PRACTICAL TIPS FOR LIBRARY AND INFORMATION PROFESSIONALS

This series provides a set of practical guides for the busy professional in need of inspiration. Sourced from experienced library and information practitioners, grounded in theory, yet not overwhelmed by it, the information in these guides will tell you what you need to know to make a quick impact in a range of topical areas of professional interest.

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Subject specialist (scholarly communications), JISC

After qualifying and working as a librarian in her early career, Helen worked for Jisc Netskills for 13 years providing training and working on a diverse range of projects across various sectors and then as librarian in the liaison team at Newcastle University. She has a keen interest in all aspects of information and digital literacy, and in supporting staff and students in their development.
Practical tips for facilitating research

Moira J. Bent
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Series Editor’s introduction

Helen Blanchett, Jisc, UK

This series provides a set of practical guides for the busy professional in need of inspiration. Sourced from experienced library and information practitioners, grounded in theory, yet not overwhelmed by it, the information in these guides will tell you what you need to know to make a quick impact in a range of topical areas of professional interest.

Each book takes a tips-based approach to introduce best practice ideas and encourage adaptation and innovation.

The series is aimed at experienced library and information professionals looking for new ideas and inspiration, as well as new professionals wanting to tap into the experience of others, and students and educators interested in how theory is put into practice.

Practical Tips for Facilitating Research

The changing nature of the research environment, involving increased competition and demand for wider dissemination and impact, provides challenges for librarians, but also opportunities. Roles are evolving, with activities being driven more by researcher requirements, which in turn requires more engagement with researchers. New specialisms are also emerging, such as that of data librarians. This book aims to provide practical tips for librarians wishing to survive the ‘crisis in research librarianship’, demonstrate value and shape new roles in the research process.

Moira J. Bent has a wealth of experience working with researchers in her library role, and indeed as a researcher herself. When looking for an author to write this book she was an obvious choice.

Moira has previously written about providing effective library services for researchers and explored information literacy throughout a researcher’s life. As a leading expert in information literacy, Moira co-authored the SCONUL Seven Pillars of Information Literacy. She was an advisor on the information literacy lens on the Vitae’s Researcher Development Framework and co-authored the Informed Researcher booklet.
While supporting researchers has long been part of an academic librarian’s job, Moira feels strongly that librarians have a role beyond ‘support’ – that we can play a vital role as a partner in the research process. While this book is intended to provide practical advice, ideas and tips, it may also change how you think about your role.

As well as incorporating her own tried and tested examples, Moira has gathered together ideas from practitioners around the world and added her own reflections.

I’m grateful to her for writing this book to capture and share her years of experience.

References
Writing a book is a great adventure, but it’s not one which can be undertaken alone, even if there’s only one name on the cover. Patience and understanding are required from all those around you and I’ve had these in abundance from my family, friends and colleagues. I’d like to thank my husband, Adam, for all the weekends he’s given up when we could have been out and about and for the endless cups of tea and continuous supply of Toblerone he provided. The rest of the family (especially Henry) have provided a welcome change from research and writing, have listened to me politely and, along with my friends, have been unfailingly positive and supportive. Special mention must be made of my close colleagues at Newcastle, especially Jenny Campbell and Yvonne Davison for their daily encouragement and friendship. Further afield, I have been overwhelmed by the willingness of people in libraries all around the world to share their ideas and experiences with me and special thanks is due to you all for responding to my call for contributions so enthusiastically. Most of the book comprises suggestions and case studies from both experienced and newly qualified librarians; my role has been to organize them into a coherent framework and provide some context. I hope I have acknowledged you all individually in the tips with which you are associated. I was ‘persuaded’ to write the book by the series editor, Helen Blanchett, whose ideas underpin the format of the book and I’m very grateful, Helen, for your reassurance and guidance to keep me on track. A final mention must be made of Pippin, our cat, who diligently sat on every piece of paper and created a constant, furry, companionable barrier between me and my computer screen.

Moira J. Bent
SECTION 8

Specific interventions in the research process or lifecycle

8.1 Identifying opportunities in research workflows
(see also Tip 3.6)

To engage effectively with researchers we need to understand who they are and what they do and, particularly, when they are doing it and what their issues and concerns are. By getting involved at all stages of the research workflow and looking for opportunities to participate, we will be better able to demonstrate value.

In *A Slice of Research Life* Kroll and Forsman (2010) surveyed researchers in four universities in the USA and concluded that there are eight topics with associated tasks which would benefit from the use of information within the research lifecycle:

1. Learning about grant funding opportunities. The library may have a role in co-ordinating information from different sources and publicizing it to researchers.
2. Issues surrounding intellectual property and exploiting commercial value. This need varies between disciplines but a role for the library might be identified with respect to copyright, licensing and referral.
3. Finding potential collaborators, whether multi- or cross-disciplinary or even cross-organization. It’s certainly true that in the sciences there are fewer individual researchers and many more working in teams.
4. Management and storage of documents and datasets. The rapid developments in technology make it more difficult to retrieve older material, with researchers expressing concern for the safety of work recorded on already outdated media or using obsolete software. Cloud services can help but this still requires the development of metadata to organize the materials.
5. Analysing text and datasets.
6. Improving information retrieval and management skills. This is often low on a researcher’s priorities. Researchers live by ‘satisficing’ and will
often use tools and services which are fast and easy if not optimal.  
7 Citing references, using bibliographical management tools.  
8 Choosing where to publish, understanding the difference between pre- and post-prints in making work open access.

These topics and tasks can be a useful starting point to better understand research workflow processes and hence when to devise lifecycle interventions.

**Best for:**
- planning interventions in the research lifecycle
- demonstrating value through timely interventions
- identifying opportunities to participate.

**Examples from practice**

**University of Westminster**
Consultants working for the University of Westminster in the UK identified a set of ‘information and data management pain points’ spread throughout the research lifecycle:

- Research administration and governance
- Collaboration
- Marketing and profile raising
- Research outputs management

Enright, 2015

This project resulted in the design of a virtual research environment structured around these key pain points.

**Research workflows meetings**
Library staff at Newcastle University in the UK were chatting to researchers after a library workshop and listening to them sharing ideas on some of the tools they used in their research. It was clear that all those participating in the discussion were gaining a lot from the sharing of experiences and the idea of the Research Workflows Community of Practice was born. The concept is a mixture of face-to-face meetings and a virtual space in which to share additional information. Two researchers agreed to initiate the first meeting and library staff help with the administration (booking rooms, sending invitations, marketing) to provide some consistency and permanence. The library also provides refreshments, but the meeting itself is planned and led by the researchers themselves. After the first
meeting staff from the IT service also offered help to set up the virtual part of the community.

Entitled 'Research Workflows: tools, tasks and techniques', the first meeting was advertised like this:

Do you ever wonder if you’re accomplishing research tasks in the most effective way? Are other researchers using tools you don’t know about, or have you discovered an amazing new app you’d like to share? What techniques and platforms are out there which might help you in your research life? We invite you to join an informal community of practice for researchers from all disciplines and at all different stages of the research lifecycle to get together to share experiences and ideas on tools and techniques that will help in our workflow.

It’s an experiment which we hope will work and will provide a useful forum to share tips and ideas, summarize discussions from face to face meetings and add links to information and resources which others might find useful. All members of the community can contribute, so, although staff from the Library and ISS will help keep it fresh, it’s really up to you!

The first meeting was very successful, with researchers encouraged to contribute five-minute informal talks about some tool or technique they found useful and to suggest topics for future meetings. The topics suggested are wide-ranging, including, for example: document collaboration, project management, note taking, using tags, reference management, research tools, cloud services, task management, mind maps, statistical techniques and much more. To date, only two meetings have taken place, but more are planned.

⚠️ To think about

Asking researchers what they think are key issues and barriers within their daily workflows can be a good starting point, but it can be helpful to set this in a wider context than the library. Many researchers have a fairly limited perception of the potential opportunities for engaging with librarians – asking what they want from the library will elicit common themes around access to resources and spaces but they may not be aware of what else might be possible. Starting a broader, more open conversation without a specific library focus can tease out less obvious openings for engagement.

References and further reading

8.2 **Make early contact with the research community**

**UNLESS YOU KNOW** and understand the research community with which you are working, it’s unlikely that you will have a very effective relationship. However, the community may be large and diverse and, certainly initially, it can be daunting to find ways in which to connect. Liaising is time-consuming. You need to make time to listen, to talk, to record what you learn and to think about how to respond.

Making the first contact is crucial. Perhaps you can obtain a regular listing of newly appointed research staff from your HR department and send a tailored welcome package to each new member of research staff, inviting them for a personalized introduction to the library.

If numbers seem overwhelming, how about setting up a regular monthly introductory meeting for all new research staff. Maybe the organization has a central welcome for new staff where the library can have a presence. The important thing is to be proactive in seeking out new research staff, regularly and consistently.

If you yourself are new to the role, try to identify key researchers, perhaps chairs of research groups or principal investigators and propose a meeting. Ensure that you attend the meeting with a clear purpose – what will the outcome be for you both? – and with something to offer. It’s not sufficient to have a woolly aim such as ‘I’m hoping to find out what you need from the library’; try to be more specific – ‘I want to discuss your research to help me plan what new journals we might need’ or ‘Can we talk about your research group’s recent publications and how we might improve the number of open access papers?’.

Research administrators can also be invaluable allies. Invite them to the library and show them around. Explain how they can use the library for personal use and chat about your plans for engaging with the researchers in their section. Ask their advice – which researchers are most likely to be receptive to you, what methods of communication will work best? Suggest they add you onto relevant mailing lists and invite you to research meetings in the department; ask if they can send papers of meetings even if you can’t attend in person.

We recognize that building relationships with researchers is critical and we try to ensure that we are involved in their world.

Hall, 2015
Best for:
- increasing knowledge of the research community
- building relationships
- promoting the library effectively.

Examples from practice

An example of a welcome letter/e-mail

Dear Dr xxx

As you're a new member of staff here at xxx University, I'd like to welcome you to the University Library on behalf of the Library Liaison team. My name is xxx and I'm the Liaison Librarian for your School; xxx is the Liaison Library Assistant for the School. If you have time, we'd be delighted to arrange a time to meet with you and explain in more detail how the Library works and what we can do to facilitate your teaching and research. Just e-mail me at xxx with some times which are convenient for you and we can set up a meeting.

