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LEARN**Leaders Activating Research Networks: Implementing
the LERU Research Data Roadmap and Toolkit****Coordination & support action**

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Table of contents

1.	Version log	4
2.	Definition and acronyms	5
3.	Introduction.....	6
4.	Activities carried out and results	7
4.1	Organisation	7
4.2	Programme.....	7
4.2.1	Keynote speakers and discussion panellist members.....	8
4.2.2	Break-out tutorial groups	10
4.3	Media Report	11
4.3.1	Pre-Event Communications	11
4.3.2	On-the-Day Activities	12
4.3.3	Post-Event Communications.....	15
4.4	Evaluation and feedback	16
5	Conclusions	17
	Appendix A.....	20
	Appendix B.....	22
	Appendix C.....	24
	Appendix D.....	27
	Group 1 - Engaging early career researchers.....	27
	Group 2 - How to cost data curation	30
	Group 3 - How to implement the LEARN Toolkit and Executive Briefing	32
	Group 4 - Using the LEARN RDM Policy & Guidance	34
	Appendix E.....	36
	Appendix F	37

1. Version log

Version	Date	Released by	Nature of Change
First draft	20 May	R. Amis (UCL)	
Second draft	22-24 May 17	I. Marsili & F. Grant	Small revisions and comments
Additional text to Second draft	24 May 17	P. Ayris (UCL)	Contributed Section 5
Third draft	5 – 14 June	R. Amis and Martin Moyle (UCL)	Minor revisions / comments
Final version	15 June 17	I. Marsili (UCL)	Finalisation

2. Definition and acronyms

Acronyms	Definitions
LEARN	LEaders Activating Research Networks: Implementing the LERU Research Data Roadmap and Toolkit
LERU	League of European Research Universities
LERU Roadmap	Roadmap for universities and research organisations on how to tackle the challenges which research data poses. It also has a series of messages for researchers, support services, research institutions and policy makers.
LIBER	Association of European Research Libraries
RDM	Research Data Management
UB	Universitat de Barcelona
UCL	University College London
UNIVIE	Universität Wien
UN ECLAC	United Nations Economic Commission for Latin America and the Caribbean

3. Introduction

Work Package 2 “Dissemination” (Task 2.4) states that the LEARN Project will organise a Final Conference that will ‘act as an international shop window for the Project’s outputs and outcomes. All stakeholder sections in the research community will be invited to attend’.

As with the LEARN Workshops, organised in Europe and Chile between January 2016 – January 2017, the Conference formed one of the main project activities.

The Conference was the culmination of the LEARN Project’s efforts over its two year lifespan, and the event was a showcase for the Project’s outputs and resources produced over this period e.g. the Toolkit of Case Studies, the LEARN Executive Briefing, and the Model Policy.

This paper is the report on the Final LEARN Conference entitled ‘*Managing the Data Deluge: roles and responsibilities for your institution*’ held in London on 5th May 2017 and organised by the Coordinator UCL.



Participants gathering before the start of the LEARN Final Conference.

4. Activities carried out and results

4.1 Organisation

The venue for the Conference was Senate House (University of London). The logistics for the event included catering and full audio-visual support. The Conference was widely publicised and promoted via the LEARN Project's website and Twitter feeds, as well as through direct mailings to identified contacts supplied by all the Project partners, the project's Reviewers (Marta Teperek and Sarah Jones) and use of various organisational mailing lists e.g. LERU.

Registration for the Conference opened on 1/3/2017 via the Project's website using the Eventbrite booking system to manage the process (see <https://tinyurl.com/ybxeyxar>). A ceiling of 140 registrants was set in order to comply with the venue's own limits.

The Conference attracted an aggregate of 152 registrations over the full open booking period. From this number 129 remained confirmed bookings on the eve of the event, of whom 112 attended on the day. The range of institutions represented by the registrants is listed in [Appendix A](#). The female to male ratio for the registrants was 63:49. Just over 35% (40) of registrants came from non-UK based institutions/organisations. Breakdowns of attendees by job type and by countries of institutional origin are shown in [Appendix C](#).

A welcome pack was assembled providing each registrant with the Conference programme, a copy of the *LEARN Toolkit, 20 RDM Best-Practice Recommendations from LEARN*, and details of the afternoon break-out tutorial groups (see 4.2.2 below).

4.2 Programme

The Conference programme was developed to allow for four keynote speakers (all external to the Project and all non-UK), two panel discussions, and four parallel break-out tutorial session groups.

The four keynote presentations and the afternoon feedback sessions were recorded and the resulting videos have been made available via the LEARN website - see <http://learn-rdm.eu/en/events/final-conference/> along with the speakers' presentation slides which can be viewed and downloaded at <http://learn-rdm.eu/en/events/final-conference/presentations/>. The full programme shown in [Appendix B](#).



4.2.1 Keynote speakers and discussion panellist members

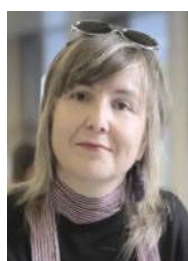
The keynote speakers were:

- Professor Kurt Deketelaere, League of European Research Universities (LERU)



Keynote title: *Research Data Management: EU and LERU views* [no slides provided]

- Dr Eva Méndez Rodríguez, Universidad Carlos III de Madrid (UC3M), Spain



Keynote title: [Research Data in an Open Science World: Reflections from a Young EU University](#)

- Dr Per Öster, CSC – IT Center for Science Ltd, Finland



Keynote title: [Research Data Management, Challenges and Tools](#)

- Dr Claudio Gutiérrez, Universidad de Chile / Center for Semantic Web Research



Keynote title: [Data, Science, Society](#)

The additional invited panellists were:

- Rachel Bruce, Jisc



- Dr Emma Ganley, PLOS



- Simon Hodson, CODATA



Biographical profiles of all the keynote speakers and panellists can be viewed at <http://learn-rdm.eu/en/events/final-conference/speakers-profiles/>

4.2.2 Break-out tutorial groups

Four parallel tutorial sessions were delivered in the afternoon section of the programme. The topics covered were:

- i. How to engage early career researchers
- ii. How to cost data curation
- iii. How to implement the LEARN Toolkit
- iv. Using the LEARN RDM Policy & Guidance



Participants in one of the break-out sessions.

Registrants were contacted prior to attending the event with details of the four tutorial sessions, and asked to pre-select a session (80% compliance rate). Because the responses received were evenly spread over the four options, all registrants who responded to the questionnaire were given their first choice of tutorial group.

Those who did not respond to the survey were allocated to one of the four groups using the following criteria:

- The overall size of the group in relation to the assigned room's capacity
- The male/female distribution across all groups
- The UK/non-UK distribution across all groups
- The individual's likely interests based on their job title

Each break-out tutorial was led by a chairperson and a rapporteur, provided either from one of the Project partners or, in the case of the tutorial group “*How to cost data curation*” session, by Jisc. Rapporteurs compiled full reports after the event, which were then made available on the Project's website, <http://learn-rdm.eu/en/events/final-conference/break-out-group-reports/> and are also provided here in [Appendix D](#).

