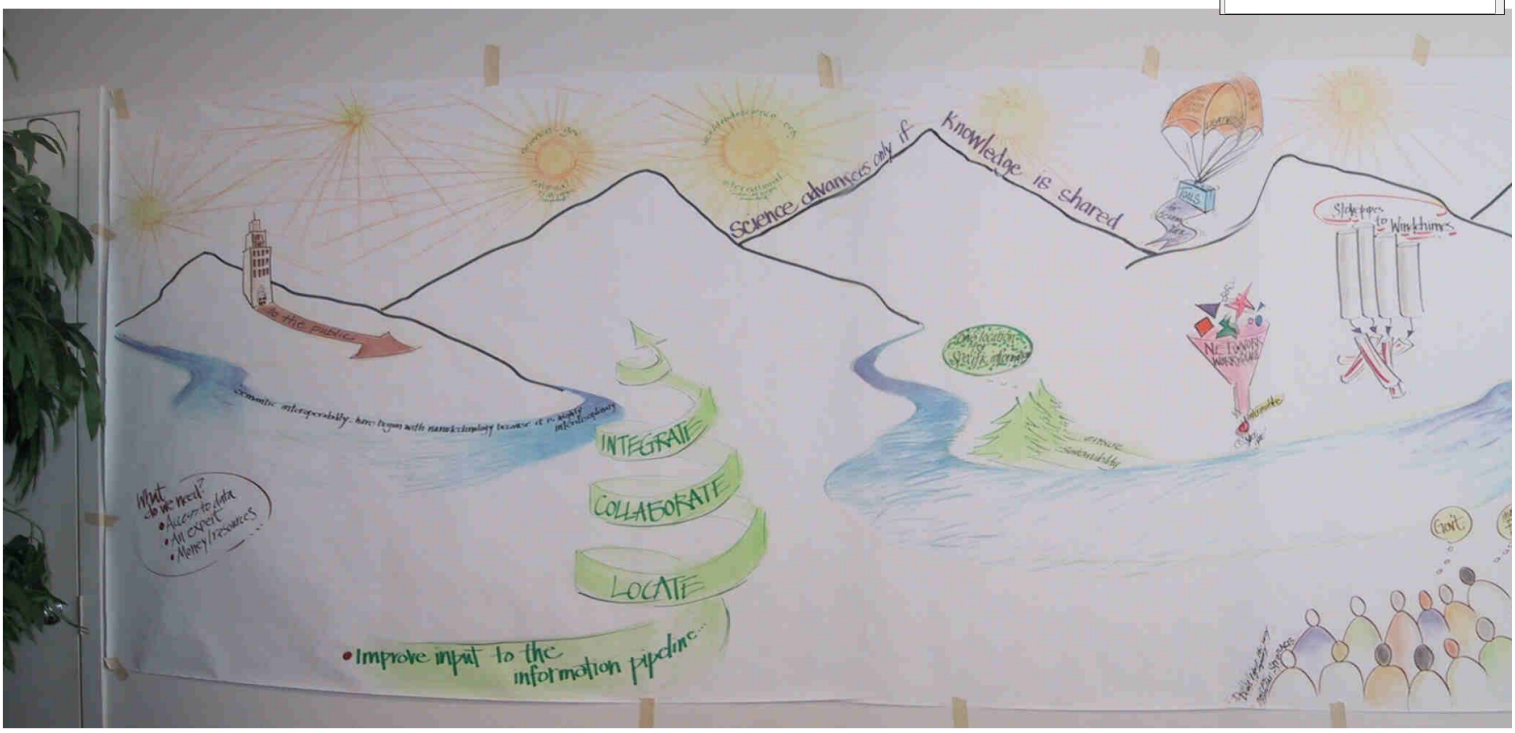
ExpeditionWorkshop/MappingPublicGoodsAndServices ConnectingToScienceAndScholarlyKnowledge 2007 08 14

Past Expeditions (3N46)

Collaborative Expedition #64, Tuesday, August 14, 2007 at NSF (3N47)

Mapping and Navigating the Waterways of Public Information: Connecting People to Science and Scholarly Knowledge (3MWU)

Below is Patricia Hilton's map of what she heard at the workshop on August 14, 2007 (3NDU)



(3NDS)