In the meantime, you may wish to explore the Library's web pages:

The Information for Academic Staff section has some general information as well as going into more detail about support for teaching and research. [URL]

The Subject Guides are a tailored set of web pages bringing together key information resources for your subject. [URL]

The Research pages link to information on different aspects of the research process

I hope you find these helpful and I look forward to meeting you. [URL]

Tours for research administrators

One UK university library recently organized some library tours for administrative, clerical and technical staff in the university. The tours were advertised on the library web pages and by e-mail to all departments and were run every week during the summer vacation. A booklet was printed to accompany the visits, with details of borrowing rights and also highlighting resources such as newspapers, maps, films, literature, IT skills books and even some genealogy resources which all staff might find interesting. The tours included a general look around the library, with explanations of how it works for both staff and students.
‘I found the tours a great way to build relationships with the staff, many of whom had never been in the library because they thought it wasn’t for them. Now it’s much easier to get help from some of them and one lady in particular now makes sure I’m included in everything the researchers in her area do. It’s made a real difference and we will definitely be doing it again.’ (UK librarian)

Contacting postgraduate (PGR) students
One UK university library makes a point of e-mailing every new postgraduate student directly:

‘Although we always run workshops as part of the training programmes for the postgraduate students, we know they don’t all come and we were worried that it was the people who didn’t come who might need the most help. We decided to e-mail every postgraduate student directly, rather than passing messages through the graduate school office, to see if that would help. We were able to get lists of all the new PGRs in each Faculty so we tailored the messages by Faculty and sent them out a few weeks after the start of term, when we thought most of the students would have arrived. We did the same thing for the intakes in January and May. The e-mail just welcomes them to the library and briefly explains what we can do, what the workshops will do for them and how to get in touch. We’ve definitely had more folks sign up this year and we’ve also seen an increase in individual contacts, so we think that a more personal touch has helped.’ (UK librarian)

Cake for questions
We can be very dismissive of the traditional approach of hanging around the coffee bar in the hope of engaging with researchers, but in practice this simple approach can be very effective:

‘I used the simple but effective ruse of offering a piece of cake in exchange for sharing with me any tips (or problems) the research team had on a particular topic that I was putting together a short training session about (in this case, information management/keeping organized during a literature review). This really worked – lots of people were forthcoming and it helped tailor my session. A lot of the research team seem to be motivated by cake! Also I think I was acknowledging that they had more experience in conducting literature reviews than I had (although I’ve done a lot more searching) and they understood that I genuinely wanted to learn from their experiences, good and bad.’ (Melanie Gee, Sheffield Hallam University)

To think about
Having something specific to engage interest always helps when building relationships. Make sure you do some research beforehand to find out about the people you will be meeting. Check out their area of research and look to see how
well it is resourced in the library. If they are new staff, ask where they have come from and whether there were particular aspects of their previous library experiences they are hoping to find here. This gives you the opportunity to highlight what you can offer and to explain how you hope the relationship will develop. You may not be able to replicate their previous experiences, or even provide the same resources, but having an open discussion from the start will help identify strengths and weaknesses and may enable you to better manage their expectations.

References and further reading

8.3 Attend research group meetings (see also Tips 4.1 and 5.7)

Wherever possible, it helps if library staff are perceived by researchers as part of the project rather than outside it. This can be difficult to achieve. Researchers may not see the need to have a librarian as part of the team; librarians may feel they have little to offer. However, even if you feel that you will be playing a minor role in the whole project, if you can afford the time, it can be well worth attending a research group meeting, especially where they will be discussing the initial approaches, planning the project and thinking about the systematic review. In order to do this, it is necessary to monitor research activity very closely, attending any regular meetings to discuss new research plans, chatting informally to individuals about their current and future work and not being diffident about asking questions. Most researchers are passionate about their work and will be happy to tell you more. Perhaps you can offer to meet the lead researcher to discuss the project. You might ask if someone could explain the research area to you in layman’s terms, as this often forces the research group to clarify their research question. The better you understand the research area and the group the easier it will be to work with them.

‘I try to go to research meetings whenever I can, it’s about being opportunistic, that personal contact often means you can give a quick response. I also try to take the initiative and look for every chance I can to explain what it is I do.’ (Helen Young, Loughborough University)

‘Get yourself onto the research committees and provide a regular update about services and any upcoming training sessions.’ (Nicola Foxlee, University of Queensland, Australia)
In a large organization, one librarian may be liaising with many research groups across a wide range of discipline areas and it simply isn’t practical to expect to be involved in every one to the same degree. In such situations maybe the best you can aim for is a phone conversation or perhaps an e-mail exchange. What is important, however, is to try to keep a record of such interactions, so that, however slim they might be, you can build on them to gradually develop a clearer picture of the research and to identify opportunities to engage with it.

Best for:
- understanding what researchers are doing
- building relationships with researchers
- making sure researchers are aware of new developments in the library.

Examples from practice

Database of researchers
One library team keeps a joint database to record interactions with researchers, detailing the names of the staff and their roles, the broad research topic and any details of the research, as well as logging contacts between the researchers and library staff.

If you have the luxury of time and the opportunity for more interaction you can also note, for example, what publication output they are aiming for, their timescale, what they know about this subject area already, whether they have done any previous work on this topic and whether they have already identified some key publications that should be included in the final output. This kind of detail will help to jog your memory next time you attend a meeting and is also invaluable when passing information to other colleagues in the library.

Sheffield Hallam University, UK
Melanie Gee’s experience of being embedded into the research community has given her easy access to research meetings, but her ideas can be easily adapted to different situations:

'I secured a regular slot in the research centre staff meetings and sub-centre (‘theme’) meetings, and made sure I had something to say at each one. Examples of how I used this 10-15 minutes slot included:

- explaining how to get to the JCR impact factor data (and what it meant)
- using our institutional open access repository (SHURA) and what stats can be pulled from it
• explaining the different types of intellectual property rights and how they were relevant to the researchers (I gained this knowledge from a previous job)
• asking for what they were interested in receiving training on, and (later) pitching the lunchtime training sessions I had developed
• recent changes in database interfaces, RefWorks, etc.
• providing an overview of the sort of work (information enquiries, literature searching, 1:1 training) I had performed to date since joining the research centre.

Similarly, I would send regular e-mails to the centre researchers and the wider research community in the faculty, passing on important updates to databases, pertinent information about Journal Impact Factors, tips for using RefWorks, etc., and circulating any training materials that I had produced. As I was establishing myself in the research centre, I would try to find a reason (or excuse!) to e-mail every few weeks – just to remind the staff that I was around, and there to help.’ (Melanie Gee, Sheffield Hallam University)

⚠️ To think about

Whilst this approach can work well in a small organization, it is much more difficult to achieve in a large university setting, where sheer numbers of researchers and variety of research areas preclude such a detailed level of knowledge. Nevertheless, it is an extremely valuable approach, so rather than dismissing it out of hand, consider if there are aspects of the tactic which will apply in your own circumstances.

‘Having a regular slot on the agenda of staff meetings has helped to establish me as one of the “team” rather than “just” a service. Also I found that each time I sent out an e-mail it would prompt one or two people to “remember” that I was there and they would get in touch, often asking for help about something completely unrelated (but still in my remit) or even for input to a bigger project.’ (Melanie Gee, Sheffield Hallam University)

Be wary of raising expectations that you may not be able to meet.

Acknowledgements
Helen Young, Loughborough University; Melanie Gee, Sheffield Hallam University.

8.4 Communicate your message effectively

Communication is a two way process. Once you understand the research community with which you want to engage, the next step is to think about the messages you want to convey and how you might accomplish this. Whole
books have been written about marketing and publicizing libraries. Ned Potter’s excellent book (2012) addresses issues such as the library brand, marketing with social media and new technologies and marketing special collections, amongst many other key issues. Ned describes seven key concepts to bear in mind:

1. *Everyone is trying to get from A to B – we have to show them how we’ll help them to get there quickly and more successfully.* This applies most particularly to researchers, who may not visit the library regularly.

2. *Market the service, not the product, market the benefits not the features.* Think about the services and benefits you wish to promote to the research community.

3. *Market what they (our users) value but continue to do what we (as providers) value.* Think about how you might apply this idea to the messages you wish to convey.

4. *Market personality.* You and your colleagues are the features that make your library unique for your researchers, think about how you will project your own personality into interactions with researchers. The personal touch is important.

5. *Never, ever market something you can’t deliver.* Don’t make promises you can’t keep. In very practical terms, an example of this might be trialling a resource which you know you can’t afford to buy – is this good practice, making sure you know what is important for the research community, or does it just raise expectations you can’t meet?

6. *Create and market different value propositions for different groups.* In essence, by focusing our attention on the research community, this concept may already have been met. However, even within the research community there are differences – remember the seven ages model in Tip 3.2. Consider how you might differentiate messages to make them more attractive for different groups of researchers.

7. *Understand the cost curve and how it applies to libraries.* Researchers need to understand that our services have a worth and that the value they get out of using them exceeds the effort they have to put in to use them. (Potter, 2012)

The first consideration is to identify the audience and to decide if one size fits all or if different groups of researchers will benefit from differentiated messages. Groups may be distinguished by level and experience/seniority or by discipline. Next, attention needs to be given to the mode of delivery and this may be dependent on the message you wish to convey, as well as the group it is aimed at. Blanket e-mails are rarely as effective as more targeted approaches but the more tailored you make the message, the more time-
consuming it will be to deliver. Mailmerge e-mail letters can offer a compromise if you have a small and fairly stable audience, as they will allow some personalization. Alternatively, enlisting the help of research administrators and programme leaders can assist in reaching specific cohorts of postgraduate students. More libraries now use social media tools such as Facebook and Twitter to connect with users and a blog for researchers can be a useful strategy. Posters and leaflets to distribute around the organization shouldn’t be dismissed and probably most effective of all is delivering your message face to face.

❖ **Best for:**

- ensuring your approach is tailored and relevant to your audience
- getting the message about the library to researchers.

★ **Examples from practice**

**University of Northampton, UK**

The University of Northampton Library, in collaboration with the Graduate School and the Research and Strategic Bidding Office, have created a Research Support Hub. This is a blog, which is promoted as a one-stop shop for all news, events and information relevant to Northampton researchers.

'It gives us somewhere to put out latest news as well as tips on information and resources.'

*(Miggie Pickton, University of Northampton)*

△ **To think about**

What methods do you currently use to communicate with users? Are these the most effective approaches for liaising with researchers? Are there other sections of the organization with whom you can collaborate to offer a more coherent approach?

**References and further reading**


Acknowledgements
Miggie Pickton, University of Northampton.

8.5 Contribute to research proposals

Frequently, library staff only become aware of research projects once funding has been received and researchers may not consider that librarians can contribute at the proposal stage. However there are ways in which LIS staff can add value to research proposals and this trend is growing.

At an early stage of the application, researchers may need to explore opportunities for collaboration, as being able to demonstrate cross-disciplinary, cross-organizational and international partnerships can strengthen the bid. Librarians are well placed to advise on this, perhaps simply by exploring the literature to find like-minded authors, or by making researchers aware of the many networking and collaborative tools such as ResearchGate and Academia, which are available to them.

The proposal will need to demonstrate how the new research will add value to existing knowledge, so some form of literature review is essential to explain the context of the bid. Whether librarians, as part of the team, perform the search for the group (discussed in more detail in Tips 8.7–8.9) or whether they assist researchers to do it themselves, this is an obvious intervention.

In addition, each of the researchers involved in the bid needs to validate their credentials by showing what their track record of research has been to date and what impact their past research has had. Directly supplying bibliometrics or working with researchers to show how to find and, more usefully, interpret them can also be a key role for librarians.

All research proposals will need to include a data management plan to explain to their funder how they will collect, preserve and manage the data generated by the research – this is another area where librarians can contribute (see Tip 8.11).

❖ Best for:
- keeping up to date with research activity
- demonstrating the value of library services
- ensuring that researchers are aware of what resources are, and are not, available before they start their research.
Examples from practice

Queensland

In a survey in Queensland, Australia, Richardson discovered that of the libraries contacted:

... all provide, or are in the process of planning for the provision of, advice and reports that will assist researchers in demonstrating their research impact in grant applicants to major funding bodies. ... This advice and/or reporting are based on the use of traditional bibliometric indicators (citations, h-index). Training in bibliometric analysis for grant writing as well as support for compiling literature reviews for grant writing is provided by some libraries. 62% (8) of libraries provide assistance in the form of bibliometric reports, literature reviews and workshops for grant applicants. 23% (3) provide one-on-one and ad hoc assistance to individual researchers. 15% (2) are looking at options for future (formal) involvement.

