

UWM Data Services Strategic Plan 2016-2018

Mission

Data Services serves researchers at UWM by supporting funding compliance around data management, helping researchers work with data more easily, and exploring new avenues of scholarship with respect to data.

Background

UW-Milwaukee is an institution with approximately 25,000 students, about 5,000 of which are graduate students. It is both an access and a research institution. This tension plays out in several ways. First, it is evident in the fact that the first two of the four campus strategic plan goals cover successful students and research excellence. Second, while UWM is now a Carnegie “Very High” research institution, its annual research expenditure is almost two orders of magnitude smaller than the other UW System “Very High” research institution, UW-Madison, at approximately \$60 million per year as opposed to over \$1 billion per year. Finally, the UWM student population is much more diverse than most of the other UW System schools, in terms of ethnic diversity, student age, online/in-person status. All of these aspects of the university’s dual role affect the delivery of library services.

In terms of what researchers at UWM actually need, we can look to existing studies on data management and sharing habits (Akers & Doty, 2013; Carlson, Fosmire, Miller, & Nelson, 2011; Tenopir et al., 2015). These studies show that basic researcher data management habits need improvement to properly protect data, with issues varying between fields. The good news is that perceptions around new data requirements, such as data sharing, are improving. In addition to these general concerns, two specific issues come up when discussing research data with people at UWM: not having accessible places to properly store data (especially sensitive data) and not knowing about research resources available on campus.

Issues with researcher practices are magnified by new funding agency requirements for data management plans and data sharing. UWM currently subscribes to the DMPTool to help with the first issue, but does not have proper infrastructure to internally host data. Data Services has received an increased number of requests in 2015 for finding places to host datasets and support for data sharing will be a continuing need going forward.

Outside of the university, UWM has 15 identified peer institution (listed in Appendix 1). The libraries at these institutions all offer traditional reference assistance with finding data, but less than half of them have research data services. Even fewer have an identifiable data management librarian. In this respect, UWM is on the forefront of its peers at addressing researcher needs.

Strengths, Weaknesses, Opportunities, and Threats

Strengths

One major strength of Data Services is that it is led by a dedicated data services librarian with expertise in the field. This means that data support is one person’s priority and ensures targeting of researcher needs on campus.

Data Services was established in 2013 (see Appendix 2 for 2013 Data Services strategic goals) and has made progress in meeting researcher data needs on campus. These services have become part of the larger framework of data support on campus and there is awareness of Data Services among a number of researchers at UWM, making it easier to grow services going forward.

Weaknesses

A weakness of having one dedicated data services librarian is that data expertise is relatively limited to one person. If something were to happen to this librarian, UWM Libraries would be unable to maintain many of the data services currently offered. There has been no sustainability planning in this regard.

Another issue of concern is scalability. Strategic growth in Data Services, such as through collecting research data, will likely require the involvement of more people. This will entail coordination with others in the Libraries and administrative support.

A final weakness is the current lack of resources available at UWM overall. This may prevent Data Services from growing in a necessary area because there is not funding to support new offerings.

Opportunities

Data Services has a huge opportunity in the face of the current shifting data landscape. With so many new funding agencies starting to require data management plans and data sharing, there is a significant window of opportunity to make researchers aware of the new requirements and the corresponding services that can help.

Part of the new requirements relates to data sharing and there is a particular need for helping researchers find places to host their data for sharing compliance. This is something that few researchers currently know how to do and is further complicated by the fact that the network of data repositories is still being established. Data Services has an opportunity to not only identify the best places to house research data but to also potentially collect UWM research data at the Libraries.

A final opportunity is found in the fact that graduate students and researchers are not skilled at managing their data. Data Services can help with this at a very basic level through workshops and other educational endeavors.

Threats

The sheer diversity of the UWM population means that there is no one best way to deliver library services on campus. Between multiple campus locations, the lack of regular business hours with respect to teaching and learning, and the fact that many students never actually set foot in a UWM building, there is a definite challenge to meet UWM researchers – particularly students – where they are at.