- **Workshop Location, Registration, and Remote Teleconferencing** (3MWV)
- Workshop Purpose (3MWW)
- Workshop Questions (3N2V)
- Agenda... print version (3MWX)
- Background (3MWY)
- Resources (3MWZ)
- Draft Scenarios (3NBC)

Workshop Purpose (3MX0)

The purpose of the workshop is to envision greater possibilities for a robust cyberinfrastructure making it easier for citizens to navigate public information (including scientific, cultural, and scholarly knowledge). Participants will share lessons learned from virtual organizations (non-profit to multi-government) employing knowledge mapping techniques, data visualization, virtual curating, and data stewardship techniques. The workshop will open up dialogue to facilitate "bootstrapping" among multiple communities and institutions committed to advancing public access to electronically stored information, including scientific and cultural heritage collections. The workshop supports information exchange among Federal Enterprise Architecture improvement activities advancing citizen-centric government in 2007. (3MX1)

> "It is probably true quite generally that in the history of human thinking the most fruitful developments frequently take place at those points where two different lines of thought meet. These lines may have their roots in quite different parts of human culture, in different times or different cultural environments or different religious traditions: hence if they actually meet, that is, if they are at least so much related to each other that a real interaction can take place, then one may hope that new and interesting developments may follow." **Werner Heisenberg** (3N7T)
>
> "Creativity is a process that can be observed only at the intersection where individuals, domains, and fields intersect." **Csikszentmihalyi, 1999** (3N7U)

Workshop Questions (3MX2)

- 1. What are the Public Good and Service attributes of Public Information? Who can make maps of Public Information today and how? How can the maps be used? (3MX3)
- 2. What is the current understanding around Public Information relative to government and non-government web resources, data collections, and knowledge repositories? (3MX4)
- 3. How can relevant stakeholders tap "build to share" principles being advanced by forward-looking information stewardship organizations, including: (3MX5)

  a) Digital data and information communities advancing sound approaches for electronically stored information. Examples include librarians, curators, web content managers, ontologists, researchers, artists, historians, data managers, and records managers. (3MAQ)

  b) Open Standards bodies and consortia (3MX8)

  c) International stewardship associations (3MX6)

  d) Virtual organizations (3N2R)

- 4. What common messages can ripple across communities with deep and diverse experience with distributed collaboration, collections development, and scholarly knowledge infrastructure? (3N6C)
- 5. What are the conducive conditions for the creativity needed among the networked communities doing this work? (3N6D)
- 6. What are the emerging strategies for advancing public web content, collections management, and scholarly knowledge infrastructures with the resilience to mitigate disruptions or degradations of service over time? (3N6E)
- 7. What strategies are emerging to advance the public's awareness and participation in science, global virtual collections, and scholarly knowledge infrastructures? (3MXB)

AGENDA: (3MZK)

8:30 am - **Welcome and Introduction** (3MXE)

SusanTurnbull, GSA and Co-chair, Emerging Technology Subcommittee and Co-Chair, Social, Economic and Workforce Implications of IT CG (3MXF)

8:40 am - **Participant Introductions: What is your Sense of Purpose in Relation to the Overall Workshop Goals?** (3MXH)

9:00 am - **Science.gov and WorldWideScience.org: Ground-breaking Advances in Scientific and Technical Information Collections** (3N98)

Eleanor G. Frierson, Deputy Director, National Agricultural Library, Department of Agriculture (3N8W)

Walter L. Warnick, Director, Dept. of Energy, Office of Science and Technical Information, Much of Science is Non-Googleable: An Emerging Solution (3N99)

10:30 am - BREAK (3N9A)

10:45 am - **Mapping Science: Opportunities and Challenges**, KatyBorner, Associate Professor of Information Science, Director of the Information Visualization Lab, Director of the Cyberinfrastructure for Network Science Center, Adjunct Associate Professor of Informatics, Core Faculty Member of Cognitive Science, Research Affiliate of the Biocomplexity Institute & Complex Systems Group, Indiana University (3NFE)

- Workshop presentation (3N61)
  - Places & Spaces: Mapping Science exhibit (3N6T)
    - Network Workbench (3N65)
    - http://scimaps.org/maps/wikipedia/ (3N6U)
- **Discussion** (3MXN)

12:15 pm - **Networking Lunch** (60 min. - on your own) (3MXS)

1:15 pm - **Virtual Organizing: Conducive Conditions for Creativity in Advancing Knowledge Collections** (3NAN)

