## Project Information

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<td><strong>Project Title</strong></td>
<td>Research Data MANTRA</td>
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<td><strong>Project Hashtag</strong></td>
<td>MANTRA</td>
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<tr>
<td><strong>Start Date</strong></td>
<td>01-08-10</td>
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<tr>
<td><strong>End Date</strong></td>
<td>31-07-11</td>
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<td><strong>Lead Institution</strong></td>
<td>University of Edinburgh</td>
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<td><strong>Project Director</strong></td>
<td>Dr. Jon Turner, Peter Burnhill</td>
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<td><strong>Partner Institutions</strong></td>
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<td><strong>Project Webpage URL</strong></td>
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<td><strong>Programme Name</strong></td>
<td>Managing Research Data</td>
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<td><strong>Programme Manager</strong></td>
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## Document Information

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<tr>
<th><strong>Author(s)</strong></th>
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<tr>
<td><strong>Project Role(s)</strong></td>
<td>Project Manager</td>
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<tr>
<td><strong>Reporting Period</strong></td>
<td>From 01-08-2010 to 1-3-2011</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>7-3-2011</td>
</tr>
<tr>
<td><strong>Filename</strong></td>
<td>MANTRA-progress-report.pdf</td>
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<tr>
<td><strong>URL</strong></td>
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<tr>
<td><strong>Access</strong></td>
<td>□ Project and JISC internal</td>
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<td>■ General dissemination</td>
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## Document History

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<td>7-3-2011</td>
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Section One: Summary

The project team has been working hard to create the learning materials and engage in liaison activities with stakeholders over the period. Although the project is straightforward and the approach has not changed, creating original and engaging learning materials is not easy. In this case there is not a lot of precedent for teaching in this area, making it a slightly daunting task, especially for a target population with various levels of computer literacy and data experience.

At the same time, the field has been burgeoning with new publications and activity nationally and internationally, which we have been studying.
Section Two: Activities and Progress

WP1: Project management

The project plan was delivered on 1st October 2010 (as agreed with the programme manager – delayed due to an injury of the project manager). Revisions and a fuller evaluation plan were included in a second version, dated 25 November. The plan was placed on the project website, which was delivered along with the more fluid wiki on 27 September.

The project team joined the recommended email lists for the programme and the project manager attended the JISC programme meeting on 21st October, preceded by a fellow RDM project’s workshop on ‘Developing data management expertise’. A presentation was given to the training strand. The project manager set up a twitter account in part to engage with the RDM community. The project manager has kept up active liaison with internal partners and stakeholders as well as the RDM broader community.

A number of meetings were organised around key milestones, involving the relevant contacts and project staff from September to March. Staffing has been allocated as planned with two exceptions. While the web designer was not needed due to use of the University’s content management system, it has been necessary to obtain staffing resource (time) from an EDINA colleague to address the lack of time in pursuing video interviews at the same time as commissioning and reviewing the learning materials and software modules. Addy Pope will become a project team member in the latter half of the project.
WP2: Needs assessment with schools
This was carried out as envisaged. Each school contact was scheduled for a meeting with the project team in September or October, during which a digital recording and notes were taken. The final agreed set of notes is appended to this report. Where references to courses and other resources were made, these were linked from the project wiki. Additional communication has and will continue regarding outputs and their quality & appropriateness for the schools.

WP3: Gathering and evaluating resources
The field has been burgeoning with new publications and activity nationally and internationally, which we have been studying. In particular the US National Science Foundation’s new requirements have highlighted the need for institutions in the US to respond, in terms of support for data management planning, which has galvanised the library profession there and resulted in numerous researcher guidance efforts. The other training strand projects have also been producing relevant output that we have needed to take into account. This has been quite time consuming, but we have managed not to become overwhelmed, and to carry on with our tasks. We have shared much of what we have discovered with the programme by opening up the home page of our project wiki, https://www.wiki.ed.ac.uk/display/mantra/Research+Data+Mantra+project+wiki.

WP4: Writing, editing & repurposing course content
The timeframes for writing and testing have been somewhat fluid. Installing, debugging and learning how to use the Xerte tool took extra time, but we think the interactivity gained through the available interactive elements is well worth it. While a couple of units have yet to be written the majority are currently undergoing team review to be followed by student usability testing, revision, and then we will seek survey-based feedback from more students, lecturers, and our ‘buddy’ project, Incremental. (Again, extra units were assigned to the project manager who has already worked quite a lot more than her scheduled time on the project with communication, coordination and commissioning tasks, and has not yet had time to author these units.) In some cases, permission has been sought and received for re-use of materials found on the Internet. In other cases, such as images from Flickr, Creative Commons-licensed materials have been found that we are able to re-use with attribution.

WP5: Commissioning data handling practicals
This activity has been more time-consuming than expected for the project manager but several milestones have now been met. Authors have been found for all four practicals. Consultancy agreements have been agreed and only one remains to be signed (with UKDA for NVivo). Primary contacts in the two relevant schools have provided input into content. Outlines of all four practicals have been received, revised, feedback obtained, and finalised. All four outlines are being submitted with this report. Open datasets have been identified and corroborated as fit for purpose. Student evaluators from the schools have been identified. Full practicals written as PDF documents with screenshots are expected this month, then will be tested/evaluated and revised/finalised.

