Research Data Management and Open Scholarship

Introduction

This paper updates Research Committee about the work of the Research Data Group at NUI Galway, frames those activities in the wider environment of data management and open scholarship, and raises the question of ongoing linkage between the Group and the Committee.

NUI Galway Research Data Group

The Research Data Group first met in December 2016 and its current membership is: John Cox (University Librarian, chair), Peter Corrigan (Head of Digital Publishing and Innovation, Library), Prof. Mathieu d’Aquin (Director, Insight), Peter Feeney (University Data Protection Officer); Trish Finnan (Digital Publishing and Data Management Librarian, Library), Dr. Aidan Kane (Lecturer, Economics), David Kelly (Digital Humanities Manager, Moore Institute), Dr. Iain MacLaren (Director of CELT), Sean O’Farrell (Director of Information Solutions and Services), Aengus Parsons (Director of Research, Research Office), Dr. Srinivas Raghavendra (Lecturer, Economics), Dr. Elaine Toomey (Postdoctoral Researcher, Psychology).

The Group has focused its work on four areas of activity:

- drafting a University policy for research data management and consulting with stakeholders
- developing advice and supports for researchers
- raising awareness of the value of research data and data management
- tracking global developments, including funder requirements and linkage with open scholarship

Key outputs to date include: the University’s Research Data Management Policy; a local guide to research data management, supplemented by ongoing presentations and advice; and a series of public events, including guest lectures and local data conversations, all designed to create awareness and promote good practice in line with funder expectations:
An Evolving Research Data Environment

The environment for research data management is fluid. Developments of particular note include:

- Research funders view research data as a major asset which they expect to be well managed and widely shared. Inclusion of data management plans is commonly required in research bids, generating new responsibilities for researchers and additional resource needs. These include secure data storage, metadata creation and publication for open access.

- There is an increasing expectation that data will conform to the FAIR principles, making them Findable, Accessible, Interoperable and Reusable. This involves significant further processing of data, for example to achieve standard formatting for seamless use with other data sets.

- Data protection requirements are changing.

- The scholarly record, until recently largely focused on publications such as monographs and journals, is becoming much more diverse. Materials generated during the research process, including datasets, are increasingly available and have the potential to enrich research if properly managed for sharing. Equally, universities and their researchers need to be appropriately credited for their generation and publication of datasets.

Open Scholarship

Open scholarship is a global movement that aims to make publications, data and other research outputs publicly accessible as early as possible and actively encourage the general public to participate in a collaborative and transparent research process. Its implications for how research is conducted and assessed are many and include:

- Expectations of open access to publications arising from funder-led initiatives, eg Plan S
- Questions of academic freedom regarding where to publish
- Challenges to the existing research publication system which is monopolised by a few large and highly profitable publishers at significant expense to universities
- A broadening of research assessment criteria to take account of a range of outputs, including data sets, with less focus on citation counts for articles in specific journals
- Stronger focus on research integrity and reproducibility through sharing of all materials used to generate findings
- Emphasis on public engagement with research

Future Considerations

Research data management, and its broader context of open scholarship, are dynamic areas. They offer both challenges and benefits. Each brings obligations for researchers but with opportunities to enhance the reputation and global profile of the University and to contribute to, and benefit from, wider access to research findings, along with greater collaboration, transparency and reproducibility in research. Research Committee may wish to consider how it wishes to engage with the Research Data Group and any other groups formed to advance open scholarship in the University. Open scholarship practices and values may also be a valid inclusion in the University strategy from 2020.

John Cox, University Librarian, 7 May 2019