4.3 Media Report

Project partner LIBER was mainly responsible for communications work both ahead of and during the conference. UCL played a key supporting role.



LIBER Communications Officer Friedel Grant preparing to interview Project Partner Wouter Schallier during the Final Conference.

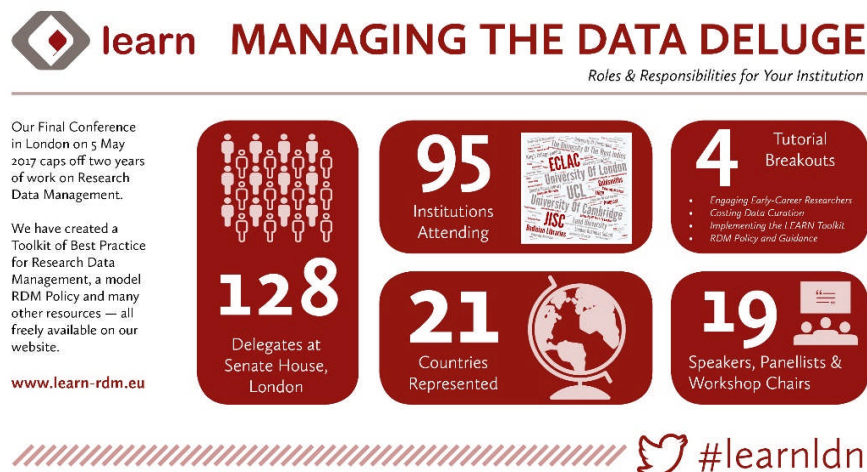
4.3.1 Pre-Event Communications

Ahead of the conference, the following materials were created and strategic activities carried out:

Materials

- **Conference Pages on LEARN Website:** created and regularly updated
- **Save-the-Date Text:** created and sent out by all project partners to relevant networks
- **Promotional Graphics:** shared on social media
- **Infographic of Key Conference Facts:** created, ready for distribution at conference
- **Promotional Poster for LEARN and the Conference:** Displayed at RDA Europe plenary in Barcelona, and updated for display at the conference itself (see [Appendix E](#))

- **Slides:** Slides featuring key numbers from the project and list of all organisation which attended the LEARN workshops were prepared, to share in the closing remarks
- **Quotation Template:** Prepared to feature key quotes from the conference
- **Poster:** Prepared by LIBER and summarising LEARN key facts, outputs and project's website was displayed outside the main hall



The infographic, giving key facts about the conference.

Strategic

- **Communications Plan:** Created, with input from other project partners
- **Social Media:** The conference was highlighted several times on Twitter, by LEARN and by a wider network of people interested in RDM
- **Targeted Mailings:** Sent to high-priority invitees from key stakeholder groups (e.g. Heads of national coordination groups, RDA contacts)
- **Videos:** Liaised with UCL on the production of a 'highlights video' of the conference, and contacted interviewees ahead of time to ensure efficient working on the day of the conference

4.3.2 On-the-Day Activities

The bulk of the communications work on the day focused on sharing the key themes and points of the conference via social media.

Social Media

Twitter was the main social media channel used to promote the conference. The #learnldn hashtag was used to track conference tweets and was seen trending on Twitter during the morning session. On Twitter, the following information was shared by the LEARN Project:

- **103 Tweets** from the LEARN Project's official Twitter account¹

¹

http://hawksey.info/tagsexplorer/?key=1zvcH9XeUo8KiAxdITZ_jxKN1BWU2gstFpzJ8EIhbXR8&qid=400689247

- **13 Videos** with LEARN Project partners and conference delegates, reflecting on the main achievements of the project, conference highlights and RDM work going on in individual institutions
- **18 Photos** and Visual Quotes
- **1 Infographic** giving an impression of the conference at-a-glance



Quotes and photos taken during the conference.

Tweeting from delegates, and re-tweets from the broader community, brought the total number of Tweets using the **#learnIdn** hashtag to **994** by 11 May.



Three of the most popular Tweets from the conference.



Most Tweets predictably originated in London, where the conference was held, but many came from people located around the world.

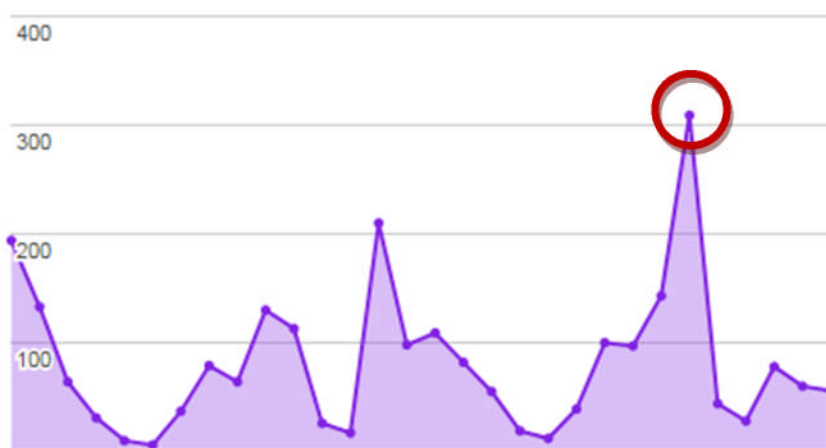


This word cloud shows the locations from which Tweets using the #learnIdn hashtag were sent.

The top five most-followed accounts relaying Tweets from the conference were:

- PLOS Biology – 49,500 (Open Access journal)
- Genome Biology – 43,500 (Open Access journal)
- Spanish National Research Council's Library and Archive Network – 19,000 (Research funder)
- UKStartupEvents – 11,500 (Events listing)
- UCL Sociology – 8,700 (University Department)

Publicity from the conference led to a traffic spike on the LEARN website.



Daily traffic to the LEARN website hit a peak on the day of the conference.

4.3.3 Post-Event Communications

After the conference, the following activities occurred:

- Photos added to the LEARN Flickr channel²
- Videos added to the LEARN YouTube channel³
- Slides added to the LEARN Slideshare channel⁴
- Conference website pages updated⁵

4.4 Evaluation and feedback

All attendees were contacted via Survey Monkey immediately following the Conference and invited to complete an online satisfaction survey. 63 of the 112 attendees completed the survey (56.25% compliance rate) and the results were made available via the Project website – see [Appendix F](#).

² <https://www.flickr.com/photos/learn-rdm/>

³ https://www.youtube.com/channel/UC57DO7Txd3B3TEoII_FnEsw

⁴ <https://www.slideshare.net/learnRDM>

⁵ <http://learn-rdm.eu/en/events/final-conference>

5 Conclusions

The final LEARN Conference attracted a wide variety of participants including librarians, researchers, research funders, publishers, and IT professionals (see [Appendix C](#)). It is the intention of the Project to retain the contact details of all of these individuals with a view to a possible future project.

