Designing Research Libraries for Digital Scholarship Innovation: Exploring Global Practices to Revitalize Local Strategies

Sheila Corrall, School of Computing & Information Lauren Collister, University Library System University of Pittsburgh



Designing Libraries for Digital Scholarship

Outline

- · Scope of the field
- Trends and developments
- DS service models
- UK practices



Questions

- What activities are undertaken by and within research libraries to advance digital scholarship and scholarly communication?
- How are they organized and presented on library websites?
- Who delivers these services?

Exploring the emergent library specialty of scholarly communications librarianship



Scoping the Field of Digital Scholarship

Product or Process?

"any element of knowledge or art that is created, produced, analyzed, distributed, published, and/or displayed in a digital medium, for the purpose of research or teaching"

(Foot in Hswe, 2006, p. 6)

"the use of digital tools, data, methods, authoring, publishing, and stewardship to support teaching, research, and learning"

(Brenner, 2014, p. 3)

"Participate in emerging academic, professional and research practices that depend on digital systems"

(Jisc, 2014)



Scoping the Field of Digital Scholarship

Scholarly Communication

"the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use. The system includes both formal means of communication, such as publication in peer-reviewed journals, and informal channels, such as electronic listservs."

(ACRL, 2003)

> Open Access (Singleton, 2011)

John Ziman, in his seminal 1968 book dealing with science and its communication, Public Knowledge, dedicated it to the memory of his gallant and gay philosopher and friend, Norwood Russell Hanson'. I think we can be pretty certain that he was not, in his dedication, making reference to sexual orientation.

Just a few years later, the British television presenter and film critic, Barry Norman, was lamenting the, as he saw it, usurping of the extremely evocative and unique descriptor 'gay' to a previously unconnected association with homosexuality. The old meaning still remains in the dictionary - but as a substdiary ('dated' tt says) definition - 'light-hearted and carefree', deriving from Middle English, 'Can we have our name back?' cried Norman. Fat chance. As the New Oxford Dictionary of English says 'The word 'gay' cannot be readtly used unselfconsciously today in these older senses without arousing a sense of double entendre, despite concerted attempts by some to keep them alive.' The etymology of the new usage, while dating from the 1960s, seems not entirely clear, but it is easy to see that it would be attractive that the first associations would be posttive, and the word is usefully very short.

So what on earth has this to do with learned publishing? Not much, except by way of another associa-

A few years ago I was at a famous conference, matnly but not entirely surprised and delighted, since the

Scholarly communication – can

we have our name back?

toptc has long been of both personal and research interest for me. I had long wished, since my days working in a library, that library school curricula should find some time to examine the whole panoply of communication and thus see where any paretcular library operation might fit. So I went along. I was further surprised that the place was totally crowded, such that I had to sit on the floor, amongst all the cardboard lunchboxes brought in by my fellow, as I thought, seekers after enlighten-

You are probably already wondering at my ignorance and naïveté (in my defence I can only say it was a few years ago). What dtd I hear? It about persuading authors to retain copyright in any of their works, and deposit them in institutional and other repositories. Had I gone into my fellow attendees similarly astonished? They were not. No one demurred from the appropriateness beautiful city in one of the southern although there could have been one states of the USA. I saw there was a or two others who, like me, decided on 'scholarly communication'. I was rapturous general response to the

So I left bemused. Stnce then, over the last few years, I have seen the interpretation that I first saw at that Charleston (I bet you guessed that) meeting repeated again and again - whether about courses, jobs, committees or even as the titles of large reports commissioned by offictal bodies who, in my view, really ought to know better.

