Postgraduate Research Student Data Management Plan: Review Guidance for Supervisors

Introduction

This document provides guidance for Supervisors on reviewing a research student's Data Management Plan (DMP). Student's are advised to complete a DMP if their research will involve the collection or creation of primary data. Primary data may be collected or created by means of experiment, observation, simulation, and processing or aggregation of existing data sources.

Creation of primary data from existing sources may occur, for example, through processing of observational data to provide inputs into a numerical model, or compiling information from disparate archival and published sources into a new database.

What the Supervisor should do

At the earliest opportunity, the Supervisor should discuss the DMP with their student and may help them to develop their DMP throughout the research programme, by discussing their data management needs and reviewing versions of the DMP as it is developed. Students should be encouraged to attend relevant training delivered via RRDP.

The Supervisor should encourage the student to complete a first version of the DMP in the early stages of research planning. A **PGR Data Management Plan Template** and detailed guidance are provided for this purpose on the research data management web pages.

The Supervisor may wish to ask the student to complete a DMP as part of their preparation for first-year annual review. The Supervisor can review the DMP using the following guidance and the **review checklist** provided, or may direct the student to submit their DMP to the Research Data Manager for review.

It is recommended that the student be encouraged to update and submit the DMP to the Supervisor on an annual basis. This will help the student to keep on to pf their data management and to maintain a record of their research process as it evolves throughout the programme. The updated DMP may inform annual progress discussions with the student, although no formal assessment of the DMP is required.

Purpose of the Data Management Plan

Students are required to abide by the University's Research Data Management Policy, which expects that where data collected or created in the course of a project support research outputs, these data will be preserved using a suitable data repository and made openly accessible wherever possible, or accessible to the fullest extent compatible with any legal, ethical or commercial restrictions.[1] If the student is in receipt of funding from a public or charitable funder, such as a Research Council or the Wellcome Trust, they will be subject to similar requirements from their funder as well.[2]

---

[1] http://www.reading.ac.uk/res-rdm-policy.aspx.
[2] http://www.reading.ac.uk/res-rdm-funders-policies.aspx.

The purpose of the DMP is for the student to document how they will manage their data and supporting materials such as software code throughout their research project, and how they will preserve these materials and make them accessible to others in support of their completed thesis and any associated publications.

The DMP is a practical research instrument, which can help students manage their research data on a day-to-day basis throughout the research workflow, from collection, through processing and analysis, to preparation for archiving and sharing on completion of the research and communication of results. It should be treated as a living document, and developed iteratively throughout the research process as more information is acquired and the research evolves.

The student will not be able to complete all sections of the DMP at a first attempt: in the early stages of research a lot of the practical detail, and some of the key data management decisions, may be as yet undetermined. But the student can use the plan to document their data management requirements, identify questions they need answers to and people to ask, and put down markers for future development of the plan.

The ability to write an effective DMP is a key research skill, which will enable students to become more efficient researchers, to identify requirements and manage risks, and to apply appropriate solutions. It is also an essential professional skill for the prospective career researcher, as many funders of research now require applicants for grant funding to submit a DMP as part of their application.

Support

For advice on reviewing the DMP contact Robert Darby, Research Data Manager, at r.m.darby@reading.ac.uk / 0118 378 6161.

Training for students on 'Managing research data and material' and 'Writing a Data Management Plan for your research project' is delivered termly through the Reading Researcher Development programme. For more information see http://www.reading.ac.uk/gs-reading-researcher-development-programme.aspx.

Training for staff on research data management and writing a data management plan is provided through People Development. Search for 'data management' via UoRLearn: https://uorlearn.sabacloud.com/.

Guidance on reviewing a Data Management Plan

What is a satisfactory DMP?

The student should complete each section of the DMP. If a section is not relevant to them (e.g. students who are not collecting data from research participants will not need to complete the Ethics and Legal Compliance section), they should write N/A (with a brief explanation if necessary) and move on to the next section. The student should not delete sections from the template.

The student may not be able to complete all relevant sections of the DMP in the version submitted for the first annual review. This is quite acceptable, but the student should demonstrate that data management requirements have been considered and put in place markers for future development of the plan.

What to look for

When assessing a DMP, you should look for the following qualities:

- The plan looks realistic, and appropriate to the nature of the project, e.g. the data collection campaign is necessary and relevant to the research question, and is not out of scale with the project scope.
- The plan demonstrates awareness of all relevant policy and legal requirements, and indicates how the student will comply with them. Relevant requirements will include:
  - the University's policy expectations on data preservation and sharing;
  - legal and ethical requirements in respect of personal/confidential data;
  - any contractual dispositions regarding IP ownership and publication, for example under a CASE/industrial sponsorship agreement or IP assignment.
- The plan should identify any possible restrictions on data sharing, and demonstrate how the student will manage these and take measures to maximise possibilities for data sharing. For example, if the student will be using secondary data, they should show they are aware of the data provider's licence conditions or terms of use and how these may affect their freedom to share derived data; or if the student is collecting data from research participants, they should plan to obtain consent for data sharing wherever possible and to anonymise data so that they can be safely shared.
- Any non-standard or additional support or resource requirements should be identified and justifiable, for example if funds are required for a training course, or if use of experimental or national computing facilities is planned.
- Where applicable sections are incomplete or lack specificity, the student demonstrates awareness that more information is needed and will be provided in future iterations of the plan.