

## The skills gap: what topics need to be covered and how

Consider which of the following topics are most important to cover in courses. Initially fill in the sheet individually and then discuss in your groups to answer the following questions:

1. Which topics does your group feel are most important to cover?
2. Are there any topics missing or ones you think are less relevant?
3. Aside from knowledge of RDM and open science practice, what skills do you feel are needed?
4. Based on your experience and the examples from this morning, what do you think are the most effective ways to re-train librarians for RDM support?

### Topics to cover in RDM and open science training

Mark these topics on a scale of 1-5: 1 = not important 5 = very important	Rating
1) The basics of Research Data Management	
2) Lifecycle models e.g. DCC curation lifecycle and research workflows	
3) Why research is important to universities and how it is governed	
4) The social organisation of academic research: disciplines, specialities, inter-disciplinarily	
5) Perspectives of researchers on research and data	
6) A methodology to audit researchers about RDM practices (e.g. DAF or curation profiles)	
7) The strategic context in which RDM and openness has become an issue	
8) Research funders' mandates and principles of good practice	
9) Journals' policies on publishing data with articles	
10) Institutional policies on RDM, including the local data policy	
11) Monitoring compliance with data policy	
12) The relation (if any) between open access for scholarly publications and RDM	
13) Existing teaching material about RDM practices relevant to groups you support	
14) Links to standards, tools and data management best practice	
15) Case studies of RDM principles in practice: version control, handling access etc	
16) General awareness of issues around open data and open science	
17) Examples of the benefits gained by managing and sharing data	
18) Ethical and privacy issues e.g. managing consent, anonymisation, secure access	
19) Information security and research data	
20) Research data storage	

21) What a data management plan is and what is involved in writing one	
22) Costing RDM activities and infrastructure	
23) The potential LIS/ computer services/ research admin support roles in RDM	
24) Impact of RDM on professional service organisational structures	
25) Exemplars of Research Data Services from other institutions	
26) Awareness of subject data centres	
27) Metadata and documentation for research data	
28) Data repository systems	
29) Local data deposit process	
30) Sources for reusable data you might want to promote to researchers	
31) Principles of data curation and digital preservation	
32) Standards and models for digital preservation e.g. OAIS	
33) Data citation	
34) Bibliometrics and altmetrics	
35) Data licensing, copyright and legal issues e.g. IP, patents & commercialisation	
36) Data information literacy	
37) Understanding of data analysis techniques such as text mining	
38) How to keep up to date on RDM	
<i>Any other topics that should be covered...</i>	
39)	
40)	
41)	
42)	
43)	