So what, for the record, is my problem? It's simply that 'scholarly communication' properly defined is so much wider, and indeed more fascinating, than this modern quasidefinition implies. You have only to think of the basic 'binary' classification of the topic - i.e. into 'informal' and 'formal' communication, to start was all about how libraries could go to see that. In the transmission of scholarly ideas, for example, not only anecdote but studies have long shown the critical importance of informal communication. Once this the wrong session? I had not. Were may have been confined to, say, letters, telephone calls, meetings, conference communications and the like. But it is now supplemented, or of the title of the session we were at sometimes supplanted, by a whole for librarians, held each year in a or the courses it was describing - array of electronic methods which I should not name for fear of dating this editorial too soon. This is imspecial lunchtime session on courses to keep their heads down given the portant on every level - scholarly advance, the time it takes, the money it costs, etc., sometimes dwarfing



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Scoping the Field of Digital Scholarship e-Learning ETDs Scholarly Digital ETCs Digital Communication **Scholarship** Assets **Postprints** e-Research Open **Publishing** Open Data Cyberinfrastructure Access **Preprints** Open e-Science **Textbooks OER** Open Research **Open Movement** Open Science **PITT**SCI

Trends and Developments in the Field

- Development of support offered and expansion of service portfolios
 - moving upstream and downstream to provide full-cycle scholarly assistance and guidance for research, learning, teaching, and other creative work
- Responding and contributing to policy development and roll-out
 - research data planning and sharing, open access archiving and publishing
- Growth in specialist positions, organizational units, physical spaces
 - assistants, coordinators, directors, heads, librarians, managers, officers, centres, commons, committees, hubs, labs, offices, teams, working groups
- Intersections of scholarly communication and information literacy
 - copyright literacy, data literacy, digital literacies, primary source literacy
- National association-led initiatives to advance local SC practices
 - ARL/ACRL Institute, DS support profiles, OpenCon, RoadShows, toolkits



Education-Consultation-Production-Curation-Evaluation





Strategy

The five-year period 2018-2022 promises to bring radical changes to the research landscape.

Scholarly Communication

Digital Skills & Services

Research Infrastructure

Wor	kina	Green	100
TYON	NILIS	OIO	upo

Architecture Forum

Copyright & Legal

Matters

Digital Humanities & Digital

Cultural Heritage

Innovative Metrics

Leadership Programmes

Open Access

Research Data Management





Digital Scholarship Areas of Practice

- **Altmetrics**
- **APCs**
- ASNs
- Author IDs
- Bibliometrics
- Content hosting
- Copyright
- CRIS/RIMS
- Data citation
- Digital preservation Maker spaces
- Digitization
- **DMPs**

- DOIs
- ETDs
- Funding mandates
- GIS
- Grant writing
- Institutional repository
 Publication ethics
- IPR
- Journal publishing
- Licensing
- Mediated deposit
- Metadata

- Monograph publishing
- Multimedia production
- OER
- Open access
- Policy compliance
- RDM
- Software development
- Subject archives
- Text and data mining
- Visualization tools
- Website development





Pitt ULS Service Portfolio



Digital Scholarship Services (est. 2015)

- Research data management
- Data acquisition and analysis
- Mapping and geographic information systems
- Digital curation and stewardship
- Metadata, vocabularies and linked data
- Multimedia and web-based scholarship
- Digital Scholarship Commons (workshops, projects, digitization, hardware and software)

Office of Scholarly Communication and Publishing (est. 2011)

- IPR, copyright and fair use
- Author rights and responsibilities
- Electronic theses and dissertations
- Subject-based repositories (6)
- D-Scholarship (institutional repository)
- Journal publishing service (40 titles) and hosting service (55 titles)
 - PKP major development partner
- OA monographs: U Press digital eds.
 750 books digitized (I/P and O/P)
- OA advocacy and author fee fund
- Scholarly impact PlumX partner





High-level four-tier model for digital scholarship services at New York University

(Vinopal & McCormick, 2013)

Applied R&D

Grant-funded, firstof-kind, deploy at tiers 2 or 3

3. Enhanced Research Services

Custom-designed UI, custom-designed DMD interface; bulk data loads, etc.

