

# CASE STUDY

A Digital Curation Centre Case Study  
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## RDM Training for Librarians

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Section of the [How to guide that this supports](#)  
Guidance, training and support

### Introduction

This case study looks at the approaches taken by three Jisc Managing Research Data Projects (2011 – 2013) and one institution to providing effective training for librarians and information services professionals in Research Data Management (RDM).

### Background context

Through its institutional engagement programme the Digital Curation Centre (DCC) has seen many institutional (RDM) initiatives emanating from libraries. Librarians are carving out a new role for themselves in promoting and embedding good RDM practices. They are well placed for this role having information science skills in areas such as metadata, open access, institutional repository use - key constituents for RDM. Librarians also tend to have good working relationships with other service departments and researchers. This results in requirements for them to sit on institutional working parties and steering groups redesigning institutional strategies and infrastructure necessary to meet operational and regulatory requirements. Despite these factors various reports indicate that researchers do not immediately turn to the library, even when librarians could help a lot.

The 2012 RLUK report on *Re-skilling for Research* looked at the role and skills of subject and liaison librarians required to effectively support the evolving information needs of researchers. It states that it “is clear that as the nature of research within our institutions changes, so must the role of the library in supporting research”. More recently the Association of College and Research Libraries (ACRL), a division of the American Library Association, has

published a paper: *Academic Libraries and Research Data Services: Current practices and plans for the future*. The paper found that Libraries tend to rely on external conferences or workshops to provide research data services training and that there is a lack of internal institutional support in this area. As the landscape changes individual institutions will need to take measures to ensure that their library and information services staff are effectively trained in aspects of RDM. This case study looks at initiatives in this area.

### Overview: RDMRose

RDMRose is a Jisc-funded project to produce taught and continuing professional development (CPD) learning materials in RDM tailored for Information professionals. It is looking in particular at the specific needs of liaison librarians in university libraries, and deliverables include OER materials suitable for learning in multiple modes, including face-to-face and self-directed learning. All materials can be reused by other library and information service educators and a version for self-supported Continuing Professional Development is available.

The RDMRose project brings together the University of Sheffield iSchool with a practitioner community based on the White Rose University Consortium’s libraries at the Universities of Leeds, Sheffield and York. Development of content and teaching was iterative, based on a highly participative curriculum development process and with a strong strand of student evaluation of learning materials and activities. Version 1 of the training materials was released in January 2013 and the project team would appreciate any feedback on their use.

## Overview: Data Library, EDINA

EDINA, based at the University of Edinburgh, provides online services and resources for UK higher and further education. Within EDINA the Data Library assists staff and students in the discovery, access, use and management of datasets for research and teaching. The Data Library offers a data repository service, consultancy and RDM guidance. One of their training approaches is through MANTRA, an online course designed for PhD students and others who are planning a research project using digital data.

In late 2012 the Data Library began piloting extended professional development training in RDM for four liaison librarians at the University. The training looks at how RDM may be applicable to research practices in the disciplinary areas the four librarians represent. This knowledge-transfer exercise includes independent study based on MANTRA and reflective writing, face-to-face sessions with short speaker presentations followed by discussion, and group exercises. An evaluation of the training will follow to inform further rollout of such training, advocacy and awareness raising initiatives, both at the University of Edinburgh and elsewhere. The training 'kit', which will include videos, will be released under an open licence for other institutions, particularly those without local experts on staff, to utilise for 'DIY' RDM training, in Spring 2013.

## Overview: TraD: Training for Data Management

Training for Data Management (TraD) is a Jisc-funded project which will embed good practice in data management at the University of East London (UEL) by developing disciplinary training material for postgraduate curricula, adapting existing materials in the area of psychology and developing new materials for computer science. The project will also provide training opportunities for research staff and a self-directed online training course for library support staff called SupportDM. The five SupportDM modules will be developed using Xerte and delivered through Moodle. They will build on the MANTRA modules developed by the University of Edinburgh and the Data intelligence training for library staff course developed at Delft University of Technology, Holland. The Data4Librarians course is a competence-based modular course, combining online and face-to-face tuition (blended learning). SupportDM will include online resources and course material, lecture notes and advice on implementing and evaluating the course in libraries. It will be tested and evaluated by UEL subject librarians (one per academic school) in Spring 2013 and then used as the basis for training further support

staff at UEL. The project will seek to embed the student courses in the curriculum and to share lessons across the university, with potential to adapt them to new disciplines.

