

Collaboration and Tension Between Institutions and Units Providing Data Management Support

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Research Data Access & Preservation

EDITOR'S SUMMARY

A panel of speakers from three universities explored their challenges and progress in building programs to support research data management, whether within the library system or with research offices or computing groups. Since 2012 Oregon State University has partnered with its research office and graduate school, helping students prepare data for preservation and sharing and developing a graduate course for credit in research data management. Based on needs identified through an environmental scan, the University of Washington hired a data services coordinator to promote the services provided and to increase collaborations, visibility and support. Purdue University pairs data services specialists with subject liaison librarians to reach disciplinary faculty and researchers. The connections identify champions, lead to successful collaborations and, most importantly, provide the opportunity to show data services specialists as peers and collaborators. With basic services established, each institution looks forward to strengthening relationships and expanding services, skills and staffing.

KEYWORDS

data set management	collaboration
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strategic planning	

Many academic libraries across the country are building programs that address data management issues on their campuses. These programs vary in size and complexity, from single-person operations to entire departments. The specific services offered also vary, often involving consultation services, training, software support and help with writing grants. Regardless of the specific characteristics of these efforts, they all reside within larger spheres. Whether this sphere is the library organization (with multiple departments or programs interacting with research data) or the larger campus (with organizations such as research offices and computing groups), there are impacts on priorities, implementations and ownership.

This panel looked at how three different universities are approaching these issues. Each presenter addressed her own environment, laying out the challenges and successes she has had. Here the presenters continue the discussion, focusing specifically on two emergent themes from the panel: the importance of campus champions and thinking long-term.

Identifying Campus Champions

OREGON STATE UNIVERSITY (OSU). OSU began developing research data

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services relatively recently – in the fall of 2012. As a new campus service, we are still working to raise awareness among faculty and administrators regarding the spectrum of assistance that we offer. We reached out to the research office (RO) and the graduate school (GS) to initiate conversations about faculty and student needs on campus and to look for areas of collaboration. The RO is very supportive of our efforts to develop data services and acknowledge that we have not only the relevant expertise but also the strong relationships with faculty across campus that enable us to provide a centralized, well-utilized service. The RO is also delighted to have someone to refer faculty to when they have questions about data-related funder requirements. The RO has made it clear that they expect the library to take the lead on the continued development and expansion of research data services, and they see us as a partner in supporting the OSU research enterprise.

The graduate school has become an unexpected source of support and partnership in the development of data services for graduate students. We already work closely with the GS to facilitate the mandated self-deposit of electronic theses and dissertations (ETD) to our institutional repository, a requirement for graduation. During a conversation with the GS about requiring concurrent deposit of the data that underlies an ETD, we had to acknowledge that most students likely do not have the skills necessary to adequately prepare and document their datasets for long-term preservation and sharing. This realization prompted OSU's data management specialist to develop a two-credit, graduate-level course [1] in research data management and offer it under a GS course designator (at the time of course development, the library lacked a designator and thus the ability to offer a credit-bearing course).

UNIVERSITY OF WASHINGTON. The University of Washington Libraries began its foray into forming a data services program by charging a planning committee to perform an environmental scan of current research data management (RDM) support services available on campus. This scan made it clear that, while several groups on campus were offering data management support, these services were a) scattered across the university campuses and departments, b) narrow in scope of population served and c) frequently not well-known. The report submitted by the planning committee

in 2010 recommended (among other suggestions) hiring a data services coordinator to act as a central resource for communication about and referral to data services available for university researchers. In short, this person was to be a *data concierge*. The position would also bear responsibility for identifying where gaps in RDM support existed and for developing services to address those needs.

The obvious challenges in meeting those goals were related to serving a large, decentralized institution and the fact that most researchers do not automatically think of the library when they need help with data management. To address these problems, the data services coordinator spent a lot of time reaching out to the groups identified in the environmental scan as providing RDM support services. She used invitations for coffee instead of requests for meetings to insert herself into busy schedules and have one-on-one conversations with key personnel in groups around campus regarding their issues and challenges and to get more information on services they provide. These folks became the initial names on our list of champions. In fall of 2012 the data services team distributed a survey to PIs and co-PIs on research projects across all three campuses. Over 300 researchers responded and, of those, over 100 agreed to participate in hour-long follow-up interviews. Those who were interviewed were added to our growing list of champions.

Thanks to these activities, the services offered by our data services program became more widely known much more quickly than if we had stuck to our traditional methods of marketing. With our increased visibility in the data management arena, the libraries have collaborated on several related projects and events with various groups around campus. Among these are co-hosting events with the iSchool and the College of the Environment, drafting a data repository proposal with a champion from UW-IT and being invited to be on a working group for a multi-year, multimillion dollar grant related to data science with the eScience Institute. There are plans in the works for more collaborations: with the Office of Research on a project with ORCID IDs; with the Office of Sponsored Research on a project to customize the new version of CDL's DMPTool and integrate data management curriculum into new researcher orientations; and with the Institute of Health Metrics & Evaluation to provide access to global health datasets.