2. Standard Research Services

Institutional repository, data analysis tools, copyright consultation, standard platforms for web-based publishing and web exhibits, etc.

 Enterprise Academic and Administrative Tools
 LMS, wikis, blogs, text scanning services, multimedia production lab, media streaming services, file storage, email, etc.



Digital Scholarship Service Models

Visual summary of three-level service delivery model for digital scholarship @Pitt (applied to RDM)

(ULS RDM Working Group, Version 5, 2016; see also

Level 3 – Specialist
RDM Service Providers

Explicit job responsibilities:

Mattern, Brenner
& Lyon, 2016)

understanding of local, national and global RDM landscape; collaborating with RDM stakeholders at Pitt and in region; expertise in one or more specific aspect/s (e.g., DMP, metadata, data storage)

Level 2 – Advanced RDM Service Providers

Volunteer RDM team members – points of contact for disciplines: aware of relevant funder requirements; understanding of disciplinary research workflows; familiar with DMPTool, and subject data repositories and practices (e.g., file formats and naming, data storage and documentation)

Level 1 – Basic RDM Service Providers

All public-facing university library staff – first point of contact for reference questions: basic understanding of RDM, drivers, research lifecycle, and how RDM applies to cycle; familiar with ULS RDM web resources; knowledge of RDM services, staff, and who to contact.



Trends and Developments in the UK

- Major focus on open access (policy compliance, APCs, and CRIS)
- Widespread provision of research data services and support, often in partnership with other professional services
- Recent growth in launch of library-managed OA university presses but not much evidence of journal hosting services
- Few formal DS centres or services and limited evidence of library engagement in digital humanities
- No evidence of library leadership or participation in university OER/open textbook programmes and projects
- Offerings and specialist roles more likely to be badged as research services, OA and RD, but also some DS/SC titles
- Several examples of good practice for librarians in other countries



DATA ACCESS STATEMENT

Any paper acknowledging UKRI (formerly RCUK) funding needs a statement explaining where readers can find the data that support your findings.

But I don't have any data!

You still need a statement. Use **This study did not involve any data**.

I have an external research partner

You might not be able to share anything - contact the RED Contracts Team to check the terms of your collaboration agreement. If you can't share data, use the statement: Data cannot be shared due to contractual restrictions.

There's enough information in my paper for readers to check my findings

Use the statement: **Supporting** data are provided within this paper.

There's enough

supplementary

information for

information in the

readers to check my

I used someone 🔻

else's data
Cite the dataset as suggested
by the data owner, or explain
where the data can be
accessed: This study used
Iname of dataset! which is

[link/contact]. | findings | Use the statement: Supporting data are provided as supplementary information.

available from

Shared openly
You can still publish it under
embargo or with access
restrictions. Explain the
restrictions in your statement:
Supporting data cannot be
shared openly due to
[reasons]. Details of how to
request access are available
from [repository] under the

l've published my data in a data repository

If the repository has a preferred citation style, use that. If not, use: Supporting data are available from [repository] under the DOI [DOI].

Still confused?

DOI [DOI].

The **Research Data Service** can help! **Contact us** for advice on data statements, publishing data, and

Created by: Research Data Service, University of Bris data.bris.ac.uk/ data-bris@bristol.ac.uk

DEPOSIT → act on acceptance ◆

Become a Distinguish networked yourself with researcher ORCID Measure Search citation the impact literature Research lifecycle Make your Organise publications your references Open Access Be copyright Manage your research data aware

Examples of Good Practice (UK)