The Evaluation of the London Conference (see [Appendix F](#)) shows how popular and well-received this meeting was. The Conference trended on Twitter. Tweeting from delegates, and re-tweets from the broader community, brought the total number of Tweets using the *#learnldn* hashtag to **994** by 11 May.

The plenary speakers received good scores in the feedback and the comments show how valuable the day was:

- *I sometimes feel the problem is so big I don't know where to start – the toolkit gives a framework for assessing strengths and weaknesses, which can then be used to prioritise actions*
- *The toolkit, and the experience and support gained in the project, give me authority and information to help me develop a principle-based service*
- *Informative keynotes*
- *The Toolkit is an invaluable resource for developing our RDM strategy and service, and has come at a good time for us when the service is about to change and guidance is much appreciated in this regard. The viewpoint of Latin America and the Caribbean was very valuable.*
- *Very helpful overview of main issues and an excellent opportunity to discuss issues with colleagues*
- *I think the RDM toolkit is an excellent resource, and one, which I will be sharing with colleagues in the sector*
- *The Conference and Project outputs have helped me as an assessment tool by which to measure my University's position in the landscape of Open Research Data Management*

Leadership

LEARN is about Leaders Activating Research Networks. The LEARN partners have shown leadership by providing the research community with tools and services which any institution or stakeholder in the research data landscape can use in order to develop a strong offering in research data management. As the one of the attenders commented: 'the toolkit is a fantastic resource and I learned a lot from reading all of the case studies'.

Engagement with RDM communities

The final project conference showed that the project had achieved high levels of engagement with target communities. Comments in the evaluation show this:

- It is good to hear what 'the community' is thinking
- Mostly just exposure to new ideas and to the experiences of other participants. It was a really great day for me. I learned a lot.
- I just want to congratulate the project partners for their great job. The EARN project has not only developed useful tools, but has also tested them using

practical examples, which is very useful information that other institutions can use

Best Practice identified

The end-of-project LEARN Conference highlighted the tools and services which the project has made available:

- LEARN model RDM policy
- LEARN Toolkit of Best Practice Case Studies
- 20 Recommendations on RDM
- LEARN Executive Briefing in 6 languages
- Self- Assessment Survey
- KPIs to measure success in institutional RDM

These are clearly appreciated by the community. Typical comments in the feedback were:

- I will use the model policy for my own institution
- The templates for policy, use cases are all very helpful
- The template RDM policy plus the suggestions on SMT engagement are also extremely useful tools for use at the small university where I work
- The Conference and Project outputs have helped me as an assessment tool by which to measure my University's position in the landscape of Open Research Data Management

Engagement with RDM decision makers

For institutions to pursue wise RDM activities, institutional decision makers have to be signed up to any course of action. They oversee the institutional strategic developments and hold the purse strings. LEARN has made strides in developing an Executive Briefing and 20 Recommendations on Best Practice, drawn from discussions at all the LEARN Workshops, which help institutions decide what to do. The LEARN Decision Tree, embedded in the LEARN Toolkit, shows how the differing LEARN Deliverables help tackle different key questions. Senior decision makers are one of the target audiences that LEARN identified and for which it has developed key Briefing materials.

Encouragement to Action in communities of practice

The LEARN project has encouraged the growth of new communities of practice, armed with the tools, knowledge and confidence to establish sound RDM regimes locally. This is partly due to the impact of the LEARN outputs, but also to the community building which the LEARN Workshops have fostered. 'Very helpful overview of the main issues and an excellent opportunity to discuss issues with colleagues' was one comment from the London feedback. This community building is international and that is important for the future of RDM: 'Broader awareness of European activities in the area of RDM' was one comment after the Workshop. Another comment greatly appreciated the join-up with Latin America and the Caribbean, and the sharing of experiences between continents.

Partnership building amongst project partners

LEARN has delivered a successful outcome to 2 years of funded activity and this is due in no small part of the success of the project partnership. Building on the engagement of partners in the UK, Netherlands, Austria, the Catalan Region, and Latin

America/Caribbean, LEARN has capitalised on a shared vision of the future for RDM and a common wish to engage with stakeholder communities to infuse them with the knowledge and confidence to make wise decisions.

Appendix A

Institutions/organisations represented at the London LEARN Conference

Aalto University	Goldsmiths London
Alma Jordan Library, The University of the West Indies	Goldsmiths London
Aston University	Gurdon Institute, University of Cambridge
Bodleian Libraries, University of Oxford	Heriot-Watt University
Brabham Institute	Hutchison/MRC Research Centre, University of Cambridge
CAICYT - Centro Argentino de Información Científica y Tecnológica	IBERO -Universidad Iberoamericana - Mexico City
CODATA	IBICT - Brazilian Institute of Information in Science and Technology
College of Mexico, Daniel Cosío Villegas Library	Imperial College London
CSC - IT CENTER FOR SCIENCE LTD - Finland	Jisc
Danish Technical University	King's College, London
De Montford University	LERU
Delft University of Technology	LIBER
Dept. of History, Lund University	London Business School
Dept. of Scholarly Communication, Lund University	London South Bank University
Digital Curation Centre	Netherlands Institute for Permanent Access to Digital Research Resources
ECLAC - UN (LEARN)	NordForsk
EDINA, University of Edinburgh	Open University
Elsevier	PLOS
Functional Imaging Laboratory, Wellcome Trust Centre for Neuroimaging	Research Libraries UK
Genome Biology, Biomed Central	Royal School of Library and Information Science, Copenhagen
PU	Science Europe

SOAS	University of Plymouth
Somerco	University of St Andrews
St Georges University of London	University of Stockholm
St Mary's University, Twickenham	University of Strasbourg
Starlab Inc.	University of Surrey
Swedish Research Council	University of the Arts London
Trinity College Dublin	University of Turin
UCL	University of Venice
University Consortium	University of West London
University of Amsterdam	University of Westminster
University of Barcelona	UNIVIE
University of Bristol	Wellcome
University of Cambridge	
University of Cardiff	
University of Charles III Madrid	
University of Chile	
University of Denver	
University of East London	
University of Exeter	
University of Geneva	
University of Greenwich	
University of Leicester	
University of Leuven	
University of Lincoln	
University of London Senate House Library	
University of Middlesex	
University of Oxford	
PU	

Appendix B

LEARN End-of-Project Conference – Senate House, London 5th May 2017

Managing the Data Deluge: roles and responsibilities for your institution

Programme

09.00 | Registration

09.30 | Coffee, tea and pastries

10.00 – 10.10 | Formal opening by Professor David Price, Vice-Provost (Research),
University College London, UK

10.10 – 10.15 | Welcome from Dr Paul Ayris, Pro-Vice-Provost (UCL Library Services)

10.15 – 10.45 | Opening Keynote by Professor Kurt Deketelaere, Secretary-General,
LERU (League of European Research Universities) - *Research Data
Management: EU and LERU views*