PURDUE. It was important for Purdue's data services specialists to partner internally with the subject liaison librarians when reaching out to disciplinary faculty. Accordingly, training and support for the liaisons have been important aspects of the data services specialist role. The data group has acted as the bridge between liaison librarians and various campus stakeholders, such as disciplinary faculty, information technology, the Office of the Vice President of Research (OVPR) and research centers. In doing so, the data services specialists were able to identify campus champions who further the data services initiative on campus by talking about the services with their colleagues, offering to pilot new potential services and collaborating as partners in research. Examples of successful collaborations with stakeholders include librarians partnering with faculty as principal investigators on grants; the collaborative and collective development of an institutional research data repository; and co-teaching with faculty in areas of data management, data information literacy and data curation. Since there is no clear line between where the liaison librarian ends and data services begins, data services specialists and repository specialists often complement the liaison librarians and are available to attend the consultations with disciplinary faculty.

One issue that we occasionally run into is that some disciplinary faculty may not see us as peers or collaborators, but rather as just support services. However, the more testimonials that faculty can give, the more we are asked to speak, teach, consult and collaborate. Just in the first quarter of 2014, the data group at the Purdue libraries has been able to deepen our relationships with the OVPR by participating in a Rolodex of Campus Research Services and the research expo and with the College of Agriculture by presenting a poster and lightning round talk at the Big Data in Agriculture Symposium. Participating in such events across campus creates opportunities for the data group and the libraries to continue to develop existing relationships, as well as foster new ones that will lead to creating new champions on campus.

Thinking Long-Term

OREGON STATE UNIVERSITY. As a newer service on campus, those of us in research data services have spent most of our time thinking about short-term goals and approaches to meeting them. We started small, with only one FTE

dedicated to providing data services support. It was important for us to recognize that we could not be all things to all people. We had to decide what was within the scope of our abilities and our resources and focus on doing those things really well. These things now include the following:

- providing information on data management best practices (via a website, <http://bit.ly/OSUData>);
- offering in-person consultation support for activities like writing data management plans, planning data management strategies for projects already underway, finding appropriate methods to share data and so on;
- providing education and training via workshops and our credit-bearing course; and
- expanding the scope of our institutional repository to include the preservation of datasets.

Now that we have basic services established, we are looking ahead to areas of expansion. We are continuing to explore the feasibility of supporting graduate students in preserving and sharing the data that underlies their theses or dissertations via deposition of the data to our institutional repository. Preparing graduate students to deposit their data would not only provide them with lifelong practical skills in proper research data stewardship, but would also result in the preservation of critical data at a time when it is vulnerable to being lost. We will soon be launching an online survey of OSU graduate students to better understand the nature and extent of the data that they are generating and what their current level of data management skills is.

We are also investigating how to implement targeted cultivation of data skills for liaison librarians who show interest or inclination and who serve in units where it especially makes sense to do so. In order for our services to continue to grow, we will need a capable front line to head off basic questions about common data management concerns or topics in their liaison area. For example, it makes sense for liaison librarians to have a basic understanding of the data types common in their areas of disciplinary purview or to know the data-sharing policies of the most popular journals for OSU authors in their discipline(s). A reasonable scope of what data-

WRIGHT, WHITMIRE, ZILINSKI and MINOR, continued

related knowledge and understanding should be expected from liaison librarians will be fleshed out through conversations directly with them.

UNIVERSITY OF WASHINGTON. The data services program has gone from one FTE dedicated librarian to 1.5 FTE librarians (with the addition of our data services communication and curriculum librarian), along with recent approval for two graduate students at 0.3 FTE each. We have also requested approval for a geospatial and numeric data services librarian in the coming year. Our proposal for an institutional data repository in February included budgeting for a repository librarian, as well. This request brings the potential of dedicated data services support up to 4+ FTE in the next biennium.

If the data repository is approved, it will be a large undertaking that will take much of our focus in terms of service expansion, training and outreach for the next year. We continue to slowly introduce new data management skills to our subject liaisons, including presenting a data management workshop at the upcoming Western Science Boot Camp for Librarians and plans for a Software Carpentry Boot Camp in late 2014. With the appointment of our dean of libraries to the position of vice provost for digital initiatives last year, we hope to use this opportunity to be able to engage our champions in development of some institutional policies related to research data management.

PURDUE. Working with graduate and undergraduate programs has also led to some interesting partnerships and has uncovered unexpected champions. For example, we collaborated with the summer undergraduate research fellow (SURF)

program at Purdue to find ways to introduce undergraduates to the concepts of data management. We have created a research data management LibGuide for undergraduates (<http://guides.lib.purdue.edu/undergraddata>) and have uncovered a new champion on campus. This is an area of future growth for Purdue.

It has been important for us to become the resource rather than just point researchers to resources. By continuing to collaborate and participate with disciplinary faculty and PIs on grants, we strengthen our relationships and grow our voice on campus. This expansion cannot be done in a vacuum, and the support and collaboration between the data services liaisons and disciplinary liaisons is critical for creating and maintaining these relationships. A liaison may face challenges while trying to balance subject-specialist responsibilities with data management opportunities, but with additional professional development opportunities, support from library and university administration and continued testimonials from disciplinary faculty champions, this team-based model should be successful. Taking the team perspective will allow us to continually overcome challenges and provide a higher level of sustainable service. ■

Resource Mentioned in the Article

[1] Whitmire, A. (2014). *GRAD 521 Research Data Management syllabus and lesson plans*. Figshare.com. Retrieved from <http://dx.doi.org/10.6084/m9.figshare.1003834>