Greater training is necessary to put open data at the heart of Research Data Management policy and practice.

**blogs.lse.ac.uk**/impactofsocialsciences/2013/10/30/helping-to-open-up/

As higher education institutions look to implement broader visions of openness, there is a need to re-assess the training and skills required for appropriate research data management (RDM). **Geoff Curtis** *and* **Stéphane Goldstein** *present the findings of a report on how best to exploit developments in RDM practice to promote greater awareness and understanding of open data.*

Opening research data has become fashionable – and rightly so. Reports such as the Royal Society's *Science as an open enterprise* and the White Paper on *Open data – unleashing the potential,* both published last year, are setting the agenda. Other relevant initiatives are the Open Knowledge Foundation, the Research Data Alliance and more broadly, an increased interest in the potential of economic and social return for the UK by making research data more open. The Government's transparency agenda provides underlying political momentum.

While there are clearly differences in data types across the sciences, arts and humanities, the challenges of managing and opening research data are essentially similar. The diagram below illustrates the elements required for opening data and how these come together to create the desired effect.
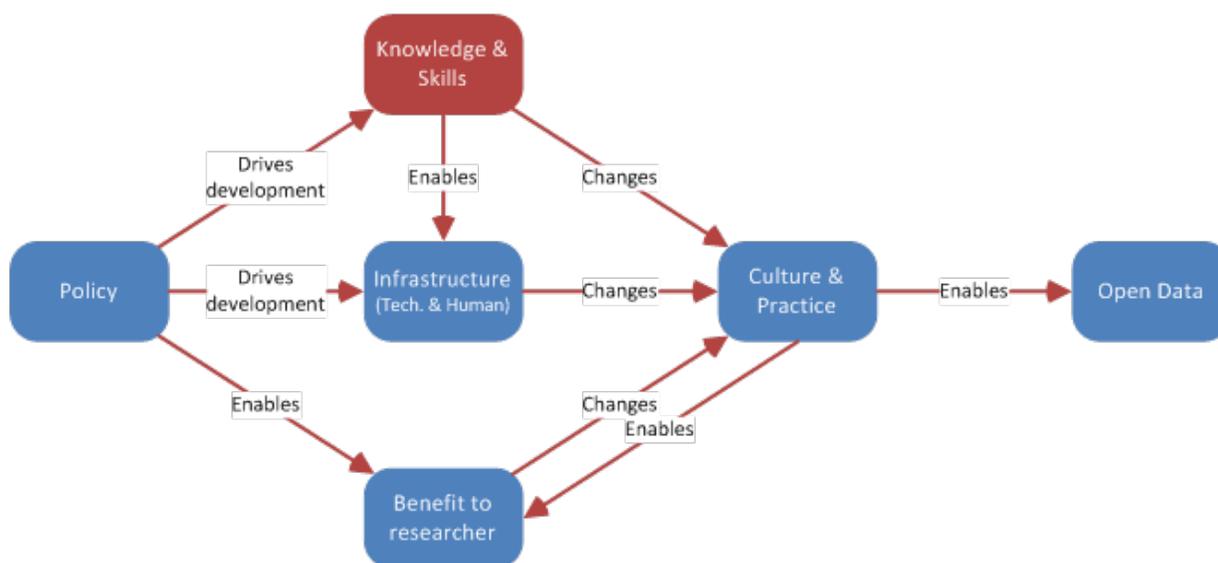
Source: Helping to open up, Research Information and Digital Literacies Coalition (2013)

Previous reports have been more concerned with strategy rather than details of the 'how'; there is little mention of how the essential understanding and skills will be acquired to implement the broad vision, nor of the benefits of training and supporting them properly. The relative neglect of the concept of skills and know-how associated with open data is reflected by the near absence, in practice, of training materials and courses focused specifically on helping to make data more open.

Such is one of the main conclusions from the *Helping to open up* report, published in July under auspices of the Research Information and Digital Literacies Coalition (RIDLs), and from which the flow-diagram above is drawn. Is the lack of training specifically focused on opening up data a problem? Not necessarily, as long as the benefits (but also the limits) of openness are addressed as an intrinsic part of the broader and more widely-recognised agenda for

improving research data management (RDM) in higher education.