Mary Lou Maher, Program Director, Information and Intelligent Systems (IIS), Computer and Information Science and Engineering (CISE), NSF - presentation (3NAO)

Deborah MacPherson, Accuracy&Aesthetics and WDG Architecture - presentation (3N30)

- RE: Reliable locations for information placement, addendum response to question from JimDisbrow and the danger of only one model - having established placement would not be one fixed model. The envisioned model is infinitely rearrangeable, the parts are connected as if rubber bands hold them together. Once an arrangement is created that works, or complies with (data)architectural requirements, the relative locations are automatically marked, like purple numbers, but one or more levels up. When a group of details on the purple number level are assembled, generic placement on supporting structural levels force similar ideas and information together. Consensus structures that are purposefully built would have approved placements. It would be fun to watch data structures be automatically rebuilt. (3NDA)

- Newseum (3NB9)
- IAC Building (3NBA)

- Discussion (3N9B)

2:15 pm - **Break-Out Session: Advancing Navigability and Discovery in Public Cyberinfrastructure: Cultivating the Governance and Tools Needed for Public Information Collections** (3MXT)

- What Works? (3NBD)
- What Doesn't Work? (3NBE)
- What do We Need to Create? (3NBF)
- What do We Need to Know? (3NBG)

/Workshop_08_14_2007_BreakOutGroup_One (remote teleconference only) (3NB5)

/Workshop_08_14_2007_BreakOutGroup_Two (3MY0)

/Workshop_08_14_2007_BreakOutGroup_Three (3MY1)

/Workshop_08_14_2007_BreakOutGroup_Four (3NB6)

/Workshop_08_14_2007_BreakOutGroup_Five (3NB7)

/Workshop_08_14_2007_BreakOutGroup_Six (3ND5)

3:15 pm - **BREAK** (3MXX)

3:30 pm - **Report Out of Break Out Groups** (3MY2)

4:15 pm - **Adjourn and Networking** (3NB8)

Collaborative Expedition Workshop Series Background (3MYY)

Purpose and Audience: The GSA Office of Intergovernmental Solutions leads monthly Collaborative Expedition workshops to advance the quality of citizen-government dialogue and collaborations at the crossroads of intergovernmental initiatives, Communities of Practice, Federal IT research and IT user agencies. The workshops seek to advance collaborative innovations in government and community services such as emergency preparedness, environmental monitoring, healthcare and law enforcement. (3MYZ)

The workshops serve individuals from government, business, and non-government organizations to practice an emerging societal form, Communities of Practice (CoPs) or Communities of Interest (CoIs), that augment Government project teams, in a manner responsive to the Citizen-Centric Government goal of the President's Management Agenda and the Public Information Access provisions of the E-government Act of 2002. (3MZ0)

Each workshop organizes participation around a common purpose, larger than any institution, including government. By learning how to appreciate multiple perspectives around potentials and realities of this larger "purpose", subsequent actions by individuals representing many forms of expertise, can be better expressed in their home and collaborative settings. By centering around people and the "whole system" challenges they organize around, IT design and development processes can mature with less risk and greater national yield of breakthrough performance. (3MZ1)

Joint workshop sponsors in addition to GSA, include the Architecture and Infrastructure Committee and Best Practices Committee of the Federal CIO Council, and the National Coordination Office for Networking and Information Technology Research and Development, Social, Economic and Workforce Implications of IT and IT Workforce Development Coordinating Group. These organizations value this "frontier outpost" to open up quality conversations, augmented by information technology, to leverage the collaborative capacity of united, but diverse sectors of society, seeking to discover, frame, and act on national and international potentials. (3MZ2)

Resources (3MZ3)

1. Appreciation of Potentials / Tapping Creativity (3N5Q)

- Kronberg Declaration of the Future of Knowledge Acquisition and Sharing, UNESCO High Level Group of Visionaries on Knowledge Acquisition and Sharing, Kronberg, Germany, 22-23 June, 2007 (3MBQ)
- Cyberinfrastructure Vision for 21st Century, National Science Foundation, Cyberinfrastructure Council, March 2007 (3MZ9)
- Cyber-enabled Discovery and Innovation Initiative, National Science Foundation, FY08 (3MZ8)
- CreativIT wiki: Developing the Synergies between Research in Creativity and Computer and Information Science and Engineering (3MG2)
  - Workshop on Synergies Between Creativity and Information Technology, Science, Engineering, and Design: Defining a Research Emphasis, November 2-3, 2006 (3MZC)
- Toward More Transparent Government, Workshop on e-Government and Web, June 18-19 (3MZD)
- FEA Reference Model Mapping Guide (3MXK)
- Report to the William and Floral Hewlett Foundation: A Review of the Open Educational Resources Movement: Achievements, Challenges, and New Opportunities, February 2007, Daniel E. Atkins, John Seely Brown, and Allen L. Hammond (3NB8)