10.45 – 11.15 | Keynote 2: Dr Eva Méndez Rodríguez, Universidad Carlos III de Madrid
(UC3M) - *Research Data in an Open Science World: Reflections from a
Young EU University*

11.15 – 11.45 | Keynote 3: Dr Per Öster, CSC – IT Center for Science, Finland –
Research Data Management, Challenges and Tools

11.45 – 12.30 | Panel Session No.1

Chair: Dr Paul Ayris (UCL & LEARN)

Rachel Bruce (Jisc)

Emma Ganley (PLOS)

Simon Hodson (CODATA)

Ignasi Labastida (University of Barcelona & LEARN)

12.30 – 13.30 | Lunch

13.30 – 14.30 | Four Parallel Breakout Tutorial sessions

Group 1: How to engage early career researchers (Myriam Fellous-
Sigrist, June Hedges & Daniel Van Strien – UCL) [**Venue -
Chancellor's Hall**]

Group 2: How to cost data curation (Paul Stokes – Jisc) [**Venue -
Athlone Room**]

Group 3: How to implement the LEARN Toolkit and Executive Briefing
(Paul Ayris & Martin Moyle – UCL) [**Venue - Torrington Room**]

Group 4: RDM Policy and Guidance (Paolo Budroni & Barbara Sánchez Solís – UNIVIE) [**Venue – Holden Room**]

14.30 – 15.15 | Panel Session No.2

Chair: Dr Paulo Budroni (UNIVIE & LEARN)

Rachel Bruce (Jisc)

Claudio Gutierrez (Keynote, University of Chile)

Eva Méndez Rodríguez (Keynote, Universidad Carlos III de Madrid)

Wouter Schallier (ECLAC & LEARN)

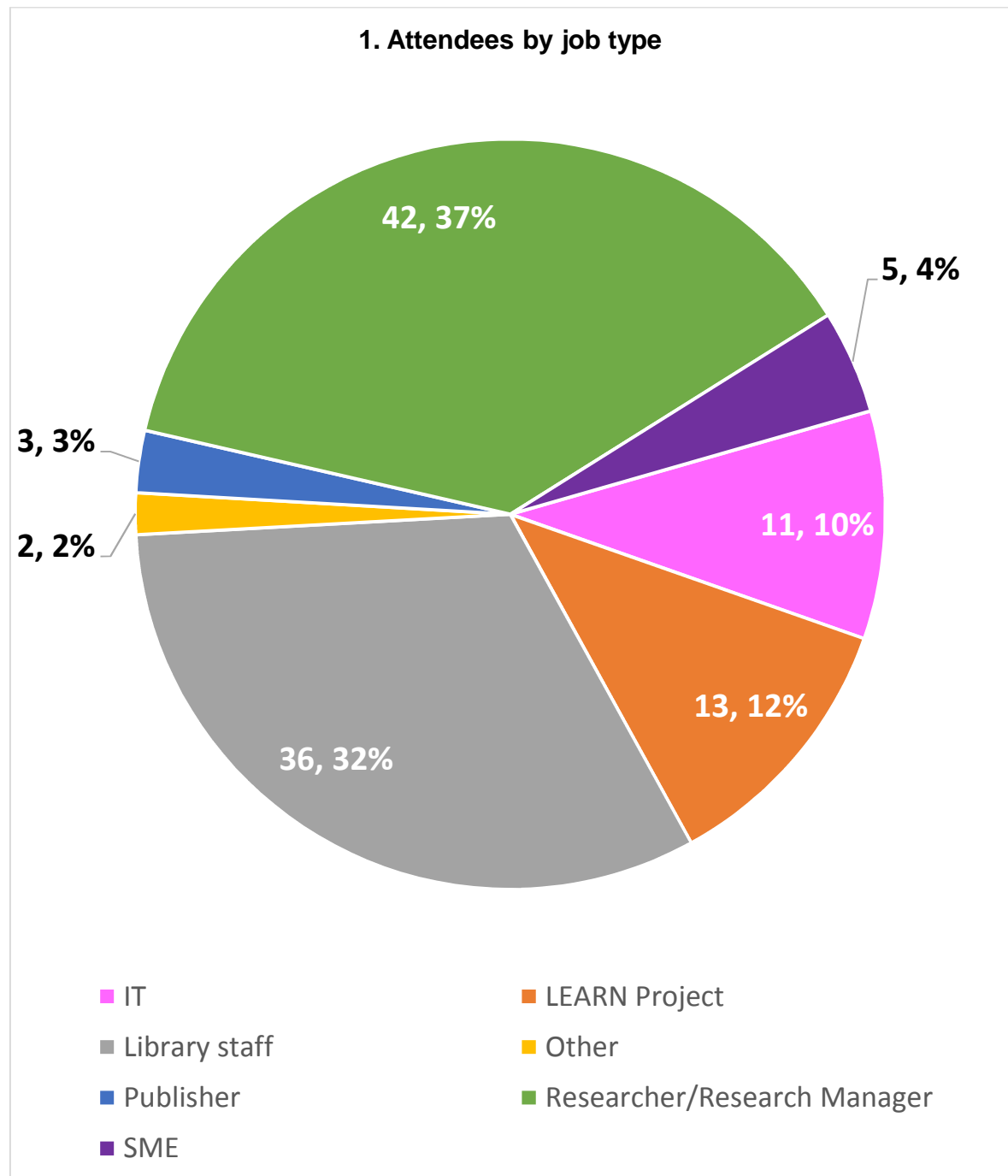
15.15 – 15.45 | Coffee, tea and cakes

15.45 – 16.45 | Closing Keynote by Dr Claudio Gutiérrez, Universidad de Chile
(Santiago de Chile) - *Data, Science, Society*