Richardson et al., 2012

To think about

Supplying data for research proposals can soon become an accepted role for the library and may take up a considerable amount of time. Before venturing down this route, consider whether you have sufficient resource to continue if the idea takes root. Treating the contribution as a pilot or experiment will ensure that you are able to draw back or even investigate if a percentage of the subsequent grant might devolve to the library in recognition of the work.

References and further reading


8.6 Charge for literature searches

A LITERATURE SEARCH is a key component of any research proposal or bid for funding. For many years, as part of both formal and informal information literacy interactions, librarians have encouraged researchers to develop search strategies, learn effective search techniques and perform their own literature searches. It makes sense, the thinking goes, that the person who is most knowledgeable about the topic is the person best placed to perform the search. However, although we can't be polymath subject experts, librarians undeniably have expertise in searching for information and, as well as
teaching others how to do it, perhaps there is a role for us still to perform this task, most effectively in conjunction with a subject expert.

In small, specialist libraries with relatively few researchers a tailored, personal literature service may be possible, often coupled with a personal current awareness service.

‘If it means nannying them, then we do.’ (Karen McCaulay, Royal Conservatoire of Scotland)

However, in large research organizations this level of personal service is no longer possible, which is why librarians have focused instead on developing the searching abilities of researchers. Charging for such a service seems an alien concept to librarians and researchers are used to all library services being centrally and freely provided, so the idea of paying for a literature search may seem unacceptable. However, it seems entirely reasonable to pay for expert consultancy and if the library can demonstrate expertise and added value then introducing a premium option may be possible. In fact, it is often the case that specific services are valued more highly if they have a cost attached.

Best for:
- demonstrating the value librarians can bring to the research process
- generating income.

Examples from practice

Northumbria University Library
Northumbria University Library, UK, has been piloting a charged literature search service for researchers who are preparing funding bids. The work is done in consultation with the researcher, using flowcharts to help estimate costings which are based on the librarian's hourly salary rate. Results are shared with the researcher, who is responsible for refining and evaluating the material, using online bibliographical management software.

This approach recognizes that researchers work to tight deadlines when submitting research bids, and so the expertise of library staff feeding into the process is much appreciated.

‘Having a pilot was very good, as it enabled us to develop good practice, develop procedures and ensure the practice is supportive to researchers.’ (Suzie Kitchin, Northumbria University)
Delft University Library

Delft University Library in the Netherlands also offers a charged literature search service, as well as an exploratory search for patent applications.

We execute a custom literature search according to your wishes. In an introductory interview you discuss the literature search with one of our information specialists and you reach an agreement on the most appropriate search terms. The search is tailored to your budget. The result is a bibliography of relevant references. The search explores the context of the research area, placing it within a broader framework. The cost of the custom search starts at €500.

www.library.tudelft.nl/en/support/researchers/literature-search

References and further reading

For more details see Northumbria University Library’s consultancy service: http://library.northumbria.ac.uk/info-researchers/consultancy. (Accessed 2.1.15)

Acknowledgements

Northumbria University Library.

8.7 Systematic reviews – get involved in the planning process

Originally the purview of medical sciences, the practice of systematic reviews is becoming increasingly popular in social sciences, as well as in some science and engineering disciplines, and they are beginning to replace traditional narrative reviews as a way of summarizing research evidence. A systematic review aims to identify all relevant information, both published and unpublished, evaluate the quality of the sources and synthesize the outcomes in an objective manner. A good systematic review is based on a rigorous methodology, with a protocol which is often peer reviewed so that it can be replicated in future. All these approaches are familiar to LIS staff – they are, in essence, fundamental to the development of information literate researchers – so it seems logical and right that librarians should have a central role in any systematic review. However, this may be less simple than it first appears. Some librarians may feel intimidated by the research topic – ‘I’m not a chemist/dentist/geographer, how can I possibly be involved at this level?’ Researchers often don’t recognize the contribution we can make and so there may not be the opportunity to get involved. Conversely, the will and demand may exist, but librarians may not have the time within an already busy working week to enable them to engage to the depth required; a systematic
review can be a very time-consuming and meticulous process. As with other areas of the research process therefore, we can choose different options:

- Teach researchers a robust approach to developing a search strategy; make them aware of all the sources they will need to consult and provide general advice and guidance.
- Provide high-quality resources about the systematic review process to aid researchers.
- Become part of the research team and actively manage all or selected parts of the review.

The first two options are dealt with elsewhere in the book; the following tips relate to active involvement in systematic reviews.

Best for:
- demonstrating skills and expertise
- adding value to the research process.

Examples from practice

Bangor University
Beth Hall from Bangor University in the UK talks about her experiences of assisting with systematic reviews:

'It helps to get involved right from the start so that you can be involved in the planning stages. Once you have a properly defined (and costed) description of your role in the systematic review process you can encourage research groups to write your time into the grant, so that a small proportion of your time is bought out or contracted to the group. This will enable you to shape the methodology and help to scope the review process.

'Even if you are playing a more minor role I would still recommend asking the research group whether they would be interested in having a brief meeting to discuss the methodology. In my experience, the information retrieval gets least thought about in the planning process, perhaps reflecting how interested the researchers are in this process. Ask questions about the inclusion and exclusion criteria and challenge decisions, e.g. retrieve publications in all languages: have you got some way of translating non-English language publications? You are asking the research group to look again at the method, talk about any limitations of resources at the institution, e.g. searching Embase: we don't have a subscription here, but it is available via the NHS – are you going to use NHS access? Talk to the researchers about their experiences with using the platforms and databases and if
possible offer additional training if required, e.g. they may never have combined search strings on Web of Science before. Ask the research group to look again at how long they have budgeted for information retrieval, deduplication and recording. Could you do some quick scoping to see how much literature is out there and do some back-of-the-envelope calculations as to how long this would take to export into RefWorks, and record?’ (Beth Hall, Bangor University)

⚠️ To think about
What skills might you and your colleagues need to develop in order to fully engage with systematic reviews? Can you find any short courses (such as those delivered by the Centre for Research and Dissemination at York University, for example) which might help?

Will the payback from getting involved at this level justify the investment of time and training costs?

Having the confidence to question what researchers say they want and using your own professional judgement to tailor the search can be difficult, especially if people are very senior or experienced in their field.

‘I have learned not to take at face value what it is the researchers say they want you to search for, when you are undertaking a literature search on their behalf. I have learned to get around this by looking at the research proposal to unpick what literature they actually need and then discussing possible strategies with them. Talk about search terms, run pilot searches, look at the results together, modify the searches and try to help them understand the recall/precision trade-off that the searches will inevitably entail. Offer choices with a gentle steer towards the choices that seem the most sensible to you.’ (Melanie Gee, Sheffield Hallam University)

References and further reading
Andrew Booth’s wiki on realist reviews,
Centre for Research and Dissemination,
www.york.ac.uk/inst/crd/services.html.
Newcastle University’s systematic reviews guide,
Acknowledgements
Beth Hall, Bangor University; Melanie Gee, Sheffield Hallam University.

8.8 Systematic reviews – advise on resources

The previous tip looked at the rationale behind LIS staff involvement in systematic reviews, especially our role in the planning process, which is arguably the key part of the whole exercise. Following on from that, however, librarians still have a key contribution to make in monitoring and advising on the process itself. Once a clear methodology has been agreed, with researchers encouraged to articulate keywords and phrases, inclusion and exclusion criteria, scale and scope, the next stage is to advise on the resources themselves. What other resources ought to be considered; are researchers aware of all the different databases available to them?

Researchers may be familiar with a few large databases, but how well do they understand how to run a complex search strategy through them? Librarians can assist in translating the search for a different database that may have different search parameters or offer practical tips to the research team about the peculiarities and strengths of individual databases. How comparable are the results from different sources? How might that affect the integrity of the systematic review? These are all questions which an information professional is well equipped to answer and which a busy researcher may not have considered.

As a paid part of the team, the librarian’s role might be to actually apply the search strategy to the resources or to read the search strategy and suggest edits and improvements. Librarians can suggest search filters and limits and run an initial search to check that the strategy is working as expected.

In addition, there may be key sources and resources to which researchers don’t have local access and, if so, the library may be able to facilitate access. As more and more information is available electronically, the fact that some material is still only available in print can be a surprise and irritation to a young researcher.

Systematic reviews follow a fairly structured pattern, so although they may be a new, not to be repeated, process for a researcher or research group, there are many aspects from one review that can be carried across to another. As a neutral contributor a librarian can devise a generic approach that can be individually tailored to each review, saving time and ensuring that no part of the process is omitted. This can be as simple as a checklist for the librarian or the researchers (e.g. Are you sure you have searched all relevant databases? Yes/no), or a more detailed list of recommended resources.

‘Understand what the researchers need from the databases platforms. For example, if you know that they are going to need to run long search strings you could pass on any tips you
know about how effective the databases and platforms are at managing this. Pass on any local knowledge, e.g. we have found some databases are slower in the afternoon when USA wakes up.’ (Beth Hall, Bangor University)

**Best for:**
- demonstrating skills and expertise
- adding value to the research process.

**Examples from practice**

**Simple review summary sheet**
Figure 8.1 illustrates a simple summary sheet for a systematic review.

<table>
<thead>
<tr>
<th>Review title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Review scope</td>
<td></td>
</tr>
<tr>
<td>Time period</td>
<td></td>
</tr>
<tr>
<td>Country/location</td>
<td></td>
</tr>
<tr>
<td>Exclusions</td>
<td></td>
</tr>
</tbody>
</table>

**Keywords, proper names . . .**
*Note here any spelling variations, truncation, etc.*

**Search strategy**
- Search term combinations

**Databases to search**
- This can be prepopulated with most popular resources

**Reference works (print and online)**
 *(Encyclopedia, etc)*

**Other specialist sources**
 *(e.g. audiovisual resources, reviews, theses, image collections)*

**Primary sources**
 *(e.g. archives, letters, special collections)*

**Resources elsewhere**

**Useful websites**

**People and events**

**Monitoring for new materials**

**Any other things to consider?**
 *(e.g., foreign language material, items which may be hard to obtain)*

**Figure 8.1 Simple review summary sheet**
To think about

What level of contribution are you able/willing to make at this stage of the process?

What options are there for access to resources outside your own library?

Rather than reacting when the need arises, can you prepare ahead of time by finding out what alternatives there are?

Acknowledgements

Beth Hall, Bangor University; Lucy Keating, Newcastle University.

8.9 Systematic reviews – help with writing up

You may well feel that after advising on planning and resources for a systematic review that your main contribution is over. The researcher is responsible for managing the information they find, for analysing it, drawing out themes and writing up the final review itself. However, a key part of a systematic review is to record the methodology and here again library staff can participate, perhaps even writing that section of the final report.

’Some researchers have forgotten what they did by the time they write the final publication, they are often not interested in the detail that I would spot, such as the deduplication, the platform used. Ask if you can see the final publication and the methods section about information retrieval, especially if you will be acknowledged in the article, because this is your contribution.’ (Beth Hall, Bangor University)

If the researcher or librarian has been diligent in recording the process, perhaps using structured forms as in the previous examples for planning and executing the search, then writing up the methodology can be straightforward. In fact, yet again, the librarian could develop a fairly generic text which can be tailored to the specific review and writing style of the discipline.