UNIVERSITY OF SOUTHAMPTON LIBRARY BLOG



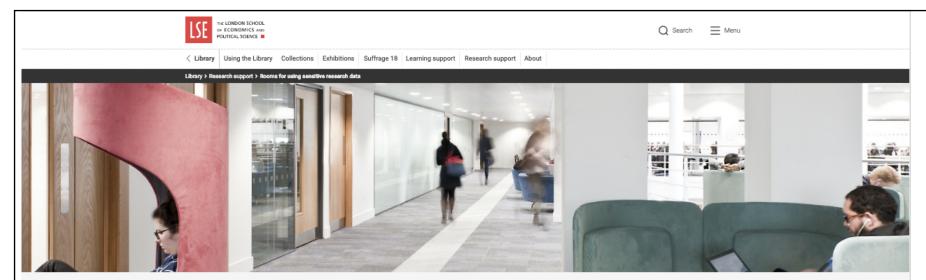
Main Menu

MAKE YOUR RESEARCH COUNT: ACT ON ACCEPTANCE

April 1, 2016 · by ECooper · in Open Access. ·



Today, April 1st 2016, is not just about hilarious pranks but also marks the start of the HEFCE Research Excellence Framework (REF) Open Access policy. Your research will be available for anyone to read, increasing your impact and helping to change the world for the better.



Rooms for using sensitive research data

Rooms 4.07 and 4.08 in the Library are set aside for the use of sensitive, confidential, or restricted research data (see the LSE's Information Classification document [PDF]). They can be used to access specific sensitive data resources which the Library manages on behalf of the School, or to access sensitive data obtained by the user under licence which includes restrictions on access.

Management of the room is based on $\underline{\sf UK}$ Data Service's concept for handling sensitive research data \boxtimes .

Who can use these rooms?

Rooms are available to current LSE research staff, postgraduate research, and master's students with research projects approved by the data supplier.

What can you use these rooms for?

We only allow use of the rooms for projects related to academic study and research that have been approved by the data supplier. Getting approval is often dependent on describing research projects, specifying data requirements, providing a justification for accessing these data, and giving information on how data will be managed.

Print or share

(a) (b) (f) (in) (y) (6.)

Management of the room is based on UK Data Service concept for handling sensitive research data ('The 5 Safes')

http://blog.ukdataservice.ac.uk/access-to-sensitive-data-for-research-the-5-safes/







Examples of Good Practice (UK)

The University Library

Home > The University Library > Research > Metrics hub

Metrics hub

This guide gives an introduction to bibliometrics and altmetries.

A resource from the Library and Research Services

What are metrics?

There are many different metrics available, each using different calculations and data to assess different aspects of research publication.

What are metrics?



Using metrics responsibly

Metrics can be a useful tool, but they are not on their ow sufficient to assess research fairly.

Using metrics responsibly





What to use metrics for and when

There are many different metrics available, it's important that you use the appropriate one for the question you're trying to answer

What to use metrics for and when $\, o \,$

Access the support available from Professional Service staff in the Library and Research & Innovation Services

Support for metrics -

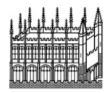
Support for metrics



Examples of Good Practice (UK)

Partnering with academic units, other professional services, other academic libraries and the community





Centre for Digital Scholarship Bodleian Libraries

The University Library

Home > The University Library > Research > Metrics hub > Support for metrics

Support for metrics

University Library

- Identify highly-cited or highly discussed papers for your literature review
- Identify influential journals that you may wish to submit your paper to
- Track attention received by your research
- Identify authors who you might want to collaborate with

For guidance on any of the above, contact the Librarian for your department

Research Services

Benchmarking

UNIVERSITY OF OXFORD

- · Citation and alternative metrics in support of funding bids
- · Advice on using metrics in research management

Contact Research Services for help with the above

Conclusions

- US services are longer established and more advanced in areas such as library publishing and digital scholarship
 - They are also more likely to use the title "scholarly communications" for their organizational units and specialist library staff
- UK libraries are concentrating resources and providing more in-depth support for open access to research (for the REF)
 - They have developed several practices that could usefully be adopted by their US peers to strengthen their support for scholars
- Management structures vary but few are wholly centralized
 - Many libraries operate a hybrid model based on functional and subject/disciplinary specialists, some use hub-and-spokes models, and a few are extremely diffuse with multiple diverse staff involved



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