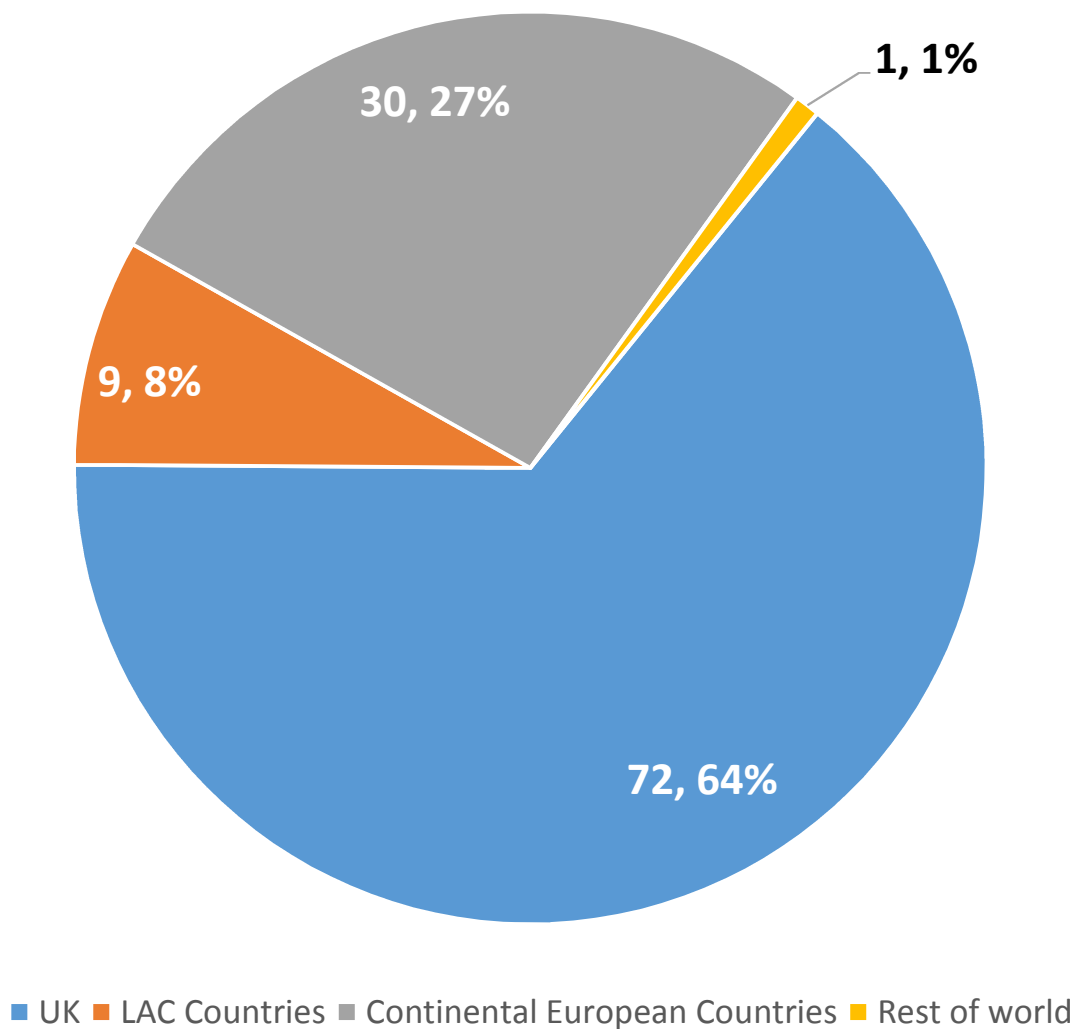
16.45 – 17.00 | Closure and departures

Appendix C

Breakdown of attendees by 1) job type and 2) by country of the origin of their institutions represented at the London LEARN Conference



2. Attendees by geographical location their home institutions



2A Detailed breakdown of attendees by country of the origin of their institutions

	No. of delegates per country
Argentina	1
Austria	2
Belgium	3
Brazil	1
Chile	4
Denmark	2
Finland	2
France	1
Ireland	3
Italy	2
Mexico	2
Netherlands	5
Norway	1
Spain	3
Sweden	4
Switzerland	2
Trinidad & Tobago	1
USA	1
Subtotal	40
UK	72
Total	112

Appendix D

Reports from the four parallel tutorial groups

Group 1 - Engaging early career researchers

Leads and Rapporteurs: Daniel van Strien (UCL Library Services), Myriam Fellous-Sigrist (UCL Library Services), June Hedges (UCL Library Services).

This session focused on the topic of engaging early career researchers. Participants in the session were from a range of institutions and countries. There was a strong representation by those working in libraries or other Research Data Management (RDM) roles but also publishers, researchers and other university staff.

The session began by introducing some of the approaches that had been taken at UCL to engage early career researchers. Following this the session broke into three groups who were asked to consider the following potential topics:

- Policy and Leadership
- Advocacy
- Open Data
- Research Data Infrastructure
- Roles, Responsibilities and Skills

These topics were drawn out of the [LEARN Toolkit](#) and [LERU Roadmap for Research Data](#). The groups were asked to decide on one or two themes to focus on. These were then discussed with the whole group and discussed further.

Why engage early career researchers?

Before discussing the main topics workshop participants were asked to consider the overarching question of why it was important to engage early career researchers with best practices in RDM. This elicited a number of responses:

Early career researchers may be more 'idealistic' than more senior colleagues so may be more receptive to the ideals motivating open science

Some challenges to engaging early career researchers were also highlighted:

- early career researchers are less integrated into academic decision making processes in universities
- early career researchers often move institutions more frequently, training them might therefore be seen as a 'poor investment' by some university managers

Who are early career researchers?

The potential difference in approach to defining early career researchers did not receive much attention suggesting that this was not a day-to-day concern for most participants; participants covered both research students (at a Master's and PhD level) and early career research staff (including postdoctoral researcher). It was pointed out that early career researchers might have different academic roles depending on their discipline but this wouldn't directly change the approach taken to advocating to these researchers.

Themes

The groups tended to not focus only on one or two areas but moved between the different themes during their discussions. When reporting back to the group the following topics were given prominence.

Advocacy

Advocacy was a major theme discussed during the session. A range of main points were made:

- Advocacy for RDM needs to be 'bottom up'. Early career researchers can help contribute to this advocacy effort.
- Often initial contact with a group or project involves early career researchers.
- Advocacy should include the promotion of the ideals behind data sharing.
- Advocacy should include potential benefits to a researcher's career, for example by highlighting citation advantages to sharing research data.
- Advocacy might be possible during other interactions libraries have with early career researchers.
- Generating word of mouth discussion about RDM is important

Roles, Responsibilities & Skills

This theme was discussed broadly and understood not only as relating to the roles, responsibilities and skills required for supporting RDM at an institutional level but also potentially for early career researchers:

- Skills and advocacy often overlapped in the discussion. Groups fed back that effective advocacy involved providing early career researchers with practical skills. Similarly it was felt that RDM support would be of more interest to early career researchers when it had a practical 'hands on' focus.
- It was suggested that it wouldn't be useful to have roles focused on early career researchers specifically but there was a perceived benefit to having an increasing number of discipline-specific roles.
- Skills were particularly important for early career researchers because they might be given responsibilities for data management across a team or research group.
- It was suggested that roles and skills would change throughout a researcher's career and this is something that should be reflected in the services offered.

Policy and Leadership

There was less discussion of policy than some of the other areas, however some of the discussion of other themes did overlap with this area. It was suggested that early career researchers might benefit from different types of Data Management Plans. A range of comments were made on leadership and early career researchers:

- Early career researchers might be effective leaders amongst their peers
- Early career researchers who develop an understanding of the benefits of RDM and data sharing may go on to have a greater role as their careers develop

Open Data

The Open Data theme received relatively little discussion. This was partly because this theme was discussed alongside other themes. It may also reflect an underlying

assumption about advocacy focusing not only on 'day-to-day' issues but also with broader ideas about openness and sharing.

