

Scanning the Data Environment at the University of Massachusetts Medical School



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Scan Before You Plan

Environmental scanning is a traditional strategic activity that allows organizations to gather information about users' needs and perceptions of value and to use that information in the development of responsive plans and services.

- **“To the extent that an organization's ability to adapt to its outside environment depends on knowing and interpreting the external changes that are taking place, environmental scanning constitutes a primary mode of organizational learning.”**

- Germano, M. A. and Stretch-Stephenson, S. M. (2012), Strategic Value Planning for Libraries. Bottom Line: Managing Library Finances 25(2): 71-88. doi: 10.1108/08880451211256405
- Choo, C. W. (1999), The Art of Scanning the Environment. Bul. Am. Soc. Info. Sci. Tech., 25: 21–24. doi: 10.1002/bult.117

The LSL Objective

In a step toward active development of research data support services, the Lamar Soutter Library at the University of Massachusetts Medical School engaged in extensive environmental scanning to better understand the strengths, weaknesses, opportunities and challenges of an academic biomedical institution with respect to research data. Evidence-gathering allows us to test our assumptions and justify our activities.

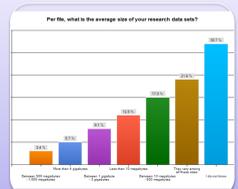
Activities



Library Data Services Advisory Group

- October 2013
- Established cross-institutional group to assist with needs assessment and provide strategic direction for library-based data support services. This group includes members of IT, Quantitative Health Sciences, and the Office of Research and provides important external perspective.

Image credit: Dorothy Byatt, <http://datapool.soton.ac.uk/tag/research-data/>



Assessment of Doctoral Biomedical Student Research Data Management Needs

- November 2013
- Conducted a survey among GSBS PhD students to explore the specific institutional repository (IR) data management needs of the University's biomedical sciences doctoral students. See poster for details.

Figure and project credit: Kate Thornhill /Lisa Palmer



Identification of Existing Services and Policies

- November/December 2013
- Identified and collected existing university policies and services relevant to the management of research data. This activity demonstrated the existing options for support as well as gaps in oversight of research data.

Photo credit: Greg Schupe Photography



Student Data Management Survey

- February/March 2014
- Conducted a survey among GSBS, GSN DNP and PhD, and SOM undergraduate students to gauge their comfort with and awareness of data management activities and best practices. The study was designed to identify needed resources and instruction opportunities on campus.



Faculty and Administrator Interviews

- February/March 2014
- Participated in third and final DuraSpace/ARL/CLIR eScience Institute. The program facilitates collaboration among different institutional entities with the goal of developing a strategic agenda for research data support services.

Photo credit: <http://www.duraspace.org/e-science-institute>

Findings

Students, faculty, administrators, and existing documentation together reveal a variety of attitudes, assumptions, and avenues for the handling of research data on campus. They identify potential activities where the library might play a role, for example:

- **Centralized Resources:** Interviewees report that institutional culture makes collaboration and information discovery a challenge, specifically for research data policies, expertise, infrastructure, and tools.
- **Data Management Training:** 80% of student survey respondents have received no prior data management training, yet 74% are engaged in or considering active research.
- **Digital Collections:** Interviewees report that repository services for data sharing, citation, and linking to support publication are needed.

Next Steps

Within six months the Lamar Soutter Library has gathered substantial information from all sectors of the institution to enable the development of a roadmap for appropriate library-based research support services. The next step is to prioritize potential services and begin implementing them.

“Environmental scanning constitutes a primary mode of organizational learning.”