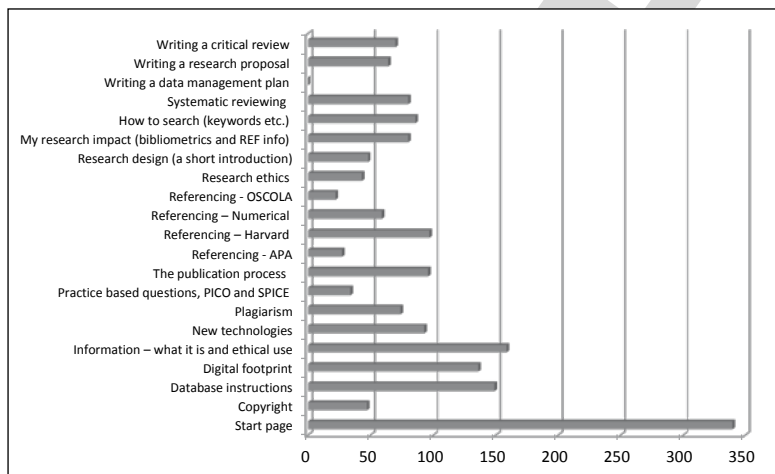
So, what now? When talking to academics about SMILE, I found that they all had ideas for new content and further development, so I expect that PILOT will follow a similar path. Already some researchers have contacted me asking for extra sections. I will also add short feedback questionnaires using Google Forms to allow users to let me know what works and what doesn't.

Some lessons learned from the project:
It can be hard to add new sections to an established menu system. This is especially true if the menu components were developed in a separate design package and then imported to Dreamweaver. In some cases you can see the joins! Everyone looks at a structure differently, and what seems like a logical location to me, may not seem so obvious to a researcher. I aim to collect more feedback, so should be able to move links to sections in response to this. Another way to tackle this is to provide more deep links in a variety of locations. I hope to embed PILOT in more BlackBoard modules after talking to a variety of tutors.

The very nature of an information literacy package presents problems when working with other support departments. The package will cover more subjects than just information and library skills. Most universities have departments who help students with writing and

communication skills, but are separate to the library. It is hard to get the message across that the library is not trying to encroach on their territory, but is just trying to provide a one-stop support resource for all researchers.

In some cases I have had tutors saying, "We can't use that, it comes from outside Glasgow!" They may prefer to use home grown resources, but find themselves caught in a cycle of unwillingness to use an OER, but not having the time to create their own content. In these cases only the researcher loses out. When faced with this attitude, I have just proceeded anyway. My reasoning is that it is better to have some information available than none, and that I quality assess each open educational resource before adapting them for use at GCU.

Using OERS is not a quick fix. It is rare that you find a resource that you can just use right out of the box. Even if the content is perfect, you still need to incorporate it into the overall design of the package. To paraphrase George Orwell, some OERs are more open than others! What I mean by this is that some resources are tied to one particular file format, such as documents in PDF format or those which display using Flash player or Articulate. This can take a bit more work to convert them to the format of your own resource. You should take this into account when evaluating an OER to see if it is suitable for incorporation into your package.

If you'd like a look at PILOT, we have an open access site at http://www.gcu.ac.uk/library/PILOT/ This is not the most up to date version, but it will give you an idea of the content.

A more up to date version is also available on Jorum http://dspace.jorum.ac.uk/xmlui/handle/123456789/17584 So far it has been viewed by 725 users and downloaded by 200. If you are one of the 200, I'd love to know what you think of it. If you have problems connecting to Jorum, contact me directly and I'll be happy to send you a copy (m.kelt@gcu.ac.uk)

Bibliography

Boden, D. Gaining a PILOT's License: Supporting researchers at Imperial College through the Postdoctoral Information Literacy Online Tutorial. Conference Paper. Konstanz Univeristy Information Literacy Conference. November 2007. http://kops.ub.uni-konstanz.de/bitstream/handle/urn:nbn:de:bsz:352-opus-59122/Boden_Debbie_konstanz_1db_2oct07_format_neu_SZ.pdf?sequence=1f Accessed 10.3.13

Kelt, M.D. (2003) Web based tutorials at Glasgow Caledonian University. Assignation Vol. 21 (1), pp.32-34.