Group 2 - How to cost data curation

Lead: Paul Stokes (Jisc)

Rapporteur: Ignasi Labastida (University of Barcelona)

Paul Stokes started the session by defining data curation versus research data management remarking that the earlier focus in the long term archive and the later on the entire lifecycle of the data. With all his expertise on data curation, he has learnt that every higher education institution has different needs on preservation and also that it is a global community effort. It is not enough to say that we must preserve all the data until ten years after its last access without thinking of the long term cost implications of such diktats.

To start costing we need to know everything has a price, therefore we need to know that price. Someone has to pay this price, but who? In addition, it is important to know the benefits that offset the costs. We should need to track all the costs and try to figure out if it is possible to establish cost recovery mechanisms.

The main problem in costing data curation is that it is a difficult and complicated to achieve. Paul asked to the participants why they thought it is not easy to calculate the costs and he received the following answers:

- *There are many types of data*
- *Storage and curation processes depend on discipline*
- *In many cases the effort is unknown upfront*
- *The value of data is not known*
- *The cost of the people involved is not easy to calculate*
- *It is not easy to include specific services in a general cost*

To help in this costing evaluation, he suggested some best practices starting with the definition of what are you costing. Here he pointed out two methodologies: activity based costing and traditional costing. The first one is based on the determination of all the activities involved in a process establishing all the costs (direct and indirect), and then divide the total amount per cost unit. The traditional costing method is based on the calculation of direct costs and the division per cost unit. Both systems are fine but we need to follow one of them along all the process of costing. Sometimes it is not easy to get the information we need to make all the calculations.

Paul suggested that every institution should establish its own cost tool, based (or not) on an existing one, because a single model does not fit everyone

He also asked the participants why they were concerned with costing data curation, He received the following answers:

- *There is a need to find sustainability at long term*
- *Researchers need to know it*
- *There is a need to defend costs*
- *To find business cases*
- *To compare the costs of doing it versus the costs of not doing it*

The session ended with some questions and answers. Among them we can remark some issues that arose:

- The need of define in the costing model for how long datasets must be curated.
- The importance of defining the current activities as the current costs and to foresee future costs also appeared.
- Sometimes in the costing evaluation, it has to be taken into account the payment of using certain data or the cost of reproducing data repeatedly.
- The institution can risk its own reputation by not doing a proper data curation. As an example, an institution was brought to court by an investigator caused by the loss of some data.
- Institutional “short termism” can be seen as a problem because curating data is a matter of long term.

As a conclusion, Paul encouraged all the participants to follow some of the models proposed and start to include some numbers in order to see the current spending in all those activities related with research data

Group 3 - How to implement the LEARN Toolkit and Executive Briefing

Lead: Paul Ayris (UCL Library Services)

Rapporteur: Martin Moyle (UCL Library Services)

Overview

This purpose of the session was to introduce the LEARN Toolkit and allow participants to reflect on how they might implement it at their home institutions. The session had three parts:

1. Presentation
2. Discussion
3. Conclusions

1. Presentation

PA gave an overview of LEARN and the Toolkit, comprising in full

- Model Research Data Management Policy, fed by a study of RDM policies and input from Workshop attenders
- Toolkit of case studies to support implementation, responding to issues identified in Workshops and in literature
- Surveys and self-assessment tools
- Executive Briefing (in six languages)

The Toolkit is designed to help to address the question: **How prepared are you and your institution for RDM?**

Examples given from a survey carried out at PA's own institution, UCL, showed that researchers were not storing data effectively, and had identified a need for better RDM support.

PA gave an overview of a selection of case studies from the Toolkit, the Model Policy and Executive Briefing.

A question was raised about the currency of the Toolkit: would it change or become out of date?

The answer was that the principles of the Toolkit would persist, although the practical examples in the published edition may become dated over time. The principles captured in the Toolkit may need to be adapted to new situations. It was also noted that the LEARN Model RDM Policy specifically recommends an annual review, which will encourage institutions to take stock of changing circumstances.

2. Discussion

PA asked delegates to reflect on how they would take up the Toolkit at their institution, inviting colleagues to share two things that they might do differently or better as a result of attending the LEARN Conference.

PU

Page 32

Version 1.0

A variety of contributions were put forward, each summarised below.

- There is a need for buy-in from PIs and researchers. Talk to PIs to raise awareness. Hold information sessions for researchers – missing metadata is particularly problematic. Policies are required to help adoption; these need to come from the top.
- Need to work with people rather than technology. Take a survey. Find 'success case' to show that application of RDM could even save money.
- Seek to understand the meaning of Research Data and RDM in an art & design context. This arts institution has a repository, but engagement has arrived at plateau. The challenge is how to embed RDM in culture? Speak to Library, speak to IT.
- Faculty-level policies required, will draw on Toolkit for this.
- FAIR data principles - will investigate further. RDM in this institution is relatively well developed, but even so it is based mainly on storage services, with support structures around them. How to incentivise researchers? Be conscious that there are already many pressures on researchers, so keep life simple for them; do not dwell on the risks, make concrete benefits understood.
- Science Europe is working on a framework for discipline-specific protocols – there will be no need to reinvent the wheel every time a DMP is needed.

3. Conclusions

There is no single answer to the successful adoption of RDM. LEARN has produced a set of tools and guidance. They should help the reader to identify the key issues for their organisation define their organisation's needs, and allow them to draw on strategies to meet them.

PA suggested four concurrent areas of activity for research-intensive universities, drawing on his experience as Co-chair of the LERU (League of European Research Universities) INFO community, as follows:

- i. Use the LEARN Executive Briefing. Take it to a decision-maker - somebody who can allocate money.
- ii. Ensure there is a RDM Policy, and get this right. Use the guidance provided by UNIVIE as part of LEARN.
- iii. Advocate to researchers. Support from the academic body is essential.
- iv. Training for early-career researchers. The can be converted for the rest of their research lives; they will help to change the culture.

LEARN case studies and other outputs can help with all aspects of this package for research-intensive universities.

Group 4 - Using the LEARN RDM Policy & Guidance

Chair: Paolo Budroni, University of Vienna

Rapporteurs: Barbara Sánchez Solís, University of Vienna, assisted by Frank Andreas Sposito, University of Denver, Colorado

Paolo Budroni (PB) begins with slide presentation

a) The world of data. Within the world of data, there are different levels (processed, inconclusive, negative, positive, shared, released, published...). In the past 15 years, focus was on OA data but nowadays institutions learn that other data have to be managed and curated for the long-term too.

b) What are policies? PB explains policy-making process with respect to a larger framework of institutional values.

- Taboos > principles > policies > rules
- Important: FAIR doctrine is a principle not a policy. (positive assertion).
- Policy = a course or principle of action adopted or proposed by an organization.
- Rules prescribe specific conducts or actions.
- Rules are only valid during a specified period.
- Rules can be created to comply with the exact language of a policy without complying with the spirit of a policy. Example how a rule is adapted absurdly, however, with applying to the policy.
- This framework can be extended with further concepts, e.g. KPIs, guidance, dissemination, revision, etc.

