Toward an Improved Understanding of Research Data Management Needs

The DART Project and Repository Services

The Project
A multi-institutional project to develop and use an analytic rubric to evaluate data management plans that have been submitted to the National Science Foundation (NSF) at five academic research institutions.

Outputs
1) An analytic rubric to standardize the review of data management plans as a means to inform research data services at academic institutions and other research organizations.
2) A study utilizing the rubric that presents the results of data management plan analyses at five universities.

Project Process and Progress
1) DMPs were acquired from each of the six institutions (Oregon State, U. Michigan, U. Georgia Tech, and Penn State).
2) The team prototyped, tested, and refined the rubric.
3) We developed a survey using questions posed throughout the rubric and implemented it via Qualtrics.
4) Through the survey, we will use the rubric to review and analyze 100 DMPs.
5) Georgia Tech and Penn State have reviewed 50 each thus far and in this poster report briefly on the analysis.

Rubric Excerpts – Questions on Sharing & Archiving

1. Q12: Section 3: Policies for access and sharing
   - Performance Level
     - Complete / detailed
     - Addressed issues, but incomplete
     - Did not address the issue
   - Provides details on when the data will be made publicly available
   - Provides clear descriptions of data availability
   - Provides clear descriptions of data confidentiality
   - Provides clear descriptions of data accessibility
   - Provides clear descriptions of data availability

2. Q17: Section 5: Plans for data archiving and preservation of access
   - Performance Level
     - Complete / detailed
     - Addressed issues, but incomplete
     - Did not address the issue
   - Identifies whether or not the data will be archived at the investigator’s request
   - Identifies how access to the archived data will be maintained
   - Identifies policies for archiving and preserving digital data
   - Describes plans for archiving and preserving digital data
   - Describes the time frame for how long the data will be maintained
   - Plan describes the types or formats of data in the investigator’s possession

DMP Reviews: A Brief Notes on Recurring Trends
Project team members at Georgia Tech and Penn State reviewed 50 DMPs each for a awarded NSF proposals. Among the trends observed (perhaps not surprisingly): 1) Minimal mention and understanding of metadata and metadata standards; 2) An overwhelming yet restrictive view of data sharing as publication of research results in a journal; 3) Confusion between archiving and keeping data on a computer or a server; and 4) Almost nonexistent awareness of the library as a locus of support for data management. The implications for improving and expanding repository services provided by academic libraries are telling, particularly in terms of instruction, outreach, and other learning opportunities whether for one’s own institution or for other data repositories and centers.

Results from Georgia Tech and Penn State on Data Sharing & Archiving

Georgia Tech researchers’ ideas on data sharing, as reflected in a review of 50 DMPs.

Data archiving from the perspective of Penn State researchers, via a sample of 50 reviewed DMPs.

Data management plans as A Research Tool
@DMPResearch

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DART PROJECT

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