Background & Materials

Project Overview:
Objective for this preliminary study was to examine local standards of data practice and policies written by instructors, researchers, and research professionals, surrounding the treatment of data for their labs, classes, or projects. In doing so, we hoped that these documents could provide some insight into how researchers view and respond to data management issues as a whole.

A considerable part of the project was identifying and acquiring written policies surrounding treatment of data in established settings of research laboratories or classrooms.

Methodology & Limitations

The research method employed in this project is Grounded Theory, a systematic approach involving the construction of theory through the analysis and conceptualization of data:

- Documents were collected using a variety of search methods and search engines
- Coding Schema with 47 Nodes of Interest was developed
- Collection of documents was coded using NVivo 10 Software package
- Axial Coding was performed, disaggregating core themes during and after analysis

Core Themes Identified in Documents

Notable limitations include:

- Limited amount of primary documents discovered
- 12 week program term

In realizing the limitation on data, researchers contacted subject librarians within the University of Michigan to assist in determining faculty who may have produced such documents.

Core Themes in Documents:

- Lab Notebook with 25 mentions
- Lab Report with 20 mentions
- Data Storage with 26.57
- Data Retrieval with 22.12
- Internal Data Sharing with 8.47
- Data Organization with 7.34

U-M librarians were helpful in identifying some material, notably a researcher blog on the subject of Ecology and general practice within the laboratory setting. Another manual was also made available through subject-librarian’s direct request to a researcher within their discipline.

Preliminary Results

Node Frequency

Note: Instruction is seen most with 33 mentions, followed by:

- Lab Notebook with 25
- Lab Report 23
- Research Methodology 20
- Rationale 19

Most Frequently Used Words:
1. Lab
2. Data
3. Use

Implications & Next Steps

In helping Data Services Librarians understand and assist researchers with managing their data, we hope to see progress in:

- Better management of Data Sets
- Data Sets being deposited into subject or institution repositories
- Data being shared with other researchers in the field
- Data being re-used to answer other research questions or as a building block of continued research

Next Phase of Study:

- Finding and analyzing more documents and artifacts to test hypotheses
- Continued support in educating researchers and librarians in the importance of sharing data and making it available in the correct circumstances

Further Research Questions:

- With data management coming to the forefront of importance due to change in funding agency guidelines, when should instructors begin to train students on proper data management practices?
- Need to work on this...