Question from IBICT - Brazilian Institute of Information in Science and Technology

- Distinction between top-down and bottom-up policy development is very important
- LEARN Policy Toolkit is best thought of not as the end of a process but the beginning of a process with many diverse realities.
- Open access can be thought of as a set of movements, not all the same
- There are diverse and conflictive interests across the field, in national contexts, and within specific organizations; there are convergent interests too
- Barriers: there are linguistic barriers. With the partner ECLAC we are in the lucky position to approach certain language issues.
- We should be sure to include PhD students: they are our future colleagues.
- Bottom line: we need increased awareness of the realistic complexities that exist in the policy-making process at all levels (international, national, organizational).

[Response from PB]

- LEARN worked very hard not to be Eurocentric in its approach
- Trying to deal directly with linguistic barriers
- Adapting and using the LEARN framework to help bridge the continents
- Rights are also a barrier to policy and access: LEARN is trying to develop a "Schengen space" where open data can move freely across national and other cultural divide.
-

Question from person at Venice University

- The beginning of LEARN felt like the start of something grassroots

- However, after 1.5 years most of the work has been done on the “upper level” (reference to “top-down” policy making in the previous question).
- Universities in other countries are not fully autonomous to develop policies (this autonomy is however assumed by the LEARN Toolkit)
- Concern: Individual universities cannot handle RDM alone because it costs too much; each university invests a lot of money
- Not every university can develop the level of expertise necessary to develop RDM as per the Toolkit
- Therefore a consortium of universities may be the best approach: universities should not isolate themselves on RDM
- Also there is so much transformation in technologies, which makes it even harder
- Maybe private companies can give support (for ex training) on RDM issues?

[Response from PB]

- One way to manage down costs is to redefine the scope of policy so that not every kind of expertise is required; that is, reduce data size to reduce costs
- In fact, big data is not the issue: most universities deal with data stores < 1TB
- Also, working from small beginnings is effective: start with pilot projects with narrow scope, grow from there as appropriate or possible

[Response from Eva Méndez Rodríguez, UC3M]

- Yes, universities don't deal with big data so much as the “long tail” of data
- Infrastructures (often national) exist for big data
- Consortia are a good idea for dealing with both cost challenges and expertise challenges
- But it's important to remember that researchers don't want *perfect infrastructure* but rather *effective infrastructure*
- You do not necessarily have to build a repository if you implement a policy.

Question from unidentified person from the United Kingdom

- Our problem is that we already have a policy environment, and it is very complex
- We operate on a half-dozen different policies from different levels of management and university offices:
 - Funder policies
 - Core business offices
- Our goal is to *rewrite* policy based on:
 - What people think they do
 - What people actually do

Question from Danny Kingsley, Cambridge University

- We have found encouragement to share must begin earlier in the research process
- For effective RDM you must deal with the beginning of the research process
- Policy is really about training staff from the very beginning, when they conceive of a research project
- Policy is very easy to write: implementation and compliance are the hard parts

PB wraps up

- Take a look at what LEARN has put together, let us know if you have any questions.
- Thanks to everyone.

Appendix E



Helping your institution manage the data deluge

Writing a Research Data Management policy for your institution?

Curious how others handle the challenges of storing research data?

Want a model policy to follow, or examples of best practices?

LEARN (LEaders Activating Research Networks) is an EU-funded project. We are taking the LERU Roadmap for Research Data, produced by the League of European Research Universities, and developing it in order to build a coordinated e-infrastructure across Europe and beyond. LEARN offers many resources to Research Data Management professionals.



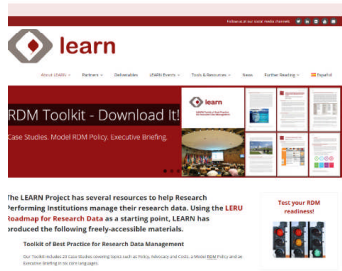
BEST-PRACTICE TOOLKIT

Our **Toolkit of Best Practice for Research Data Management** includes **23 case studies**, and a **model RDM policy**. It has 8 main sections:

- Policy and Leadership
- Tool Development
- Subject Approaches
- Open Data
- Research Data Infrastructure
- Roles, Responsibilities, Skills
- Costs
- Advocacy

RDM READINESS SURVEY

Our **13-question survey** is a way to assess how ready your institution is to manage research data. Each question has three possible answers, representing a green, yellow or red light. The more 'green light' responses recorded, the more prepared an institution probably is to manage its research data. www.learn-rdm.eu/en/rdm-readiness-survey



& MORE RESOURCES

On the LEARN website you can freely access and download all of our resources. These include a **summary of the LERU Roadmap for Research Data**, key **Recommendations from our RDM Workshops**, an outline of the **Core Elements of a RDM Policy**, and the **Dataset** behind our RDM Readiness Survey.

www.learn-rdm.eu

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Appendix F



LEARN Conference: Managing the Data Deluge: roles and responsibilities for your institution. - 5th May 2017 at Senate House, London

LEARN Conference evaluation

Where appropriate respondents scored each question using a scale of 1-5 where 1 = Poor and 5 = Excellent

1. How suitable was the venue of Senate House for the LEARN Conference?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	0	3	7	21	31	62	4.29
%	0.00	4.84	11.29	33.87	50	100	

2. How adequate did you find the administrative and catering arrangements for the conference to support the success of the event?

Score	1	2	3	4		5	Total	Weighted Average
Respondents	0	1	2	24		36	63	4.51
%	0.00	1.59	3.17	38.1		57.14	100	

3. How useful did you find the paper given by Professor Kurt Deketeleare?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	0	3	11	22	27	63	4.16
%	0.00	4.76	17.46	34.92	42.86	100	

4. How useful did you find the paper given by Dr Eva Mendez Rodriguez?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	0	2	7	32	22	63	4.17
%	0.00	3.17	11.11	50.79	34.92	100	

5. How useful did you find the paper given by Dr Per Öster?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	1	5	14	27	15	62	3.81
%	1.61	8.06	22.58	43.55	24.19	100	

6. How useful did you find the paper given by Dr Claudio Gutierrez?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	1	3	16	19	16	55	3.84
%	1.82	5.45	29.09	34.55	29.09	100	

7. Was there enough time allowed for questions and discussion in the two panel sessions?

	Yes	No	Total	Weighted Average
Respondents	55	8	63	1.87
%	87.3	12.7	100	

8. How useful were the afternoon parallel tutorial sessions to ask questions and express your own opinions?

Score	1	2	3	4	5	Total	Weighted Average
Respondents	0	7	9	26	20	62	3.95
%	0	11.29	14.52	41.94	32.26	100	

9. Please name one way in which you think the conference and/or the LEARN Project's outputs have helped you to develop your professional knowledge.

Created new connections in understanding of RDM and developed new insights

Speaking to colleagues in other institutions on managing 'live' data vs 'archived' data

Learnt about what others are doing as an example to follow.