It is difficult, if not impossible, to perform a systematic review without using some form of reference management software to organize and manage the information and this should have been addressed long before the writing up stage. However, specific knowledge of the software is also pertinent in the final stages, for using citation features, adapting to journal styles and ensuring correct and accurate referencing. Here again, library staff can make an important contribution, perhaps taking over management of the database of references on behalf of the team, checking for consistency and accuracy of metadata and advising on appropriate output styles.
Best for:

- demonstrating skills and expertise
- adding value to the research process.

Examples from practice

Some librarians have built up a small collection of examples of good practice in how to write the methods section of a systematic review, which they can share with researchers.

Bibliographic software packages often have sophisticated tools that can be helpful when managing large datasets: for example, the use of controlled vocabularies. Take some time to investigate which tools will be of most benefit, even if you can’t be an expert yourself it helps to be aware of options which researchers can choose.

Using a mind-mapping tool, such as MindView, can also be helpful in structuring the sections of a systematic review. MindView was used to organize the tips for this book, as the structure can be designed as a visual map and then exported directly into Word to create the structure for the subsequent document.

To think about

What other benefits might accrue from your involvement with systematic reviews? Might these less tangible outcomes, such as closer acceptance by the research community, balance the not insubstantial time and effort involved?

‘I have learnt so much by being directly involved with systematic reviews, and developed my understanding that I can pass on as guidance to others looking for my support. In addition, I have been given the opportunity to have my name on publications, which is good for my own research profile.’ (Beth Hall, Bangor University)

However, it is equally important not to over-commit and to promise more than you will be able to deliver. It’s easy to feel excited or flattered to be included in a research project in this way and to devote time to it to the exclusion of the ‘day job’.

‘Personally I know that I get sucked in and spend too long on work for the review that I can really allocate, also the research group ask more of me if they know I can help. It is important early on in the process to explain the boundaries of what support you can offer, e.g. are you able to attend regular team meetings or stakeholders meetings or not. I have found that if you show the research group some useful ways to use RefWorks, for example, then they will ask if you could manage all the references and marking up/annotation after every sift.’ (Beth Hall, Bangor University)
References and further reading

Acknowledgements
Beth Hall, Bangor University.

8.10 Engage with research data

There are many definitions of research data. The Australian National Data Service (2015), collating statements from several universities, concludes that it is ‘all data which is created by researchers in the course of their work, and for which the institution has a curatorial responsibility’. In the UK, the Engineering and Physical Sciences Research Council (2015) states that research data is ‘recorded factual material commonly retained by and accepted in the scientific community as necessary to validate research findings; although the majority of such data is created in digital format, all research data is included irrespective of the format in which it is created’. Going into specific detail, the University of Melbourne (2005) describes data as:

... facts, observations or experiences on which an argument, theory or test is based. Data may be numerical, descriptive or visual. Data may be raw or analyzed, experimental or observational. Data includes: laboratory notebooks; field notebooks; primary research data (including research data in hardcopy or in computer readable form); questionnaires; audiotapes; videotapes; models; photographs; films; test responses. Research collections may include slides; artefacts; specimens; samples. Provenance information about the data might also be included: the how, when, where it was collected and with what (for example, instrument). The software code used to generate, annotate or analyze the data may also be included.

University of Melbourne, 2005

The rise in importance of ‘digital affordances’ (Kenney, 2014), such as repositories, data management and bibliographical software, brought about by advances in technology, has influenced scholarly practice in relation to the handling and management of data, with a variety of different terms evolving, such as e-scholarship, e-research and e-science. Although initially found mainly in science subjects, recognition is increasing in social sciences, arts and humanities. Data is increasingly viewed as a valued product of research in its own right, distinct from the traditional academic output of papers, books and
reports; it can take many forms: text, numbers, audio and images, to name just a few.

As well as defining data itself, terminology around the production, use and management of data is confusing. In the UK, e-science refers to the large-scale science that will increasingly be carried out through distributed global collaborations enabled by the internet (National E-Science Centre, 2012), whereas the preferred term in Australia is e-research. In the USA, cyberinfrastructure refers to research environments that support ‘advanced data acquisition, data storage, data management, data integration, data mining, data visualization and other computing and information processing services over the internet’ (Gold, 2007). In library and information science, data literacy is yet another aspect of information literacy.

Against the national infrastructures, mandates by funding bodies such as the UK Research Councils and Wellcome Trust, the Australian Research Council and similar bodies in other countries now require researchers to consider how they organize, manage and share their research data and this has provided opportunities and challenges for librarians. Lewis states the situation neatly:

Perhaps the starting point for any discussion about libraries and research data is to ask whether managing data is actually a job for university libraries. The answer to this question is a straightforward yes and no. Yes, in the sense that data from academic research projects represents an integral part of the global research knowledge base, and so managing it should be a natural extension of the university library’s current role in providing access to the published part of that knowledge base. No, because the scale of the challenge in terms of infrastructure, skills and culture change requires concerted action by a range of stakeholders, and not just university libraries.

Lewis, 2010, 145

Be that as it may, many libraries have taken up the challenge and are upskilling existing staff or developing entirely new roles to address this latest challenge.

In addition to the large-scale data management debates, concerns are also being raised about supplementary data in journal papers and how this is being handled. In the USA, NISO, the National Information Standards Organization, has developed recommended practice for publisher inclusion, display and handling of such materials (National Information Standards Organization, 2013), but this is relatively uncommon in other countries.
Best for:

- getting involved with research data.

Examples from practice

Research Data Management pyramid

In the Research Data Management pyramid for libraries (Figure 8.2), Lewis (2010) identifies different ways in which libraries can engage with research data.

![Research Data Management pyramid for libraries](image)

Figure 8.2 Research Data Management pyramid for libraries (Lewis, 2010)

These revolve around data literacy – raising awareness of issues relating to research data such as ethics, access, skills to find and interpret the data, and data curation – how to manage, store and develop the data. For librarians seeking to engage with data, therefore, we can include it in information/digital/data literacy development, treat data as a collection and curate and manage it and manage the accompanying metadata.
Australian libraries
Richardson (Richardson et al., 2012) describes how libraries in Australia have developed proficiency in the curation and management of data. For example, existing staff at the University of New South Wales have developed their skills relating to research metadata and e-research infrastructure. New data librarian posts have also been created. At the University of Western Australia a unit has been created that sits at the intersection of the library and the IT support models. The anticipated benefits include cross-fertilization of knowledge and services based on the synergies between research analytics, data management, research outputs and e-research systems.’ (Richardson et al., 2012).

To think about
Data management is technically challenging and extends the scope of the library’s traditional activities. Some existing staff may feel intimidated by the challenge, which demands a whole new set of skills. Even if new, appropriately skilled staff are appointed, decisions need to be made about staff training for existing staff if they are not to feel excluded and ‘left behind’ by the new direction.

Just being aware of the challenges researchers face in dealing with their data can be beneficial. Many researchers are unaware of the benefits of early recording and management of their data and will leave any curation until the end of their project. Library staff can encourage researchers to start thinking about data management right from the start. Even if you aren’t an expert yourself, do you know other people in the organization to whom you can send researchers, or from whom you can learn yourself?

References and further reading


### 8.11 Advise on data management plans

*A S RESEARCH DATA* has increasingly been recognized as having value in its own right, so in order to comply with funder mandates, researchers are increasingly expected to provide a data management plan as part of any bid for funding. A data management plan (DMP) describes what researchers expect to do with the data they collect, both during and after their research. The DMP commonly articulates what kinds of data will be created, explains
the standards and metadata which will be used with the data, how the data will be accessed and shared, policies and provisions for the re-use of the data and plans for the long-term archiving of the data.

With their skills in managing information and metadata, librarians are often well placed to contribute to data management planning. As a minimum, we can point researchers to external high-quality information sources and training resources to help them develop their skills. Expert workshops can be hosted by the library, bringing key speakers from elsewhere, for example from the Digital Curation Centre in the UK. With more resources, internal training programmes can be developed, along with detailed, location-specific guidelines for researchers on how to deal with their data. Ultimately, such a programme will need to be supported by a fully fledged internal data repository. In order to accomplish this, however, it is likely that specialist staff will need to be employed, or existing staff will need to develop their own data management skills. In the meantime, small steps to encourage good practice in data management planning can still be taken by LIS staff.

**Best for:**
- getting involved with research proposals right from the start
- demonstrating skills and expertise.

**Examples from practice**
Examples of resources relating to data management planning are easy to find, so just one or two are highlighted here.

**The Digital Curation Centre**
In the UK, the Digital Curation Centre (www.dcc.ac.uk) provides a wide range of information and resources to assist researchers in their curation of data. They describe a digital curation lifecycle, which is a useful structure on which to base a DMP.

The DCC digital curation lifecycle comprises the following steps:

- **Conceptualise:** conceive and plan the creation of digital objects, including data capture methods and storage options.
- **Create:** produce digital objects and assign administrative, descriptive, structural and technical archival metadata.
- **Access and use:** ensure that designated users can easily access digital objects on a day-to-day basis. Some digital objects may be publicly available, whilst others may be password protected.
Appraise and select: evaluate digital objects and select those requiring long-term curation and preservation. Adhere to documented guidance, policies and legal requirements.

Dispose: rid systems of digital objects not selected for long-term curation and preservation. Documented guidance, policies and legal requirements may require the secure destruction of these objects.

Ingest: transfer digital objects to an archive, trusted digital repository, data centre or similar, again adhering to documented guidance, policies and legal requirements.

Preservation action: undertake actions to ensure the long-term preservation and retention of the authoritative nature of digital objects.

Reappraise: return digital objects that fail validation procedures for further appraisal and reselection.

Store: keep the data in a secure manner as outlined by relevant standards.

Access and reuse: ensure that data are accessible to designated users for first time use and reuse. Some material may be publicly available, whilst other data may be password protected.

Transform: create new digital objects from the original, for example, by migration into a different form.

Digital Curation Centre, 2015

In addition, the DCC provides a series of useful checklists relating to data management plans and the curation of data, www.dcc.ac.uk/resources/how-guides. All are free to download and use.

University of Western Australia
The University of Western Australia also provides a Data Management Toolkit with links to the university’s guidelines for writing a DMP.

The Research Data Management Plan helps researchers to document and establish:

- Metadata standards which will be used for data formats.
- Storage and backup procedures and provisions.
- Future access to the research data for sharing and/or reuse.
- Retention and disposal procedures and provisions.
- Ownership and protection of intellectual property.
- Documentation describing all of the above.


University College Dublin
UCD Library in Dublin provides a very useful four-page data management plan checklist for researchers, shown here as Figure 8.3.
SECTION 8: SPECIFIC INTERVENTIONS IN THE RESEARCH PROCESS  147

PROJECT DESCRIPTION
☑ Project title  ☑ The aim/ purpose of the research  ☑ Project duration

CONTEXT: Administrative and contact information
☑ Principal investigator (PI)  ☑ Researchers/other project members  ☑ Main contact details
☑ Collaborators/Partner Institutions  ☑ Funding source(s) and requirements

DATA TYPES
Provide a description of the data your project will capture, create or use. It is important to record this detail to help you and subsequent users understand why and how the data was created.
☑ How will data be created (captured)? e.g. interview data, questionnaires, imaging, experimental measurements etc.
☑ What data formats will be used? e.g. File formats such as excel, word, open source etc.
☑ Will the data be reproducible? What would happen if it got lost or became unusable later?
☑ How much data will there be and what will its growth rate be? How often will it change?
☑ Will existing data be used? If so, from where, and what is the relationship to the existing data?
☑ Are there special tools or software needed to create/process/visualise the data?
☑ How will metadata be captured, created and managed?