## Overview: Open Exeter

Open Exeter is a Jisc-funded collaborative project combining the expertise and experience of the University of Exeter Library, IT and Research and Knowledge Transfer staff. It has engaged with researchers and postgraduate research students (PGRs) to assess how research data is used across the University. One of the areas of focus is the development of training materials for researchers, PGRs and research support staff, including subject librarians. The Holistic Librarian project has involved piloting a self-directed course designed to help Exeter subject librarians become familiar with the concepts and practicalities of RDM. The training takes the form of "23 Things for Research Data Management". During the pilot version, each subject librarian was asked to complete a variety of 'things' or specific tasks or questions related to RDM, for example Thing 7 was to document the subject librarian's approach to the following situation "If a researcher asked you how to cite a data set, which resources could you point him to?" After each 'Thing' has been completed the subject librarian's response is written up in the form of a blog post for future reuse. The result could be described as Frequently Asked Questions (FAQ) of RDM for subject librarians to develop the knowledge, skills and confidence needed to give guidance to academics on RDM. The whole set of 23 Things will be evaluated and adapted and then rolled out to train the subject librarians on Exeter's Cornwall campus in Spring 2013.

## Key successes factors

### Teach about the research process

A common factor across projects that claim success in reskilling their librarians is that they have considered what distinguishes training for librarians in RDM as opposed to training for other groups (such as research support or researchers). The RDMRose project based their learning materials on the premise that librarians do not tend to be researchers. The information gap is often not just RDM methods but in the whole perspective of the researcher. They found that in the last few years much focus has been on developing support to learning and teaching, meaning a relative neglect of research. Librarians do not know enough about what researchers do, and so researchers often do not feel that librarians can support them in their work. Much of the RDMRose training focuses on

librarians understanding the diverse perspectives of researchers in different disciplines, getting out there and learning more about the research process and where the various roles librarians could play are really needed. 'Getting out there' could take the form of shadowing, networking and working on real data sets. The project likes to talk about 'learning', rather than 'training' by focusing on personal reflection and how supporting RDM relates to professional identity, rather than seeing it just as a matter of acquiring a list of skills.

Many of the projects mentioned have considered what approaches work well for librarians, deliberating on factors like timings, media used, subjects covered etc.

## Use active learning

RDM Rose decided that practical and active learning was to be central to their approach. Their sessions often used realistic problem-based learning, case studies and inquiry-based learning. The topics chosen attempted to link activities to the different roles libraries could take. This emphasis on 'practical sessions' has worked with other projects and institutions. At Open Exeter the approach taken was one of enquiry-based learning shaped around genuine enquiries that had come in to the library, or around anticipated queries from researchers. The subject librarians discovered how they would be able to give guidance in these situations. In other training participants had remarked that they were very keen on use cases when available.

The TraD project is planning to use the blended learning approach of the Data4Librarians course for its SupportDM modules. Combining face-to-face classroom methods with computer-mediated activities can result in a more integrated approach for all involved. SupportDM will combine presentations, online learning modules, activities and group reflection. Developers of the Data4Librarians course, created at Delft University of Technology, have commented that future designs will concentrate on making the course even more interactive, collaborative and constructive. However it should be mentioned that the projects and institutions mentioned here have tried and tested lots of different approaches and, as is often the case, different approaches work for different individuals.

## Encourage librarians to see RDM training as career development

Previous reports have noted a reluctance by librarians to reskill in this area. It could be argued that before institutional policy is clear it remains

unclear what librarians should learn. Librarians already have significant work duties and require guidance on how and why they should prioritise RDM relative to other roles. One possible approach is to demonstrate that RDM will be a useful skill for the future and librarians should be encouraged to see training as not only useful but career development. In the RDMRose project librarians have been encouraged to reflect on their own personal career path and how the demands of support to RDM align with their personal strengths and current role. The Data Library at EDINA has encouraged librarians to embark upon reflective writing; it has been agreed that these accounts will be kept private and only available for use by the librarians in the project. Open Exeter has taken a more 'open' approach and has encouraged those participating in the Holistic Librarian project to blog about the learning process and how they would improve the training. Embedding in current staff development programmes or in an ischool (as is the case with RDMRose) has also enabled librarians to see obtaining RDM knowledge as a step on a career path.

It has been noted by some projects and institutions that the subject of RDM can seem forbidding and overly technical on first view. However in reality most librarians, once involved in training, found the topic interesting and gained in confidence. Librarians should be reassured that many of the skills needed for RDM are very closely aligned with the skills they as librarians already have.