Meet colleagues working and with experience in research data management.

The report on the project's results presents very interesting points to consider when preparing a data management policy.

I sometimes feel the problem is so big I don't know where to start - the toolkit gives a framework for assessing strengths and weaknesses, which can then be used to prioritise actions.

Getting up to date on the outcomes of the project and awareness of the content of the outputs.

Provided a broader perspective outside of my institution and role

References (initiatives and literature).

The toolkit, and the experience and support gained in the project, give me authority and information to help me develop a principle-based service.

The morning's plenary sessions were useful to sketch the landscape. In particular, I learned that the FAIR principles are becoming more widely adopted.

Informative keynotes

The papers and particularly the specialized tutorial proved crucial for an ongoing bid that my department is involved in.

Good to know about the 'taboo to policy' spectrum. Helpful framework for thinking.

Workshops and Toolbox

Given me a broader awareness of approaches being taken in different institutions and given me ideas, which could be adapted or replicated in some way.

Development of research policies, authors' rights and repositories.

The workshops

The Toolkit is an invaluable resource for developing our RDM strategy and service, and has come at a good time for us when the service is about to change and guidance is much appreciated in this regard. The viewpoint of Latin America and the Caribbean was very valuable.

Very helpful overview of main issues and an excellent opportunity to discuss issues with colleagues

Costing workshop was really valuable in informing my thinking on DMP costing and resource sustainability

Developed a model RDM policy which can be used by research performing institutions

Toolkit useful for understanding basics.

I think the RDM toolkit is an excellent resource, and one, which I will be sharing with colleagues in the sector.

The Conference and Project outputs have helped me as an assessment tool by which to measure my University's position in the landscape of Open Research Data Management

Further awareness of wider efforts in this field.

The conference gave me a far greater understanding of EU policy and attitudes around RDM/Open Data. The template RDM policy plus the suggestions on SMT engagement are also extremely useful tools for use at the small university where I work.

Broader awareness of European activities in area of RDM

The practical usability of the presentations in every-day life at my institution.

The panel discussion had some interesting questions asked and some even more interesting answers

Inspiration, good ideas, network

The templates for policy, use cases are all very helpful.

Suggestions for future developments in my university

The toolkit is a fantastic resource and I learned a lot from reading all of the case studies.

Ability to engage with colleagues

It has given me insight into the variety of preparedness for RDM, and how across research organisations, researchers and nations there are different levels of maturity. This is useful in my role as a national actor in terms of setting directions with stakeholders to move

research data management forward.

It is good to hear what 'the community' is thinking.

I will use the model policy for my own institution

Mostly just exposure to new ideas and to the experiences of other participants. It was a really great day for me. I learned a lot.

10. Are there any other comments you would like to make regarding the LEARN Conference to inform possible future events?

I just want to congratulate the project partners for their great job. The LEARN project has not only developed useful tools, but has also tested them using practical examples, which is very useful information that other institutions can use.

The room was quite long and narrow, meaning people at the back were a long way from the screen.

No need to waste paper by printing off the 80 something page booklet for everyone.

Great collection of people to bring together, much appreciated

Venue: a lecture room might have been more useful for the plenary sessions. Catering: it was hard to eat the food provided without tables etc. Tutorials: the one I attended (RDM implementation) wasn't really a tutorial but more a discussion session.

The groups could have been discipline-oriented.

The pretty much hands on costing RDM should become a firm feature.

What is going to be the future of LEARN project? Will there be a new project?

To develop skills for management of research products in repositories.

Mini workshop very useful.

More time for the tutorial sessions, less time for the panel sessions

I don't think enough people are talking about the impact the GDPR [General Data Protection Regulation] will have on RDM more broadly, and the policies/services we are developing more specifically. As a European project, there was a real missed opportunity here to begin a cross-national conversation around these issues - the afternoon panel session would have been a good opportunity for this. It may be that we are too early in the game for this conversation but I think this group is ideal to lead the RDM community in the impact of the implementation of the GDPR on RDM. **The morning session was too long. I was straining to be attentive by the last two morning speakers.** It is good to put as much information as possible in the programme, but if people are not attentive, it is wasted effort and unfair to the speakers. A 9:30 start (with 9am registration and refreshments) could have facilitated a small break.

Could have had more direction/structure to the tutorial session. An extra speaker and more Q&A time for all speakers might have been more useful than final panel session.

LEARN has raised awareness of RDM issues and acts as a beacon of Best Practice

The conference was very well organized and useful. Including more about the humanities and social sciences would be useful. **Catering where there is adequate seating would be better and less luncheon and general catering carbs would be appreciated.**

Well-organised and a packed and informative programme. I did however think that that both panels took up a lot of the event time (length of each session was quite long) and I would have liked to have had more discussion around issues that have a practical effect on RDM service delivery. The high-level strategic outputs and topics covered were discussed widely, **but I don't think the practical implications were discussed enough.**

The tutorial sessions could have been more useful if they had been structured to deliver some practical desired outcomes e.g. 7 practical ways to increase awareness of Open data research requirements amongst early career researchers.

Enjoyed the 'Engaging early career researchers' workshop as it gave us chance to talk in small groups about RDM activities.

Keep up the good work!

Many thanks for the conference. It's good to see the completion of the project and the outputs being delivered and taken up by the community. There was a buzz at the event and a lot of broader online engagement. Overall, I felt there were too many presentations and not enough discussion or workshop time, which was a shame, as there was clearly an engaged community willing to exchange lessons. The morning would have benefited from a coffee break. Reducing the number of keynotes and only running 1 rather than 2 panels would have helped with the overall structure. It would have been nice if the tutorials were a bit more practical or run in rooms laid out cabaret style to facilitate group discussion and sharing. **The toolkit seems a useful resource, but the format is perhaps a little dense and difficult for people to find the most useful pathway through.** It would help to make

suggestions for implementation. Perhaps provide some scenarios e.g. If your question is X, do this, or if your issue / focus is Y, check out... The survey will be a good starting point for many, irrespective of what stage they are at, and you could provide recommendations that point people towards the relevant case studies or practical tips from them based on their responses. Some kind of online version of the toolkit would have been a bit more interactive and reusable.

Chancellors Hall is a lovely venue but its length and narrowness is not perfect. It is always a challenge to have discussion and to learn from outputs. I think, although this cannot always work, a day and a half would perhaps be better for discussion and sharing. There was limited sharing of views, issues and practice. However, this worked ok for the final event perhaps.

For topics whose impacts are so wide reaching, a broader community of participants should be sought. In today's conference for example, it would have been good to hear from researchers in Geophysics or Astronomy for example - those whose fields of interest will really test the resilience of the policies under discussion. Pilot studies undertaken in Humanities will not really provide useful information for anticipating the future needs of Big Science.

I think the breakout sessions deserved more time and some kind of hands on work.

It seemed to me we went over a lot of old ground again today.

This may seem somewhat obvious, but participants should have a place to sit down during lunch.