DATA ORGANISATION, DOCUMENTATION AND METADATA
Organising, documenting and describing data is important in order to assure quality control and reproducibility of data
☑ What metadata standards will be used?
☑ How will metadata be captured, created and managed? Is there a discipline-specific standard?
☑ How will folders and files be structured and named?
☑ How will different file versions be managed?
☑ What data identifiers will be assigned?
☑ What other documentation and contextual information will be available in order to help others understand the data? E.g. data dictionaries, codebooks, questionnaires

DATA STORAGE AND SECURITY
☑ Back-up: – How will it be done and how often will it be done? – Who will be responsible?
☑ Security: – How will data security be guaranteed e.g. data encryption, password etc.
☑ How will the data be shared during the project?

LONG-TERM PRESERVATION
☑ What data will be kept or destroyed after the end of the project?
☑ How long will data be kept? e.g. 3-5 years, 10-20 years, permanently?
☑ Where will the data be stored? e.g. archive, data repository, network etc.
☑ What file formats will be used? Are they long-lived?
☑ Who will manage the long term data?
☑ What is needed to prepare the data for preservation or data sharing?
☑ What related information will be deposited with the data?

ETHICS AND INTELLECTUAL PROPERTY
☑ Are there any ethical and privacy issues that may prohibit sharing of some or all of the data?
If so, how will these be resolved?
☑ Do your data contain confidential or sensitive information? If so have you discussed data sharing with the respondents from whom you collected the data?
☑ Who owns the data arising from your research, and the intellectual property rights relating to them?

Figure 8.3 UCD Library data management plan checklist (taken from http://libguides.ucd.ie/data/checklist_plans, with permission) (Continued on next page)
To think about

Some librarians express concerns about their abilities to engage with DMPs, seeing them as the domain of specialists, needing extra skills and knowledge which we may have neither the time nor the inclination to develop. However, they are growing in importance and can also offer a great opportunity to embed the library more firmly within the research process. The situation can be confusing for both library staff and researchers, especially if a few library staff are more skilled than others. Think carefully about the level of engagement you can offer, make sure this is clearly stated and that all library staff understand the position and where to get help, even if they are not directly involved. If there are high-quality resources freely available elsewhere you can make use of them to build a seemingly tailored guide without a great expenditure of either time or money.

References and further reading

Digital Curation Centre (2015) What is Digital Curation?,
www.dcc.ac.uk/digital-curation/what-digital-curation. (Accessed 29.3.15)

Acknowledgements

Joy Davidson, Digital Curation Centre; Julia Barrett, University College Dublin.

8.12 Facilitate the writing process

There are many motivations for writing. It may be an expectation of the job, or a condition of the funding, resulting in a feeling of obligation and a need to keep up with the peer community. Many researchers relish the intellectual challenge of writing about something they are passionate
about and feel a need to contribute to the body of knowledge on their subject. Others may be driven by more pragmatic incentives such as enhancing their CV, furthering their career or generating income. Writing can be used to clarify thinking and to develop skills, it can be very enjoyable and give a sense of achievement, but it can also be very frustrating and the cause of much stress and anxiety. It is certainly extremely time-consuming!

It is not only new or inexperienced researchers who can struggle with the writing process. Senior staff may feel they are too busy or have too many conflicting demands to take time away to write and writing successfully does demand both mental and physical space. Confidence is a huge issue for aspiring writers, who may fear rejection or open criticism of their work. Helping to manage these fears in a constructive way can be as simple as making clear how frequently even senior researchers have work returned and discussing how criticism can be turned into debate.

Although initially writing may be viewed as only the preserve of the researcher there are opportunities for librarians to contribute. Writing and the subsequent publication process are time-consuming and take time away from research itself, so many researchers welcome advice. There are many facets to the writing process apart from the actual writing itself: aspects of peer review, editing, proofreading, finding out about journal requirements and correct citation are all intermingled and all need to be dealt with by both aspiring and experienced writers.

Although few librarians will feel qualified to advise on some of these activities directly, drawing together information about them can be immensely helpful to busy researchers. Librarians are used to being the ‘go-to’ people for answering queries, whatever they may be about, so this is a natural step. A web page that acts as hub to highlight all the different activities and experts across the organization is a useful place to start. For aspiring writers, practical hints and tips to think about may also be welcome.

📍 Best for:
- enabling researchers to improve writing skills
- providing a go-to place for researchers seeking help with their writing.

⭐ Examples from practice

‘One thing’

‘As part of the writing for publication workshop we asked different people to tell us ‘one thing’ – one piece of advice they would pass on or wanted to ask. We’ve been able to turn
this into a set of tips that researchers seem to find very helpful. They like the idea that these suggestions come from real people:

Journal editors – what is the one thing you would say to aspiring authors?
- Make sure it’s relevant to the readership. Check the aims and scope of the journal.
- Answer the so what question. Stress why it matters, what is original and new.
- Take time to check grammar and spelling. If it’s not well written it’s hard to read.
- Make sure all sources are acknowledged – you can be sure peer reviewers will recognize some of them.
- Ask a colleague to read it through before you submit it.

Experienced writers – what is the one thing you wish you’d known when you started writing?
- Start the manuscript with the preparation of figures, then the results, conclusion and discussion.
- Learn to say no – don’t publish in poor journals.
- How to be strategic about being named as first author.

New writers – what is the one thing you want to know before you start writing?
- How to identify the right places to aim for to reach the widest audience.
- To what extent do papers get altered in editing?
- What’s a good length for a paper?

Librarians – what is the one thing you can offer to help writers?
- Give background on status of journals.
- Make sure they have access to relevant resources.
- Help with citation and referencing.

Publishers – what is the one thing you say to authors submitting to your journal?
- Read the instructions to authors, observe deadlines, unpack acronyms.
- Be aware of the turnaround time for a response from us.

Using this approach enables researchers to focus on some of the key issues relating to writing for publication.’ (Librarian, UK university)

Writing for publication hints and tips
Figure 8.4 is taken from a booklet on writing for publication (Gannon-Leary and Bent, 2009). The booklet was devised as part of a Writing for Publication workshop. The checklist can be used with researchers during workshops, or made available to them independently.
## Do...  
<table>
<thead>
<tr>
<th>Do...</th>
<th>Don't...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure content is relevant, practical, interesting, applicable to the readership</td>
<td>Submit an article on a topic outside the remit of the target journal/conference</td>
</tr>
<tr>
<td>Ensure information is understandable, clearly presented</td>
<td>Include unnecessary detail</td>
</tr>
<tr>
<td>Ensure you address the major issues of the topic or cite other sources that do</td>
<td>Take too narrow a viewpoint which fails to discuss or take account of other issues or fails to draw on the published body of knowledge</td>
</tr>
<tr>
<td>Ensure the information conveys something new or tackles an old issue from a new perspective</td>
<td>Deal with a subject already extensively covered in the target journal or at previous year’s target conference</td>
</tr>
<tr>
<td>Ensure you include the data that led to your conclusions</td>
<td>Make conclusions that are not substantiated by your article/paper</td>
</tr>
<tr>
<td>Use plain language where possible and bear in mind you are writing for an international audience</td>
<td>Use jargon, acronyms, Anglocentric terms</td>
</tr>
<tr>
<td>Write about something about which you are passionate</td>
<td>Write about the ‘b****ing’ obvious!</td>
</tr>
<tr>
<td>Clarify your motivation for wanting to write, what is in it for you</td>
<td>Be pressurised into writing by others</td>
</tr>
<tr>
<td>Write at the right time: some topics are time-limited</td>
<td>Write about something now superseded</td>
</tr>
<tr>
<td>Find a mentor or co-author with experience – if the former, identify who is contributing what</td>
<td>Allow a peer on board as co-author only to lend their name but not contribute</td>
</tr>
<tr>
<td>Tailor your writing to your intended target readership</td>
<td>Be self-indulgent, writing for yourself without regard for the needs/requirements of the target readership</td>
</tr>
<tr>
<td>Eliminate unnecessary words that do not add to the meaning</td>
<td>Be afraid to cut – most pieces are improved by some judicious editing</td>
</tr>
<tr>
<td>Explain how and why you chose what to include (and this may be indicative of what you chose to exclude/cut)</td>
<td>Cut to the extent that you render the text unintelligible, reading like notes rather than continuous prose</td>
</tr>
<tr>
<td>Be confident in, and on top of, your subject</td>
<td>Be frightened to go for it!</td>
</tr>
<tr>
<td>Ensure you can handle criticism and the peer review process</td>
<td>Lose heart. Even the best authors have faced rejection at some stage</td>
</tr>
<tr>
<td>Get a colleague to act as informal proofreader-come-peer reviewer</td>
<td>Rely on your own proofreading</td>
</tr>
<tr>
<td>Decide on the form of your name you wish to publish under and stick with it – this will maximise citations and make your writing career easy to follow (useful when applying for jobs)</td>
<td>Use variant forms of your name – sometimes forename, sometimes initials</td>
</tr>
</tbody>
</table>

**Figure 8.4** Dos and don’ts of writing for publication (Continued on next page)
To think about

Are there experts within your organization with whom you can work to offer a more coherent approach to helping with the writing process? Even if you can’t offer the service yourself, the library can act as a central hub to bring people together, perhaps by devising and hosting a series of talks given by others.

References and further reading

Elsevier (2015) Publishing Campus,  
https://www.publishingcampus.elsevier.com. (Accessed 8.5.15)  
The Elsevier Publishing Campus is an online platform offering free lectures, interactive training and professional advice.  

8.13 Make researchers aware of what editors and publishers want

Journal websites include practical information about layout, referencing and the submission process for authors wishing to publish with them. However, aspiring authors also need to know about the selection process for inclusion and why editors and publishers respond in the ways they do. The best way to discover this is to hear from those involved in the process. The library can facilitate this by hosting seminars; perhaps there are journal...
editors within your organization who would be prepared to contribute their experience and expertise. Ascertain who they are by checking internal web pages, asking key publishers to give you a list of their editors based at your institution or just by sending an e-mail and asking. If you have published yourself, talking about your own experiences can add an extra dimension to such an event.

Publishers themselves will often be willing to send representatives to talk about their selection and publishing process. In some disciplines, publication is limited to a few main publishers, so hearing directly from them will be very beneficial for new authors. Avoid accusations of favouritism and bias by inviting a range of publishers. Badging them as a special series of events is a good way of advertising them.

Best for:
- enabling new authors to understand publisher requirements
- creating a shared understanding by bringing publishers and authors together.

Examples from practice

What publishers want
One librarian describes his experience:

’For the last few years we’ve run a series of lunchtime workshops at which publishers come along and talk about things like their peer review process, their selection criteria, things that really irritate them and that kind of thing. We do it over lunch because then we can usually persuade the publisher to fund some food. Sometimes they attract a wide audience, others times, when they’re focused on a particular area, we get fewer folks, but actually they usually ask more questions because it’s very subject-specific. I always like to start the session off by providing some local context and I always stay to pick up on local questions but otherwise they are very easy sessions and get us a lot of street cred.’ (UK librarian)

To think about
Before asking for contributions from local editors, have a clear agenda and explain exactly what you expect from them.

’I found the first time that some editors were inclined to hustle for their own journal or to focus on just how their journal works rather than generalizing. Some of that was fine, as we did want a personal perspective, but it also turned some of the audience off. The next
time we ran it, I wrote a short brief, like a framework really: explain who you are/which journal you edit, explain rejection rates, peer review process, describe selection criteria, common mistakes, give general advice.’ (Librarian, UK university)

Publishers will come with their own agenda and so it’s helpful to discuss beforehand exactly what they plan to offer. However, publishers may also be prepared to offer refreshments or other incentives to encourage attendance.