It is often difficult to make UWM researchers aware of events and new campus services as people are overwhelmed with information and emails. This is a problem not unique to Data Services.

Compounding this problem, many researchers don't know that the library can help them with their data or what Data Services actually does. Part of this is an issue of marketing and part is the unfortunate academic stereotype that the library is only a place to access research materials like books and journals.

Strategic Goals

Based on the above SWOT analysis, Data Services has the following goals for 2016-2018.

1. Better Outreach and Marketing

Data Services will expand its outreach and marketing in the near term in order to best take advantage of opportunities that correspond with the new funder data requirements. This includes several components:

- Targeted messages to faculty about new data requirements (and corresponding services) via Office of Research emails, Library contacts, and other relevant venues

- Outreach to individual departments, deans, and campus units supporting research
- A better looking Data Services webpage and easier navigation to it from the UWM Libraries homepage

Timeline: 2016 and again as needed

2. Work with Strategic Library Contacts on Basic Data Skills

Data Services will identify a couple other librarians, including the science librarian, to help make more comfortable discussing data management plans and research data repositories with researchers in their contact area(s). The goal is to ensure that basic data skills are better supported by User Services and not solely dependent on one person.

Timeline: Identify personnel and conduct initial training in 2016, evaluate and modify as needed in 2017

3. Continue to Improve Educational Programs

Data Services will evaluate its current educational offerings to provide a more consistent and comprehensive suite of training sessions and materials in order to improve data management practices on campus. This entails:

- Overhauling in-person sessions to be active-learning driven
- Reviewing and updating recorded materials for 24/7 access
- Periodically offering larger training events and bringing in outside workshop offerings
- Making efforts to integrate data instruction into existing graduate coursework and training

Timeline: 2017 -2018

4. Investigate Requirements to Host Research Data and Potentially Implement a Data Repository

With new funding requirements to share data, the Libraries need to seriously consider the possibility of offering a platform for sharing UWM research data. We currently do not have an access or preservation system that is appropriate for data, so we risk UWM data be locked up in outside repositories run by for-profit organizations. Going forward, Data Services will investigate the minimum requirements for collecting research data and make a proposal on the adoption a data repository solution, keeping budgetary issues in mind. If the proposal is approved, the goal is to run a pilot project before any full implementation in order to better coordinate the necessary efforts across the Libraries.

Timeline: complete research in 2016, potential pilot project in 2017, and potential go-live in 2018

5. Form Stronger Regional Partnerships

Data Services are offered by many university libraries but usually supported by a limited number of people at each. As data management is an evolving field, it is logical to discuss and attempt to coordinate efforts between local and partner institution. Currently, UWM Data Services has infrequent discussions with both the UW-Madison Research Data Services lead as well as the digital projects and IR personnel at Marquette. These conversations need to be ongoing with an eye for potential joint support systems in the future.

Timeline: 2016-2018

References

- Akers, K. G., & Doty, J. (2013). Disciplinary differences in faculty research data management practices and perspectives. *International Journal of Digital Curation*, *8*(2), 5–26. <http://doi.org/10.2218/ijdc.v8i2.263>
- Carlson, J., Fosmire, M., Miller, C. C., & Nelson, M. S. (2011). Determining Data Information Literacy Needs: A Study of Students and Research Faculty. *Portal: Libraries and the Academy*, *11*(2), 629–657. <http://doi.org/10.1353/pla.2011.0022>
- Tenopir, C., Dalton, E. D., Allard, S., Frame, M., Pjesivac, I., Birch, B., ... Dorsett, K. (2015). Changes in Data Sharing and Data Reuse Practices and Perceptions among Scientists Worldwide. *PloS One*, *10*(8), e0134826. <http://doi.org/10.1371/journal.pone.0134826>