The move to instigate and generalise good practice in RDM comes from the funders' desire to re-use and re-purpose research data. It has been underpinned by major endeavours such as the Jisc Managing Research Data Programme. This work provides the framework for improved understanding of opening data. But, as the report suggests, in spite of the increased interest in RDM issues, there is still some way to go before an "open by default" culture can be claimed in higher education. There is not yet a clear view on the type and level of support in opening data that is needed by researchers; nor is there a common view on how such support should be delivered, or on the skills required by the staff delivering the support.

Helping to open up provides some useful leads in how best to exploit developments in RDM practice to promote greater awareness and understanding of open data. One obvious approach is to review the skills and knowledge requirements of the many different aspects of RDM, and derive the implications in each case for open data. Thus, for instance, data management planning can be made to incorporate objectives such as making data as discoverable as possible, processes for selecting data for release and considering licensing terms; all these factors have a direct bearing on openness. Decisions about metadata schemas and frameworks, which also affect discoverability and citeability, are another example of how RDM know-how can serve the interests of openness.

Another approach relates to the roles of the different sets of players involved in RDM, and how training for these roles can be fine-tuned so that data openness becomes a normal part of RDM. Four broad groups of players (data creator, data owner/controller, research data specialist and research manager) were examined by the report as shown in the following graph:
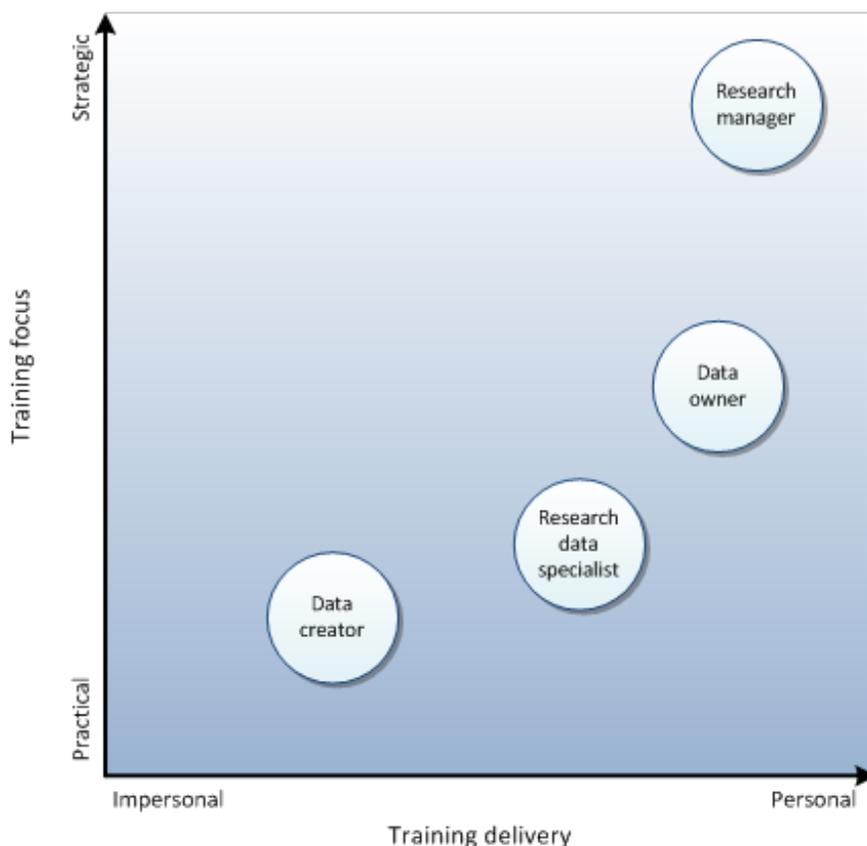
Training focus describes the degree to which training concentrates on strategic or practical aspects; delivery describes whether the type of activity focuses on individual needs or on more collective requirements. The distinct roles imply different relevant training approaches.

A further layer of complexity is added by the crucial importance of meeting the requirements of researchers, which

differ across disciplines. Subject-specific contexts have an important bearing on what researchers need to know about RDM, and by extension about open data. Putting open data at the heart of RDM policy and practice is thus an imperative. Doing this necessarily implies the need to refine the training approaches so that opening data is explicitly in training materials and courses.

Research funders and HEIs have a particularly important responsibility in this task – as does BIS, as the Government Department that is taking the lead in promoting data openness in the research arena. The specialist support bodies such as Jisc and the Digital Curation Centre also have an important role to play.

Note: This article gives the views of the author, and not the position of the Impact of Social Science blog, nor of the London School of Economics. Please review our Comments Policy *if you have any concerns on posting a comment below.*

About the Authors

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