## Obtain feedback

Most of the projects and institutions looking at RDM training for librarians have built a feedback process into their activities. RDMRose conducted a questionnaire asking participants to rate their current knowledge and the importance of a wide range of different topics relating to RDM. This information was collected at the beginning and end of the delivery enabling them to gauge learning, growing confidence and changing sense of priority. In the Holistic Librarian project all the Subject Librarians were asked to consider a number of questions when writing their blog posts. The final question was "How did you find this task? How would you improve it?" In the TraD project the library was seen as a natural partner in their online course creation having developed the online Info skills3 course which teaches students information skills. Their feedback has been obtained throughout the course development process.

# Challenges

## Teaching the right skills to the right people

One of the biggest challenges has been teaching librarians the right collection of skills. These skills could be seen as technical skills (e.g. knowledge of data repositories and storage) and soft skills (e.g. collaborative working). The RLUK report actually identifies 32 RDM skills, with 9 of these as being the current 'skills gaps' that academic librarians need to concentrate on.

In January 2013 the University of the West (UWE) of England's Jisc-funded project on Managing Research Data: a pilot study in Health and Life Sciences invited projects from the training strand of the Jisc MRD programme to share their tools that enable skills development for librarians at a one-day workshop. The workshop, entitled *Reskilling for Research Data Management*, was advertised as of value to librarians who liaise with researchers as well as to those who support research output repositories, and those who provide the infrastructure of the scholarly communication processes through collections and e-resources management. At the workshop the 32 skills identified in the RLUK report were narrowed down to five key areas: the research process, partnerships, research data, scholarly communication and metadata. Through discussion groups there was realisation that not everyone can be trained in all these areas; different teams (liaison, metadata, repository etc.) will probably take up different roles in relation to RDM. However it is important for librarians working in HEIs to know which individuals they can point researchers to. A 'train the trainer' approach has been taken at some institutions to allow knowledge to 'filter down' more easily.

## Embedding training

One issue mentioned by many of the projects and institutions is that librarians rarely have the time to attend long training courses. Future RDM training would benefit from being embedded in Library and Information Science postgraduate courses. This approach is being taken through the RDMRose work based at Sheffield iSchool, and the materials produced can be reused by other LIS educators, but other work tends to be aimed at in-post librarians. It is important that these skills are the norm for the next generation of librarians. For in-post librarians, it is important to consider the most suitable format/method of training. Open Exeter's Holistic Librarian training allowed subject librarians to manage the timing and speed of their own training to fit in around their other activities.

## Maturity of RDM

RDM is a relatively new area for the higher education sector and institutional services are often still in development. It may not just be a matter of learning about an existing repository system or how to promote a service, sometimes these systems do not exist yet. For librarians it can be hard operating in a context where the institutional direction is unclear. With this in mind many of the RDMRose learning materials have focused on current practice, strategic issues and stimulating discussion about how the library and individual librarians are going to respond to the challenge ahead.

## Further information

**RDMRose:** <http://www.sheffield.ac.uk/is/research/projects/rdmrose>

RDMRose Learning materials: <http://rdmrose.group.shef.ac.uk/>

**Data Library, EDINA:** <http://www.ed.ac.uk/schools-departments/information-services/about/organisation/edl>  
**MANTRA:** <http://datalib.edina.ac.uk/mantra/>

**Trad: Training for Data Management at UEL:** [http://www.jisc.ac.uk/whatwedo/programmes/di\\_researchmanagement/managingresearchdata/research-data-management-training/trad.aspx](http://www.jisc.ac.uk/whatwedo/programmes/di_researchmanagement/managingresearchdata/research-data-management-training/trad.aspx)

**OpenExeter:** <http://as.exeter.ac.uk/library/resources/openaccess/openexeter/>  
OpenExeter blog (Holistic Librarian): <http://blogs.exeter.ac.uk/openexeterrdm/blog/tag/holistic-librarian/>

**3TU.Datacentrum:** Data4Librarians: <http://dataintelligence.3tu.nl/en/home/>

**UWE project Managing Research Data:** a pilot study in Health and Life Sciences workshop: *Reskilling for Research Data Management*: <http://blogs.uwe.ac.uk/teams/mrd/archive/2012/11/29/re-skilling-for-research-data-management-a-workshop-for-academic-librarians.aspx>

## Key Points:

- Teach librarians about what is involved in the research process
- Use active learning that is engaging and focuses on tasks
- RDM Training should be seen as part of career development for librarians
- Training design is an iterative process and feedback is highly important

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