A National Digital Data Policy for the United States: To Be or Not to Be?

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National Digital Data Policy: USA

- Impossible to clearly define
- Scope: effort focused on curation of digital text files
  - DSpace & Fedora
- Increasing emphasis on born digital materials
- Last four to five years growing interest in the management of digital data:
  - Discovery
  - Access
  - Retrieval
  - Application
Overview of Research funding in USA

- Myriad of sources of research funding
  - Federal and State governments
  - Private Foundations
  - Corporations
  - Individuals
  - Not-for-Profit Organizations
National Digital Data Policy: USA

- Criteria for Receiving Funding
  - Application process varies
  - Criteria for award varies
  - Guidelines for research process varies
  - Assessment for success of project varies
National Digital Data Policy: USA

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Not hard to see that it VARIES!!!
National Digital Data Policy: USA

Example of One Area: Federal

- National Science Foundation (NSF)
- National Institutes of Health (NIH)
- Institute for Museum and Library Services (IMLS)
National Digital Data Policy: USA

- An Illustration Using One Funding Agency: National Science Foundation (NSF)
  - Independent Agency to promote the progress of Science: funds appropriated by Congress
  - Expends nearly $6.0 billion ($6,000,000,000) annually
  - Early 21st Century saw interest in digital data management
    - Role of Computational Analysis
    - Creation of Role for Cyberinfrastructure
National Digital Data Policy: USA

- An Illustration Using One Funding Agency: National Science Foundation (NSF)
- Creation of Office of Cyberinfrastructure in 2005
    - First Report to Highlight Need for Managing Data
    - Role of for New Professionals in Data Management
- Appointment of Dr. Christopher Greer, program officer.
National Digital Data Policy: USA

- An Illustration Using One Funding Agency: National Science Foundation (NSF)
  - Scientist who understood role of Library Scientists
  - Workshop in September, 2006, to develop plan to steward data, result, report, “To Stand the Test of Time: Long Term Stewardship of Data Sets in Science and Engineering”
    - Called for new collaboration
    - Preservation of digital data
    - Called for development of plan to steward data for the future
  - New Zealand Preservation Metadata Model used as example
Scholarly Communication

“traditional” research publication

“published” data/datasets
unpublished research traditional
“published” research non-traditional
published research traditional
secondary tertiary resources

analyzed data/datasets
processed data/datasets
“raw” data/datasets

in the past, libraries involved at this end

currently many attempts to data mine to uncover data...

metadata curation profiles for data allow forward/backward movement through scholarly communication process

D. Scott Brandt, Purdue University - 2006
National Digital Data Policy: USA

- ARL Joint Task Force on Library Support for E–Science
  - ARL = Association of Research Libraries
  - 113 Largest Academic/Research Libraries in the United States and Canada
  - Sponsors or co-sponsors of SPARC (Scholarly Publishing and Academic Resources Council); CNI (Coalition for Networked Information); and IAC (Information Access Alliance)
ARL Joint Task Force on Library Support for E–Science

Charge from Research, Teaching, and Learning Steering Committee and the Scholarly Communication Steering Committee.

- Inform membership about e-science issues
- Identify opportunities and recommend strategies for developing relationships with various government scientific agencies and other key stakeholders, scientific societies.
- Build an understanding of needs and experiences of scientists and researchers in various disciplines – the use of digital scientific data.
ARL Joint Task Force on Library Support for E–Science

- **OUTCOME 1**: An ongoing capacity and process within ARL to develop, coordinate, and evaluate an e-science program agenda.

- **OUTCOME 2**: A widely shared understanding both within research libraries and among other stakeholders in the e-science support community of how libraries can contribute to the development and ongoing evolution of cyberinfrastructure and e-science.
OUTCOME 3: Knowledgeable and skilled research library professionals with capacity to contribute to e-science and to shape new roles and models of service.

OUTCOME 4: Research libraries as active participants in the conceptualization and development of research infrastructure, including systems and services to support the processes of research and the full life cycle of research assets.
OUTCOME 5: Influence on policy, standards, and resource allocation decisions that support ARL principles
National Science Foundation
Recognition of the Challenge for Data Curation

To Stand the Test of Time
Long-term Stewardship of Digital Data Sets in Science and Engineering

A Report to the National Science Foundation from the ARL Workshop on New Collaborative Relationships: The Role of Academic Libraries in the Digital Data Universe
September 26–27, 2006
Arlington, VA

“Nature, to be commanded, must be obeyed.”
Attributed to Francis Bacon (1561–1626)
Prover-Catalog, bk. 5, aph. 139 (1529)

Dr. Christopher Greer
Former Program Director
Office of Cyberinfrastructure, NSF
NSF should facilitate the establishment of a sustainable framework for the long-term stewardship of data. This framework should involve multiple stakeholders by supporting:

- Research to understand, model, & prototype data stewardship
- Training and educational programs to develop new workforce
- Efforts to effect change in the research enterprise regarding the importance of the stewardship of digital data produced
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Sustainable Digital Data Preservation and Access Network Partners (DataNet)

Program Solicitation NSF 07-601

National Science Foundation

Office of Cyberinfrastructure

Directorate for Computer & Information Science & Engineering

Preliminary Proposal Due Date(s) (required):
January 07, 2008
October 06, 2008

Full Proposal Target Date(s):
March 21, 2008
February 16, 2009
There are many issues that must be explored as the US continues to assess and develop a national data policy – Clifford Lynch, executive director of CNI states, on February 5, 2008, the following issues will be tantamount to determining a national data policy for the US:

- Copyright/Intellectual Property
- Public vs. Private - concern that public information may become privatized
- All Government information is publicly accessible and reproducible – unlike other nations
- Research funded by public funds must be available
- Development of standards for data sharing
- Issue of privacy versus the practice of research
Thank you!

Questions and Answers?

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