Appendix 1

UW-Milwaukee Peer Institutions

- Cleveland State University
- Georgia State University†*
- Indiana University-Purdue University Indianapolis†*
- Portland State University†
- Temple University†*
- University of Cincinnati*
- University of Houston†
- University of Illinois-Chicago†
- University of Massachusetts-Boston
- University of Missouri-Kansas City
- University of New Orleans
- University of Pittsburgh
- University of Toledo
- Virginia Commonwealth University†*
- Wayne State University

† the university library offers data services

* the university has a data librarian

Appendix 2

2013 Data Services Strategic Goals

Short-term goals: develop initial data services along a variety of access points

1) Compile an online collection of data management resources

Many libraries that offer data services have corresponding webpages that provide data management information and links to outside resources. These sites are a partner to in-person services and offer resources for anyone who wants to know more about data management.

2) Provide individual consultations for data management plans

An obvious data service to provide is supporting grant compliance for data management plans. The need for this service is likely limited at the current time, as many researchers are already accustomed to the new NSF requirements, but will probably pick up as other funding agencies implement their own data management plan requirements in the next few years. Despite the small current need, this is a good service to advertise as it draws attention to the library's role in data management and can lead to further discussions about data.

3) Offer instructional sessions on data management

A big challenge to good data management is simply having the knowledge to manage data well. Data management instruction serves as another access point in addition to the web resources and one-on-one consultations. Both stand-alone and course-based sessions will be offered.

4) Market these initial data services

The library should carve out a space around data and make it known to campus that we offer services in this area. A key focus initially should be grant compliance, as this is a defined need that we can build other data services upon. The ultimate goal of this marketing is not necessarily to drive any particular service, more to associate research data support with the library in the minds of UWM researchers.

Medium-term goals: develop cross-campus collaborations & build on existing services

5) Take part in any cross-campus data management groups

The Data Services Librarian should represent the Library on committees dealing with data issues on campus. This will allow the Library to both be a part of the larger data management conversation and to adapt its services to better support campus patrons.

6) Survey campus data needs

The Data Services Librarian should survey, either formally or informally, campus researchers' most pressing data needs. The survey results will help with the allocation of resources and the establishment of priorities for data management.

7) Expand consultation services to cover data management in general

The Data Services Librarian will provide consultation for researchers who wish to improve their data management practices. The librarian will examine the researcher's current practices and make

recommendations based on the findings. This service will likely require consultation with other data stakeholders on campus on an as-needed basis.

8) Offer consultation services for finding and citing datasets

The Data Services Librarian should provide second-level consultations for finding datasets. This is also an excellent opportunity to work with library contacts to identify data sources and repositories that apply to their contact subjects.

9) Develop intra-library awareness of data issues

As data become more built into the scholarly communication process, the library will play an increasingly important role in data sharing and data discovery. For this reason, it is important to develop librarian awareness and skills around data. This will be a gradual process that should be pursued along both informal and formal avenues.

[Long-term goals: address the other big issues](#)

10) Establish workflows for adding datasets to the library holdings

The library may acquire datasets to support user research, as is done with GIS data in the AGSL. Datasets will likely be acquired on a case-by-case basis and should fit within existing collection development policies. No matter the dataset, clear workflows should exist for the collection of this type of content.

11) Help researchers find repositories for their datasets

As funders increasingly require data sharing, the library should provide guidance on where to deposit datasets. The local repository is an immediate option but this service should take advantage of any structure put into place as a result of the recent White House Public Access memo.

12) Help develop a long-term campus data storage and preservation solution

Data storage and preservation is a big issue in data management, especially for researchers with very large datasets. This is not an issue that the library can solve, but our preservation knowledge means that we should be a part of this conversation.

13) Help develop University policies concerning research data

Having clear university policies on data—covering such issues as ownership, retention, and transfer—will help guide management decisions and can prevent conflicts.

14) Establish a cross-Wisconsin data services coalition

Data management is a relatively new area for libraries, so it's important to learn from the successes and failures of our peers. One way to achieve that is to form a coalition of academic librarians in Wisconsin working in data management. I envision a mix of informal communication and networking with occasional in-person meetings.