2. Mapping the Spaces / Virtualizing the Cultural Collections (3N5R)

- Places & Spaces: Mapping Science exhibit (3N5S)
  - http://scimaps.org/maps/exhibit/ (3N4O)
- NASA CoLab (3MG4)
  - NASA's volunteer clickworkers mapping Mars (3MG5)
- David Rumsey Map Collection (3N3D)
- Nikolas Schiller (3N3R)
- Virtual Library Museums Pages (3N2S)
  - Virtual Museum of Computing (3N2T)
  - WWW Virtual Library (3N2U)
- Modeling the Structure and Evolution of Science (3N4N)
- Art on the Web (3N2V)
- Web Gallery of Art (3N2W)

3. Tools / Approaches / Deployment (3N5T)

- CENDI (3NBZ)
- Network Workbench (3N4K)
- Cyberinfrastructure Shell (3N4L)
- http://www.osgi.org (3NF3)
- Science Commons (3NAP)
- Science-specific search engine (3N39)
- Governmentwide Assessment of Citizen Service Activities Survey, GSA Usa Services, June 2007 (3N34)
- Many Eyes (3NFJ)
- Swivel's mission is to make data useful (3NFK)
- NIH Public Access Policy (3N9N)
- Papers from Jan 29-30, 2007 conference on Designing Cyberinfrastructure for Collaboration and Innovation (3MZ4)
- The Public Domain of Digital Research Data (3N9L)
- Croquet Consortium (3N6N)
- Identifying, Counting and Categorizing Interogovernmental Organization (3MZ7)
- Ontology Summit 2007 - a case study in a virtual community's process and effort to research, develop and capture semantics and knowledge. (3MZG)

1. Balancing Practice-Centered Research and Design, David Woods and Klaus Christoffersen (See page 10 - The Engine of Innovation: Interlocking the Cycles of Research and Development) (3NAM)

- Bill St. Arnaud blog (3MZF)
- Purple Slurple (3N3S)
- Remote Sensing Tools, control over reality (3N3T)
- Standard Upper Ontology Working Group (3N3U)
- Mapped Up (3N3P)

4. Stewardship Organizations / Scholarly Databases (3N5U)

- Digital Library Initiative Phase II (3N69)
- Library of Congress (3N3Z)
- U.S. National Archives and Records Administration (3N2Q)
- National Archives Wiki, United Kingdom (3MZ5)
- http://science.gov (3MZM)
- http://worldwidescience.org (3MZL)
- The Global Information Commons for Science (3N2I)
- Scholarly Database (3N4N)
- Consultative Committee for Space Data Standards (3N2J)
  - http://en.wikipedia.org/wiki/CCSDS (3N2K)
  - Open Archival Information System (3N2L)
- Inter-University Consortium for Political and Social Research (3N2M)
- Thomson Scientific ISI Web of Knowledge (3N3V)
- Research Library Group (3N2N)
  - http://en.wikipedia.org/wiki/Research_Libraries_Group (3N2O)
- James Burke Institute - Knowledge Web (3N3N)
- Bootstrap.org (3N3A)
- CreativeCommons (3N3B)
- The Institute for Figuring (3N3I)
- Institute for the Future (3N3J)
- Wolfram Science (3N3Y)
- International Symposium on Digital Earth (3N3M)

- Disappearing Places (3N3F)

5. Civic Education / Community Data Sets (3N5Z)

- World Federation of United Nations Associations Millennium Project (3NAR)
- E-democracy participation - United Kingdom and Germany (3N9R)
- Project Citizen (3N35)
- National Infrastructure for Community Statistics (3N2P)
- http://www.civiced.org (3N32)
- http://www.ourcourts.org (3N33)
- http://en.wikipedia.org/wiki/Public_good (3N2X)
- dataisnature (3N3C)
- Eyebeam (3N3H)
- Interactive Architecture (3N3L)
- Time Indefinite (3N3W)
- Turbulence, spotlight (3N3X)