Kelt, M.D. (2012) SMILE: making the most of other people's work – not reinventing the wheel. Conference paper. 101st Deutscher Bibliothekartag: Bibliotheken - Tore zur Welt des Wissens (101st German Librarian's Conference: Libraries – the Gateways to Knowledge). Hamburg. May 2012. http://www.opus-bayern.de/bib-info/volltexte//2012/1177/pdf/Smile101.pdf Accessed 11.3.13

CBI Future fit: preparing graduates for the world of work. [Online] Available from: http://www.cbi.org.uk/pdf/20090326-CBI-FutureFit-Preparing-graduates-for-the-world-of-work.pdf [Accessed 10 October 2011]

National Information Literacy Framework Scotland blog. Framework levels. [Online] Available

from:

http://caledonianblogs.net/nilfs/framework-levels/higher-education/ [Accessed: 10 October 2011]

The future of undergraduate psychology in the UK [online] Available from:

http://www.bps.org.uk/sites/default/files/documents/the_future_of_undergraduate_psychology_in_the_uk.pdf [Accessed 14 May 2012]

Vitae Researcher Development Framework http://www.vitae.ac.uk/researchers/428241/Researcher-Development-Framework.html Accessed 11.3.13

Web sites:

1. GCU code of good practice in research http://www.gcal.ac.uk/hr/policies/general/code_of_good_practice_in_research.doc

2. GCU research ethics booklet http://www.gcu.ac.uk/registry/secretariat/documents/EthicsBookletMarch2011asonwebsite.doc

3. BPS code of human research ethics http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf

4. HPC guidance on conduct and ethics for students http://www.hpc-uk.org/assets/documents/10002D1BGuidanceonconductandethicsforstudents.pdf

5. PRISMA http://www.prisma-statement.org/index.htm

6. Writing a research proposal Learning Development Department of the University of Leicester.

7. Mantra by Edina, University of Edinburgh, at http://datalib.edina.ac.uk/mantra/introduction.html

8. Research design, developed from the University of Plymouth, Learning from WOeRk project http://cpdoer.net/collections/research-methods/

9. Research Design http://www.itrainonline.org/itrainonline/mmtk/mmtk_basic_research_methods_handout.doc

10. Questionnaire Design, by Student Services, University of Bath www.bath.ac.uk/lmf/download/50976

11. Writing a critical review Steve Draper, Glasgow University Department of Psychology http://www.psy.gla.ac.uk/~steve/resources/crs.html

12. Writing a critical review University of Plymouth, Learning from WOeRk project

13. APA referencing based on Cardiff University Information Services tutorial at https://ilrb.cf.ac.uk/citingreferences/apatutorial/index.html

14. OSCOLA referencing, by Cathie Jackson, Ian Bradley, Matthew Davies and Lynn Goodhew, Information Services, Cardiff University https://ilrb.cf.ac.uk/citingreferences/oscola/tutorial/

15. op tips for technical writing by Vince Ricci CIEE http://www.slideshare.net/tokyovince/introduction-to-technical-writing-4305074

16. Technical report writing by Joe Schall, Penn State University http://www.slideshare.net/engCETL/technical-report-writing-handout

17. Style for students by Glynis Perkin of Loughborough University https://www.e-education. psu.edu/styleforstudents/c1_p15.html

18. Adapted from: Using Twitter in university research, teaching and impact activities : A guide for academics and researchers. LSE Public Policy Group 2011. http://blogs.lse.ac.uk/ impactofsocialsciences/files/2011/11/Published-Twitter_Guide_Sept_2011.pdf

19. MyRI University College Dublin, Dublin City University, Dublin Institute of Technology, The National University of Ireland, Maynooth and the NDLR http://www.ndlr.ie/myri/

20. GCU graduate centre PILOT links http://www.gcu.ac.uk/graduateschool/postgraduatestudy/ usefullinks/pilotlibraryresource/#d.en.51452

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