8.14 Develop awareness of fraudulent publishing practices
(see also Tip 10.11)

It is becoming increasingly common for new researchers to be approached by publishers, often after receiving an award for a higher degree. They may be encouraged to publish their thesis with the publisher or to pay a fee – common practice in the open access environment, so not in itself suspect – to have their work published. However, not all such approaches are authentic; a dishonest publisher will not provide the editorial and publishing expertise of a legitimate journal and publishing in a less credible journal can harm the reputation of a less well established researcher. Sometimes referred to as ‘predatory’ or ‘vanity’, some publishers can be aggressive and persuasive and their journal titles often mimic more established, reputable titles, and so it can be difficult to identify them initially. Library staff can raise awareness of such activity in workshops with researchers (see Tip 10.11) and by providing clear advice on their websites.

In some cases, senior staff in your organization may, without their permission or even without their knowledge, be listed as editors of such publications. This can be very embarrassing and annoying, as it can damage their reputation amongst their peers as well as lead to misunderstandings with aspiring authors. It can be very difficult to have names removed from such spoof editorial boards. In order to mitigate the damage, researchers in this position may wish to add a clear statement to their personal website and social media profiles to the effect that they do not endorse the publication.

Conversely, of course, authors may deliberately enter into less honest arrangements with publishers in order to build up a fake reputation in the scholarly world, to deceive their employers and colleagues and to manipulate their citation counts. This kind of scholarly malpractice is much easier to do when journal titles are so similar and are likely to be overlooked, for example, in a list of publications on a CV, leading to the possibility of the employment of less well qualified researchers.
Best for:

- ensuring authors are aware of publishing pitfalls.

Examples from practice

Beall’s list

Beall’s list, created by Jeffrey Beall from the University of Colorado, claims to list potential predatory open access (OA) publishers and journals, although there is some controversy about the reasons for listing some publishers, so it should be used with care. The website also includes suggested criteria to assist in identifying potential predatory OA publishers. An alternative to this ‘blacklist’ is the Directory of Open Access Journals (DOAJ) and, to some extent, large indexing databases that assess the quality of journals before including them, commonly referred to as a ‘whitelist’. By their nature, whitelists are not comprehensive, so whilst inclusion on a whitelist may confer respectability, omission from such a list does not necessarily imply malpractice or poor quality. However, using both types of list together can help distinguish, but not definitively confirm, fraudulent or reputable operations.

Checklist for authors on predatory or vanity publishers

Some questions to pose to researchers aspiring to publish:

- Have you heard of the journal before? Perhaps the title is very similar to a well known journal – check the details.
- Has the publisher approached you directly, do they seem to be very persistent and/or aggressive?
- Have they suggested that your article will be published very quickly?
- Is there a clear process which explains costs before you submit your work?
- What evidence is there of a peer-review process?
- Check the editorial board credentials. Do the editors really exist? Do they have a publication profile?
- Look at the journal website. How is it designed? What other titles are connected to this one? Where is the publisher located?
- What is the quality of existing articles in the journal?
- If they are quoting an impact factor, can you verify this in the Journal Citation Reports database?

‘Think, Check, Submit’

Think, Check, Submit (http://thinkchecksubmit.org) is a campaign initiated by organizations such as the Association of Learned and Professional Society
Publishers and directories such as the Directory of Open Access Journals. It aims to help researchers identify trusted journals for their research. It is a simple checklist researchers can use to assess the credentials of a journal or publisher.

⚠️ To think about

New predatory journals appear on a regular basis, so you can’t assume that if a journal isn’t listed on Beall’s list that it is a genuine journal. As well as using the checklist for authors above, you can check Ulrichsw eb (Proquest, 2015) and other reputable journals directories to see if the title is listed.

References and further reading


8.15 Facilitate a Community of Writers

Writing, especially writing for publication, can be a daunting process and researchers at all levels and from all disciplines can sometimes struggle with feelings of isolation or inadequacy. Assumptions can be made that because they have obtained a research position that they will automatically be able to produce good written work. However, there are many different forms of writing for publication; researchers may be familiar with writing an academic paper, but can they translate their findings into a technical report or into a form suitable for a non-specialist audience? How might they cope with using social media tools, such as blogs, as a means of communicating research outcomes?

One way to address these issues is to discuss them with other researchers and to learn from a shared experience. The library is ideally positioned to facilitate this kind of activity by initiating a Community of Writers.

The Community of Writers concept (Gannon-Leary and Bent, 2010) is a community of practice integrated with a community of learners. A community of practice refers to the process of social learning that occurs, and shared sociocultural practices that emerge and evolve, when people who have common goals interact as they strive towards those goals (Wenger, 1998). A community of learners/learning community, on the other hand, refers to a community whose first purpose is not practice but rather the advancement
A Community of Writers is both a community of practice and a community of learners – a safe place for people to practise their academic writing and also to learn about academic writing – it could be conceived as either a physical or a virtual ‘writing retreat’ but rather than being a short-term experience it is a more long-term solution.

A Community of Writers aims to help people write, research and teach more confidently and creatively. It might be organized to include exercises and activities to enhance confidence, stimulate creativity and develop writing skills but crucially it depends on the willingness of participants to share their own experiences and knowledge of writing. It should be framed by research concerns and be situated within the broader context of the organization.

Some of the benefits which might accrue from a Community of Writers include:

- helping to develop, integrate, and enculture new research students/staff
- providing a speedy response from a peer audience
- affording an opportunity for collaborative critique that may inform manuscript revision prior to submission for publication
- giving greater understanding of the writing style and format expected for publication
- ensuring regular accountability
- establishing friendships/networks
- identifying potential research and/or writing projects
- affording opportunities to engage in collaborative writing ventures
- renewing or sparking of an interest in writing for publication
- overcoming barriers to publication
- aiding the completion of unfinished work/reviewed work for submission
- matching journals appropriate to the group members’ work
- providing resource materials such as instructions for authors for various journals and writing support literature
- decreasing manuscript development time
- increasing quality of work
- influencing productivity
- giving a feeling of being supported as opposed to being pressured
- giving a sense of forging a scholarly identity
- fostering collegiality.

**Best for:**

- engaging researchers with the writing process.
Examples from practice

Writing retreat, University of Huddersfield
The ‘Developing a culture of publication’ project at the University of Huddersfield in the UK began in 2013 with the aim of encouraging collaborative writing between students and their supervisors. The project was funded internally and was linked to the University’s strategic goals to increase the volume and quality of outputs and student employability. The overall outcome of the project was to increase research and scholarship capacity whilst establishing a community of scholarly practice. The first year included two Schools, Human and Health Sciences and Art, Design and Architecture and was run over nine months, with four mandatory days’ attendance; a preparatory pre-workshop event, a two-day writing retreat and a dissemination event. Students attended in pairs with their supervisors. The retreat itself was held in a rural off-campus location and comprised a combination of writing time, scheduled panels, such as a journal editor’s panel, and social activities. Now in its third year, the writing retreat is funded by the School of Human and Health Sciences and is facilitated by the Department of Nursing and Health Studies and Computing and Library Services. Library staff were closely involved in the planning and running of the retreat.

‘My role was to assist with open access enquiries, help with selection of appropriate journals and contribute as an experienced writer, peer reviewer and journal editorial board member. I also mentored a number of the pairs.’ (Graham Stone, University of Huddersfield)

Student feedback indicated that students had felt valued and had increased in confidence in their writing, with seven published papers and three conference papers as tangible evidence of success. However, some issues were encountered with initial engagement, especially as postgraduate research students had other workload pressures and in subsequent years the focus has been on MRes students.

‘The whole experience has been one of the most rewarding things I have done. There is a wealth of excellent research undertaken at masters level, which deserves to be published. It is also very rewarding to see the pride and importance of publishing when the student’s articles are accepted.’ (Graham Stone, University of Huddersfield)

To think about
What might your role be in facilitating a Community of Writers? Does it need to be physical and/or virtual?
Can you participate as a writer/developing writer yourself? What difference might that make to your relationship with other researchers?

References and further reading
Wubbels, T. (2007) Do We Know a Community of Practice When We See One?, Technology, Pedagogy and Education, 16 (2), 225–33.

Acknowledgements
Graham Stone, University of Huddersfield.

8.16 Assist with open access advocacy

A lthough marketing as a concept is much more prevalent in libraries these days, it can still be difficult to strike the right tone when thinking about how to publicize specific messages. Open access (OA) is a good example. For several years librarians have been preaching the OA doctrine, explaining the financial imperatives for library budgets alongside the more philanthropic contexts of publicly funded research being available to all and access to cutting-edge research in developing countries. More recently in the UK, mandates from research funding bodies, along with direction from central government with respect to the next Research Excellence Framework exercise, have provided a stick rather than a carrot approach to encouraging researchers to engage with open access. Not unsurprisingly, this can cause resentment and misunderstandings and can muddy the existing, and still valid, messages we are trying to convey. Senior management in the university may or may not align themselves with the whole OA message, but they will certainly understand the financial imperatives incumbent on them to comply with the practical aspects of the debate. For library staff, whilst this central support must be welcome, it can have the effect of skewing the OA message we are trying to convey.
Best for:
- Communicating the open access message.

Examples from practice

University of Leicester
The University of Leicester has used a wide range of communication techniques to spread the word about open access, including:

- An OA Owl mascot to front the campaign (Figure 8.5)
- A letter from their Pro Vice-Chancellor for research
- Flags and banners around the campus
- Leaflets sent to all research staff
- Drop-in sessions
- Departmental briefings
- Library outreach stall around the campus
- Twitter campaign
- Videos on practical aspects of how to submit articles to the institutional repository
- A dedicated website pulling all the information together.

'The multipronged approach seems to have helped reinforce the message.' (Selina Lock, University of Leicester)

To think about
Consider what messages you want to convey about open access and how these relate to the current approaches in your organization. How can you harness the current interest in OA amongst the research community to best advantage?

Think about your audience and tailor the message appropriately. It’s important that new research staff and research students are aware of open access and the implications for them now and in the future. More senior researchers, who may have to comply with mandates and directives more immediately, may need to hear a slightly different message.

Consider the wording you use in your messages – terminology with which librarians are familiar may not have immediate resonance with researchers.
A pragmatic, rather than idealistic, approach may have short-term benefits which will nevertheless contribute to a better overall understanding of open access. The *Advocating Open Access* toolkit for librarians and research support staff includes a seven-step checklist:

1. Gather essential information for accuracy and consistency.
2. Understand your audiences and find the best ways to reach them.
3. Build a profile of open access stakeholders and their attitudes.
4. Create compelling messages that appeal to stakeholders’ interests.
5. Plan and develop your communication and advocacy campaign.
6. Begin communicating and do so regularly, honestly and consistently.
7. Monitor, measure and evaluate the impact of how you communicate.

References and further reading

*Advocating Open Access – a toolkit for librarians and research support staff,* produced by University College London, University of Nottingham and Newcastle University as part of a Jisc-funded project, http://find.jorum.ac.uk/resources/10949/20121.


Acknowledgements

Library Research Team, University of Leicester.