WP6: Video interviews & production
As mentioned under WP1, this workpackage is behind schedule as it was found unrealistic to pursue at the same time as all of the other deliverables. An additional project officer from EDINA has been obtained to assist with this work. A shortlist of people to interview is currently under consideration and this will be taken forward soon.
WP 7: Quality Assurance & testing
This activity dovetails with WP4, in an iterative process of authoring, testing, revising. Instructions, a script, and a pre- and post-test questionnaire were devised for the face to face usability-type tests with PhD students from each of the 3 schools to be scheduled this month. Before this occurs, authors are revising materials based on internal project team feedback. These 3 testing documents are submitted with this report.

WP 8: Port to WebCT; deposit in JorumOpen
This cannot be done until the materials are finalised. There is a question where the materials will be made available to students; not all schools make use of WebCT and it’s unclear what added value it provides. Additionally we have discovered that xerte exports as an XML package but the actual pages are delivered via Flash.

WP9: Formative & Summative Evaluation
The project evaluator was involved in decision-making about the student testing (WP 7) and has been provided with the needs assessment notes. She has asked for a meeting to be arranged with the project team for some informal formative evaluation discussion in advance of the summative evaluation work commencing.

Section Three: Institutional & Project Partner Issues
School liaison activity is fine; partners and contacts are unchanged. We have added an external project partner, Dr. Seraphim Alvanides from Nottingham University, who is interested in providing the course to his students when it becomes available. He is a Geographer and has provided feedback on the R and ArcGIS software modules. He has offered to provide additional student evaluators as well.

Section Four: Outputs and Deliverables
MANTRA featured in a peer-reviewed paper and presentation given to the IDCC conference 6-8 December, 2010 in Chicago. (Both are available: http://edina.ac.uk/presentations.html ) In addition a proposal to IASSIST 2011 (May, Vancouver, Canada) for MANTRA was accepted as a peer-reviewed paper (presentation), and a proposal for a paper to the Open Educational Resources 2011 conference (May, Manchester) was accepted with an invitation to write a full paper for the journal, due in June.

Project activity has been synergistic with other RDM activity undertaken by the Data Library. The project manager organised and took part in an international panel, Developing Services to Support Research Data Management and Sharing, for the ECDL 2010 conference in Glasgow, 7 September. Description: http://www.ecdl2010.org/?page_id=556

The MANTRA project will be introduced to other University support staff along with the data repository service (Edinburgh DataShare) and the Researching a Data Asset Registry (RADAR) internally-funded project by the project manager at a local talk on Library roles in research data management: experiences from Monash University, to be given by Sam Searle, visiting Edinburgh from Melbourne on 22nd March.

Finally, delivery of the MANTRA training course within the University of Edinburgh is part of the Information Services Plan, 2011-12. This will be undertaken in collaboration with the Institute for Academic Development.
Section Five: Outcomes and Lessons Learned

The project team has found that authoring the online learning materials has been easier with Xerte, especially as the interactive elements have been easy to add. Having more than one author working simultaneously has lent synergy to this activity. Concentration required to author materials is high and chunks of time must be set aside for this work; it cannot adequately be tackled while multi-tasking. There is a balance to be found between not wanting to reinvent the wheel and not wanting to plagiarise others' materials.

We have found that there is a tension between data management norms and data management best practice. For example, some people believe that using open source software and open standards are important best practice for data management. Yet, we have found the need to ground the ‘lessons’ in normative practice, for example in the use of proprietary software in some cases. What is relevant for one research student is not necessarily relevant for another; not only between disciplinary families but within them.

Other lessons learned are reflected in the Needs Assessment notes, appended.

Section Six: Evaluation

See Section 2, WP 9. There have been some technical issues in the Xerte installation on a shared server; we will ask the evaluator to include a summary of these in the evaluation report.

Section Seven: Dissemination

See section 4 and section 2, WP1.

Section Eight: Risks, Issues and Challenges

Original deadlines were overly optimistic and have needed to be more elastic. However, there was slack built into the timeframe to allow this.

There has been a crunch on the project manager’s time at 20% to work directly on the workpackages (i.e. video interviews and authoring) in light of extensive work on overall coordination & communication, commissioning, quality assurance, and dissemination. Other (non-project) work has been delayed in order to ensure high quality project deliverables. Fifty percent project management time would have been more ideal.

An additional member of the project team has been added to ensure the videos are completed with enough time for editing. It is hoped that time will be found for the project manager to write the extra two to three modules in time for evaluation of the whole course; if not, the other authors will be called upon to complete the chapters.

Although the project is straightforward and the approach has not changed, creating original and engaging learning materials is not easy. In this case there is not a lot of precedent for teaching in this area, making it a slightly daunting task, especially for a target population with various levels of computer literacy and data experience.
Section Nine: Collaboration and Support

The project team met with the DAMSSI project at their request to discuss how the materials map onto the Researcher Development Framework from VITAE and the SCONUL Seven Pillars. Followup is ongoing. The Incremental Project team from the JISC Managing Research Data Programme has agreed to help evaluate the materials at the same time as the school primary projects, to ensure a sound data management perspective in addition to the discipline-specific perspectives.

Section Ten: Financial Statement

See budget spreadsheet submitted separately.

Section Eleven: Next Steps

The most important next steps are completing the online materials, completing the software modules and getting them tested and revised; beginning and completing the video interviews; ensuring adequate quality assurance, and exporting the materials for open re-use. Evaluation and dissemination will also become increasingly important.

Checklist:

Before you return this report:

- Ensure that your project webpage on the JISC website is up to date and contains the correct information. Attach details of any required amendments to this report. Project webpages can be found from: http://www.jisc.ac.uk/whatwedo/projects.aspx
- If there have been any changes to the original project plan and/or work packages, ensure that amended copies of the relevant sections of your project plan are attached to this report.