**8.17 Do some research into open access issues yourself**

In order to better understand how researchers are responding to the imperatives of open access publishing, it helps to know more about the decisions they make in terms of when, how and where to communicate their research. As librarians, we can make assumptions about this and presume we know what the main concerns are and, although this can lead to some high-quality initiatives, we also run the risk of being viewed as patronizing or ‘not understanding what it’s really like to be a researcher’ (UK researcher). If we are researchers ourselves, then we may have experienced some issues personally, but there may well be stumbling blocks of which we are unaware or which are perceived differently by different researchers. Knowing more about these areas
can help tailor OA advocacy to address them with a clear researcher-centred
approach. Before embarking on any OA advocacy campaign, therefore, it is
wise to conduct some research of your own in this area.

If appropriate and manageable, you can conduct your own investigations
with researchers with whom you work, perhaps simply by informal
conversations or by asking questions within meetings. A more structured
approach could consist of focus groups with selected researchers, online or
paper surveys or semi-structured interviews.

An alternative might be to build on the work of others, ensuring that you
have read recent reports (see below for examples) and are aware of any
ongoing projects.

❖ **Best for:**

- planning OA advocacy by getting to know your research community better.

❖ **Examples from practice**

**MIAO and CIAO**

Mandates’ seeks to explore researcher behaviours and the ‘pain points’
surrounding the publication process. It has produced several outputs:

- **MIAO – My Individual Assessment of Open Access** – ‘is a self-assessment tool
  for researchers to assess how prepared they think they, and their institution,
  are for Open Access (OA) compliance.’ It can be downloaded from http://bit.ly/
  1DCmlW9.

- **CIAO – Collaborative Institutional Assessment of open access** – ‘is a
  benchmarking tool for assessing institutional readiness for Open Access (OA)
  compliance.’ The tool is based on CARDIO: Collaborative Assessment of
  Research Data Infrastructure and Objectives, http://cardio.dcc.ac.uk is
  available at http://bit.ly/1EINKY and is licensed under CC BY. You can
download it and there are also instructions on how to use it.

**Intervention mapping guides for understanding researcher behaviour**

This process was developed by Julie Bayley at Coventry University as part of a
Jisc-funded project. Intervention mapping is a process whereby you can think
through:

- what the problems are
- what a better situation would look like (goal)
what (and whose) knowledge, attitudes and processes would help achieve the goals
what activities/approaches will most effectively produce the changes.

The process involves the use of a grid to identify the problems, goals to address the problem and the actions resulting from the goal. A facilitator’s guide and blank mapping grid are available from http://find.jorum.ac.uk/resources/20119.

⚠️ To think about

Think of ways in which you can learn more about the open access debate. Look for workshops to attend, follow blogs such as The Scholarly Kitchen (http://scholarlykitchen.sspnet.org/) to see what other people are saying. Don’t just lurk, join in the debates.

References and further reading


Acknowledgements

Rowena Rowse, Oxford Brookes University; Julie Bayley, Coventry University.

8.18 Create open access and publication process flowcharts

Increasingly, authors are becoming aware of the need to publish their work in an open access journal, but many struggle with understanding the process and with identifying the most appropriate options. It can be helpful to create a simple open access flowchart or checklist that could be used by authors, or perhaps by administrators, to help them to work through the different stages of the submission process.

If publication has already been accepted in a printed journal the situation is even more complex. Anyone with experience of writing for publication will know that once your work has been accepted by a publisher the focus is all on the future. Earlier versions of the work are often deleted, or at least not
saved in any systematic way; filing and organization are rarely a key component of the creative process of writing. In practical terms, this approach creates a real barrier to open access deposit in the institutional repository as, already moving on to new areas, a researcher may be reluctant to spend time going back to sort out material that they feel is completed.

In addition, authors may simply be unaware of the limitations placed on them by their contract with the publisher or in many cases they feel it’s safe to ignore the small print. A common attitude is that ‘it’s my work, surely I can do what I want with it’. Librarians working with researchers to encourage deposit in an institutional repository are frequently presented with inappropriate versions of the work; rarely is a publisher’s PDF acceptable. Providing a flowchart for the writing-up process can help researchers to develop a more systematic publication workflow.

Best for:

- developing a publication workflow to encourage researchers to make their work available via open access routes.

Examples from practice

**Australian OA Support Group**
The Australian Open Access Support Group provides a useful OA journal options flowchart (Figure 8.6), available on a CC BY licence.

**OA Checklists**
Some universities provide a checklist of reminders to researchers when writing up their work, for example:

- York University, UK, www.york.ac.uk/library/info-for/researchers/open-access/guide.

‘I don’t use the checklist in any kind of formal way, but just knowing about it reminds me that I have to think about saving different versions as I’m writing – I think it’s probably saved me time in adding stuff to the repository.’ (UK researcher)
To think about

Before creating a flowchart, it may be helpful to talk to researchers from different disciplines about their research workflows to ensure that you take all eventualities into account.
References and further reading
Australian Open Access Support Group,

Acknowledgements
Steve Boneham, Newcastle University.

8.19 Promote your institutional repository

Many organizations try to collect their published output in an institutional repository but it can be difficult to encourage researchers to deposit their work. One of the issues is lack of awareness of the repository, coupled with a belief that only traditional publishing methods (i.e. academic journals) have any real influence over future impact. Researchers may feel that the process involved in depositing materials is opaque and don't understand what the benefits can be. Advocacy, raising awareness of the existence of the repository, as well as the benefits that may accrue, is a key way in which information staff can help. Advocacy can take many forms; you can try:

- talking to individuals and groups
- giving formal presentations
- providing background information on web pages
- providing real-time information on downloads.

Devising a way to demonstrate the impact of your institutional repository can seem a difficult task, but with a little creativity you can draw out some key data and present it in a tailored way to key researchers.

🎁 Best for:

- engaging researchers with the institutional repository
- ensuring researchers are aware of the benefits of their institutional repository.

🌟 Examples from practice

Open University, UK
Staff at the Open University produce faculty-specific infographics (see an example in Figure 8.7) each year demonstrating deposits, downloads, the percentage of open access deposits, top authors, top items and five-year trends. This visualization of the repository data is delivered to senior faculty staff during meetings with the
Faculty Associate Deans for research and provides them with key statistics in a visually striking way. Trends over time can be identified, as can comparisons with other faculties. The graphics evolve over time as priorities change: for example, percentage of open access materials is increasingly important.
‘This has had the result of getting me invited to the next Science Research and Enterprise Committee next week to discuss it in more detail. The Associate Dean has just rung me and asked for more figures.’ (C. Biggs, Open University)

Trinity College Dublin, Ireland
At Trinity College Dublin, the Research Support Librarian regularly contacts all 158 researchers in her discipline area by e-mail, soliciting recent author manuscripts. These are checked for copyright and versioning and deposited on behalf of the researcher into the institutional repository.

‘This integrates me into the work flow of the researcher and fulfils the library’s need to be in a strategic position.’ (Jessica Eustace-Cook, Trinity College Dublin)

⚠️ To think about
Do some research beforehand to determine what repository data is important to your organization. (see Tip 4.5)

Don’t assume you know all the reasons that are inhibiting deposit. Individuals may have different priorities, skills and approaches that influence their behaviour.

Take time to talk to researchers and listen to their responses, factoring them into the solution where feasible.

‘Make sure you know the research environment around OA and the different models. In Ireland we only support Green OA so the UK Gold model causes some confusion.’ (Jessica Eustace-Cook, Trinity College Dublin)

Acknowledgements
C. Biggs, N. Dowson, Open University; Jessica Eustace-Cook, Trinity College Dublin.

8.20 Create unique researcher identifiers
Although several systems exist to allocate unique registration numbers to authors, for example ResearcherID from Thomson Reuters, the current most commonly used system is ORCID (Open Researcher and Contributor ID). ORCID is an international, interdisciplinary, open and not-for-profit organization created to solve the researcher name ambiguity problem and aims to become the universally accepted unique identifier for researchers. The ORCID system provides a unique, persistent digital identifier for every
researcher. This is helpful, as it avoids issues of attribution that may arise if a researcher has a common name or if they have used different forms of their name when publishing work. Perhaps they have changed institution, used different combinations of initial or changed their name completely. It’s important that researchers receive credit for all their published work, as this information can affect applications for jobs and future career prospects, as well as enhancing their standing in the academic community. ORCID is also increasingly being used to support automated linkages between researchers and online platforms and databases so that publications are correctly assigned and details automatically uploaded. Library staff can create their own ORCID identifier (this obviously works best if you have publications to link to it, but you can still create one for demonstration purposes) and can also encourage all researchers to register. ORCID identifiers can be added to author records in the institutional repository and link to other online platforms, such as ResearcherID.

Individual registration for an ORCID identifier is free, but premium organization-level membership, for a fee, provides additional benefits. As well as connecting systems to ORCID, to enable synchronization with local repositories for example, member organizations can receive alerts from ORCID on the activities of their researchers with respect to ORCID and published works. This can feed into institutional reporting systems to help create a picture of the research output of the organization.

In the UK at the time of writing there are 13 HEI ORCID members and Jisc has just concluded a successful consultation on membership of a consortium to reduce membership costs. In addition, a wider group of national funding bodies, such as the Higher Education Funding Council and Research Councils UK, along with library bodies such as SCONUL and RLUK, have signed a joint statement supporting the ORCID initiative (Jisc, 2015).

❖ Best for:

- encouraging researchers to register a unique author identifier.

★ Examples from practice

Texas A&M University, USA
At Texas A&M University the library started work in 2013 on integrating ORCIDs into the work of all researchers, focusing initially on early career researchers and graduate students. By integrating ORCIDs into their management systems, all theses and dissertations from 2014 onward are automatically associated with the author’s ORCID. This approach ensures that ‘our newest scholars can benefit
from a carefully-curated and unique scholarly identity over a lifetime career’ (Texas A&M University Libraries, 2015). As masters and doctoral students enrolled for their courses in 2014, the Libraries assigned over 10,000 ORCID identifiers to them. Anyone who received an ORCID from the University Libraries in February 2014 has a record in the Libraries’ ORCID master file and the campus directory. Other researchers can request an ORCID be created for them or, if they already have one, can have their details added to the master file.

**Imperial College, UK**

In 2014 Imperial College London became a member of ORCID. A cross-College project was set up to issue all academic and research staff with ORCID IDs, under the framework of the College’s Open Access Project. The ORCID project identified 764 existing IDs linked to College staff and created 3,226 new ones. Within seven weeks from ORCID creation, 1,155 academics had logged into their ORCID accounts and linked them to Symplectic Elements, the College’s publication management system.

Reimer, 2015

**University of Northumbria, UK**

At Northumbria, the University Library has been proactively promoting and supporting ORCID, both as an identifier in the institutional repository Northumbria Research Link (NRL) and as part of a well established research skills programme. Our approach to the pilot project was to establish a partnership with stakeholders from around the University to explore the broader implementation of ORCID at different stages of the research lifecycle and researchers’ career paths.

Cole, 2015

⚠️ **To think about**

It helps if senior figures in your organization are supportive. You might contact your Vice Chancellor or whoever is the head of your institution and offer to help them sign up to ORCID.

Identify the key researchers in your organization and contact them directly to offer to help them sign up to ORCID.

‘I found that starting at the top and getting our VC to register meant that it was much easier to encourage others to do it.’ (Librarian, UK university)

Check to see which researchers have registered for ORCID recently and tweet, blog or create a short news item about them regularly. Pass this information on to your research office or faculty research contacts if you are in a university.
Make sure that, if you have published yourself, that you practise what you preach and have an ORCID yourself.

References and further reading

8.21 Bibliometrics

In recent years, the use of quantitative indicators of quality and impact of research has grown in popularity, despite their being ‘usually well intentioned, not always well informed, often ill applied’ (Hicks et al., 2015). Some universities are using specific metrics, such as the h-index, to inform promotion and appointment decisions, whilst others insist that researchers only publish in journals which are ranked in the top quartile in journal impact ranking tables, using this as a measure to allocate funding. This can be particularly frustrating if data is used to compare research across disciplinary boundaries, as arts and humanities subjects are not as well represented as sciences. Metrics are also used in league tables to evaluate university quality, so it’s understandable that managers become obsessed by them and sometimes apply them indiscriminately without a clear understanding of their meaning.

Librarians have been working with bibliometrics for years and so are well placed to offer advice and impartial information about their value. The use of such data, however, is relatively new territory for many researchers and research administrators, so this offers an excellent opportunity for librarians to add value to the research lifecycle.

Some libraries have developed new bibliometrician posts, in others existing staff are developing and extending their skills; what is clear, however, is that this is an area with which libraries have to engage.

There are many ways in which you can engage with the bibliometrics agenda with individual researchers, research groups or at a strategic level. Here are a few suggestions, drawn from different university libraries:
Add bibliometrics data to entries in the institutional repository.
• Provide clear guidelines on how to calculate different metrics, with information on their strengths and shortcomings.
• Run workshops for researchers and research administrators to explain the different metrics available.
• Provide data on the organizations’ most cited papers and researchers.
• Provide data on behalf of individuals or research groups.
• Contribute research impact metrics for grant applications and research proposals.
• Collect data to feed into benchmarking exercises.

As well as the more traditional metrics, which rely mainly on manipulation of citations in peer-reviewed journals, alternative metrics (altmetrics) are harvesting data from a wide variety of less formal sources. Researchers and many others may discuss the outcomes of research projects on social media platforms such as Facebook and Twitter and share information using tools such as Mendeley and CiteULike, or gateways such as ResearchGate and Academia. Altmetrics, therefore, might indicate how frequently a paper has been viewed or downloaded, can record discussions in journals, blogs and social media and highlight when items have been bookmarked, linking this data to citations in the literature. Although perhaps not a reliable tool for indicating the academic rigour and longevity of a paper, these metrics are nevertheless a useful indicator of initial impact. As the sources from which the data are derived are so publicly accessible, however, altmetrics can be manipulated even more easily than other metrics by authors who self-cite or use gaming techniques to create a false impression of their impact. Even so, several established publishers are collaborating with the Altmetrics organization to provide this additional data alongside their journal articles, giving instant, regularly updated snapshots of the impact of each individual paper.

Best for:
- giving structured advice to the university on bibliographic indicators and metrics
- adding value to the research process by clarifying how metrics can be used to measure the impact of research outcomes.

Examples from practice

Adding altmetrics data to the institutional repository
Leeds Beckett University Library adds an altmetrics button to each entry in their institutional repository, indicating whether the research has been picked up by
news outlets or blogged or tweeted about: http://eprints.leedsbeckett.ac.uk/183. See Figure 8.8, for an example.

Research Impact Measurement Service at University of New South Wales, Australia

In 2005, University Library staff at UNSW created a Research Impact Measurement Service (RIMS) that in 2009 produced over 30 reports every month and employed 6–7 full-time-equivalent staff.

Most of the reports are used to support promotion, grants, and institutional comparisons. This research support service also informs and improves the performance of such traditional library activities as collection development. RIMS is now integral to the measurement of research outputs at UNSW, and has significantly raised the profile of the Library throughout the academic community.

Drummond and Wartho, 2009
Online bibliometrics guides

Bibliometrics are not for everyone, but it is becoming increasingly important that researchers appreciate how they may be used to measure effectiveness or to provide evidence of success. Many libraries produce online guides to assist researchers to better understand what they are and how they work. Newcastle University Library's Research Impact Guide has pages explaining different metrics and how to calculate them: http://libguides.ncl.ac.uk/impact (accessed 1.6.15).

As well as the citation and journal measures and tools the University of Oxford's Bibliometrics and Citation Tracking guide explains university rankings and league tables: http://ox.libguides.com/bibliometrics (accessed 1.6.15). Yale University Library's Research Impact guide also encourages researchers to broaden their impact by explaining how to develop a digital identity: http://guides.library.yale.edu/impact/home (accessed 1.6.15).

⚠️ To think about

Keeping up to date with advances in bibliometrics is challenging; however, it's important to be able to give well informed impartial advice, so look for ways to keep up with the literature in this area. Following a blog, such as The Scholarly Kitchen, http://scholarlykitchen.sspnet.org/about, ensures that you are aware of key issues.

Bear in mind that publications in different disciplines have different timescales in terms of citation patterns and their cited half-life, which can skew results.

None of the sources currently available to track bibliometrics data is comprehensive, reliant as they are on the underlying database, so getting a true quantitative picture of the impact of an individual is impossible. However, despite their shortcomings they do offer a quick and dirty snapshot of the relative position of a researcher within their community and as such, should not be dismissed out of hand.

Do not apply the same indicators in all circumstances; select those that correspond to the context in which they are to be applied. For example, think about when it is appropriate to look at altmetrics and when other measures might be more relevant.

References and further reading


**8.22 Assist in tracking citations**

Off more personal and relevant interest to researchers than the bare statistics delivered by many bibliometrics tools is information about how their research has been cited and subsequently used. Most large individual databases capture citation information for articles and authors within their system and some (Web of Science and Scopus, for example) provide analytics demonstrating source of citation by country, year, etc. There are also several freely available web-based portals which assist in recording and tracking citations. ResearchGate (www.researchgate.com) harvests citation information and alerts authors to new papers, as does Google Scholar (www.scholar.google.com) and a myriad of similar systems. At the time of writing, Elsevier are developing their Researcher Dashboard, pulling in citations from their own journals and elsewhere.

However, none of these sources consistently records a comprehensive list of a researcher’s total output and subsequent recognition; gathering this kind of information can quickly become difficult to manage. Whilst it is relatively easy to set alerts for new citations to a publication, maintaining a comprehensive record of citing articles in a systematic way is much less easy. For example, although an author can add details of their own publications to ResearchGate and Google Scholar, it isn’t possible to submit details of subsequent citations. The F1000 Beta seems to promise this kind of sophisticated functionality, but is limited by discipline.

**Best for:**

- keeping a comprehensive list of citations.
Examples from practice

Calculate Your Academic Footprint

This example from the University of Waterloo in Canada is an excellent example of how one library has tackled the issue of recording citations. Kathy MacDonald and Peter Stirling at the University of Waterloo have developed a LibGuide called Calculate Your Academic Footprint (see Figure 8.9), which takes researchers through the process of using bibliographic software (RefWorks) to track and monitor citations to their publications. The software is used to record an author’s publications and a system devised to record and link citing articles to the cited paper within the software.

To think about

What can you offer to help researchers record citation information? This deceptively simple task is less easy in practice and, if you are able to offer a solution, this can provide a useful way into the research community.

References and further reading

8.23 Publicize research output

Given the energy expended in undertaking research and producing outcomes, the effort devoted to publicizing and celebrating the production of new knowledge can be relatively limited. This is an opportunity for library staff to help raise the profile of researchers both within their organization and externally. If work is deposited in an institutional repository, look for ways to highlight papers, perhaps simply by tweeting about new additions regularly, or by tweeting about papers with the highest downloads each week. Similarly, by registering on platforms such as ResearchGate, librarians can follow research activity, congratulate their researchers and select researchers or themes to tweet about. If local or national events are taking place, material from the repository relevant to such events can also be emphasized.

Often one of the first places where researchers report new research results is at conferences, but apart from a few specialized repositories, such as f1000posters (http://f1000.com/posters), unless the presentations are written up as conference papers, this cutting-edge information is often lost. The library can provide both physical and virtual spaces to retain and publicize this kind of activity. At a simple level, posters which have been presented at conferences can be regularly displayed in the library after the conference. Once this becomes accepted practice, researchers often appreciate the recognition this affords them.

Such posters can also be hosted virtually, as can slides from presentations. Some researchers may be in the habit of uploading slide presentations to online platforms such as SlideShare, but this is likely to be inconsistent. In the same way that libraries manage institutional repositories, libraries can create and manage databases of conference presentations and posters. As well as providing a central resource for the organization to manage all research output and an easy source for publicizing work, such a facility is helpful in harvesting information about the impact of research, always of interest for any research assessment exercise.

**Best for:**
- demonstrating how the library can help publicize new research
- keeping up to date with new research in your organization
- building relationships with researchers.
Examples from practice

Leeds Beckett University, UK

Leeds Beckett University Library produces information guides linked to specific events or weeks, such as national Dementia Awareness Week (Figure 8.10). As well as highlighting library resources on the topic, it pulls data from the institutional repository to demonstrate how relevant the university’s research is to the wider community.

To think about

It is more likely that slides presented at a conference will include material that is not copyright-cleared. As well as providing a central repository for the presentations, therefore, you may also have to factor in time to check for copyright and attribution.

As platforms for hosting slides are already freely available, rather than creating...
a separate resource, might the library offer to manage and tag material on a public platform on behalf of researchers?

8.24 Celebrate theses

It is common practice for university libraries to hold the definitive copies of theses submitted for a higher degree, traditionally in print, but also now in electronic form, as part of the institutional repository. However, even though our postgraduate students spend a minimum of three years researching their thesis and may get to know library staff well during that process, it is rare that libraries do more than receive the completed work, catalogue it and assign it to safe storage, whether physical or virtual.

Is there a case for celebrating the completion of such a major piece of research and if so, how might the library contribute? In large institutions the volume may be too great to do more than create a weekly or monthly list of new theses received, which could be highlighted on the library’s website, or at a more granular level on specific subject pages such as LibGuides. Perhaps supervisors might be encouraged to nominate a thesis which they feel merits more publicity for a ‘thesis of the month’ or ‘key new research’ feature on the web pages?

Best for:

- building relationships with researchers
- engaging doctoral students
- demonstrating how the library can be involved in the whole research process
- widening awareness of research.

Examples from practice

Nailing the thesis

In Sweden, before the final submission, candidates for PhD are encouraged to nail their thesis in a public space to invite feedback. In many universities, the library is the accepted common space and some libraries have a recognized space incorporating a noticeboard, where the thesis will be nailed with due ceremony (see Figure 8.11).

At Umea University, for example, the ceremony takes place three weeks before the official defence of the thesis and the thesis is made available on the digital repository at the same time. Although the nailing isn’t compulsory, many of the approximately 200 theses published at Umea each year are also nailed. The procedure is said to originate from 1517, when Martin Luther posted his 95
theses on the church door in Wittenberg. The small nailing ceremony is attended by the candidate, often some family members, colleagues and supervisors and a member of library staff.

⚠️ To think about

It’s unlikely that you’ll want to replicate the Swedish nailing ceremony, but it serves as an example of the library’s involvement in the completion of a major piece of research. Are there other ways in which this could happen? Can you set up an automatic feed from the library catalogue to help publicize newly received theses? Might this be an opportunity to work with the research office to publicize them jointly?

References and further reading

A slightly more unusual example of the nailing ceremony at SLU Arlap, involving a singing supervisor, can be viewed on YouTube at www.youtube.com/watch?v=ONul2_8z6Pl&display=desktop. (Accessed 20.4.15)

Information about their nailing ceremony requirements can be found on the Karolinska Institute website, https://internwebben.ki.se/en/nailing-and-distribution. (Accessed 20.4.15)

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