

The Coalition for Networked Information (CNI)

Reports from the meeting held in San Antonio

by Betsy Wilson, Janet McCue, Gloriana St. Clair, Patricia Iannuzzi,
Nancy Baker, Hannelore B. Rader, and Thomas Hickerson

Ed. note: What follows are summaries of several of the project briefings at the CNI meeting. Thanks to the authors for providing these reports.

Developments in networked information

The Coalition for Networked Information (CNI) held a highly successful Task Force meeting in San Antonio, Texas, on December 7–8, 2000, attracting more than 250 participants. The meeting offered a wide range of presentations that advanced and reported on CNI's programs, showcased projects and issues from task force member institutions, and highlighted cutting-edge activities in the networked information area. The meeting was comprised of an opening and closing plenary session interspersed with a rich range of breakout sessions, ample time for informal networking with colleagues, and a reception on the evening of December 7.

CNI was founded in 1990 by the Association of Research Libraries, CAUSE, and

Educom. ACRL is a task force member and was represented by Betsy Wilson, ACRL president, and Mary Ellen Davis, ACRL senior associate executive director.

CNI Executive Director Clifford Lynch kicked off the meeting and the opening plenary with a high-level technology and environmental 10-year retrospective and a review of the issues CNI is currently pursuing. These issues form the basis for the newly issued Program Plan for 2000–01 available at <http://www.cni.org/program/>.

The Program Plan is organized around three themes: 1) Developing and Managing Networked Information Content; 2) Transforming Organizations, Professions and Individuals; and 3) Building Technology, Standards and Infrastructure.

Donald Waters, program officer for Scholarly Communications at the Andrew W. Mellon Foundation, joined Lynch on the podium and rounded out the opening plenary with a presentation of some of the initiatives the foundation is undertaking in the area of

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networked information and scholarly communication.—*Betsy Wilson*

SFX

Herbert van de Sompel (Cornell University) and Oren Beit-Arie (Ex-Libris) provided a fascinating overview of the integration of the open URL framework and the SFX software. The goal of these technologies is to allow a user to search an information resource and link to distributed resources.

To illustrate the integration, Rick Luce (Los Alamos National Laboratory) demonstrated the LANL implementation. Here a user can launch a search in Biosis, retrieve relevant citations, and link to the full text of the articles—from any of the full-text resources that are available to the LANL community.

Whether the article is available in Proquest or IDEAL, an ISI database or Ovid, the open URL framework and the SFX server provide the interoperability mechanism to allow open linking. The SFX server takes the open URL input and associated metadata, evaluates appropriate sites, and then completes the links to the targets. It provides a single point of administration for all of these services. The SFX server has been implemented at the University of Ghent and at LANL and is in beta test at a number of institutions. For more information, visit www.sfxit.com or www.sfxit.com/OpenURL.—*Janet McCue*

Questia

Will students on your campus pay about \$20 a month to use an electronic collection of about 50,000 books and to have footnote and other support in creating their term papers and projects?

Questia has convinced venture capitalists to give them \$165 million to prove that students will pay for this service. Similarly, Questia has been actively recruiting publishers to give them up-to-date content. The reward incentives for publishers include a percentage of the revenues. These revenues will be calculated based on the number of pages that the students using Questia view in their search for information.

Questia will feature scanned images with extensive mark up so that student searches will take them precisely to the sentences they need to do their assignments. While searching will be free, when students begin to download information to create their own papers,

they will have to become subscribers to the service for a month or a semester. Questia will be marketed directly to students using a sophisticated plan that is still under development. Questia has only recently begun to think of libraries as a possible market for this product.

Troy Williams, CEO, is a graduate of the Harvard Law School, where his service as a law review editor impressed him with the difficulties of creating good footnotes. He has recruited an astounding team, including Stanley Chodorow, who will head the academic side of the company; Carol Hughes, who has led Questia's collection development operations; and several executives from different companies, including Disney.

Questia will offer a convenient alternative to coming into the library, photocopying the information needed, and typing it into a computer to create a term paper.

Students demonstrate a love of convenience through many of their life choices. Will they subscribe or will they realize that their campus library may offer a no-charge alternative also available to them in their own lodgings?—*Gloriana St. Clair*

Open Archives Initiative (OAI)

This initiative is also an exciting one. Like Questia, its function is to make more effective use of content available online. Unlike Questia, its audiences are primarily the faculty who use preprint servers, such as the Ginsparg preprint server at Los Alamos. OAI's purpose is to enhance access to e-print archives as a means of increasing the availability of scholarly communications.

OAI will describe a metadata harvesting protocol. This protocol will allow users to find information that is currently shut off from their searching. The data harvested from these large electronic archives will be used to build higher-level, user-oriented services, such as catalogs and portals to materials distributed at multiple e-print sites.

OAI was developed at a Santa Fe convention and amplified at a technical meeting held at Cornell University. A public comment day was held on January 23, 2001, in Washington, and a European comment day will be held in Berlin in the first quarter of 2001. Comments can also be sent to openarchives@openarchives.org.

Certainly, having better access to the e-print sites around the country is quite an exciting development. But OAI may have further applications. Many believe that it will also be adapted to harvest the metadata from other kinds of digital collections. Then, the many institutions that have built large digital depositories will have a new method for attracting users to them.—*Gloriana St. Clair*

Pacific Bell/UCLA initiative

Howard Besser, associate professor at UCLA's School of Education and Information Studies (GSE&IS), introduced the audience to the Pacific Bell/UCLA Initiative for 21st Century Literacies (www.newliteracies.gseis.ucla.edu) Besser serves as co-director of the initiative with Aimee Dorr, dean and professor at GSE&IS. Pacific Bell awarded a \$1 million grant for the two-year project that will address the need for multiple literacies in the 21st century. Three areas that will be addressed by the initiative are educating the user; improving the information system; and addressing policy issues. Expected outcomes for the initiative include:

- development of guidelines for information-literate students and for teachers and librarians working with students;
- guidelines for design professionals and others who develop information systems and materials; and
- policy research that will be disseminated to policymakers and the broader public to inform public discussion.

Three hundred sixty participants from education, librarianship, public policy, and industry were invited to participate in the Pacific Bell/UCLA Summit: New Technologies, New Literacies—a Wonderful Learning Experience! The summit was held on October 21, 2000, with representatives from the California Governor's Office and the California State Department of Education in attendance. A new, snappy eight-minute video on information literacy was produced by Pacific Bell and is now available.

Besser critiqued "traditional" information literacy approaches developed to date and addressed the need to build adaptive systems based upon good design principles that are customized for different user communities. He outlined that the next step for the project is a literature review and analysis of

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research and publications related to information, media, visual, cultural and other relevant 21st century literacies. GSE&IS faculty will also explore how to best design systems to match literacy levels and develop principles for systems design. Finally, GSE&IS faculty will also research policy issues related to this project, including information literacy standards, issues regarding the "Digital Divide," and privacy and ownership concerns.—*Patricia Iannuzzi*

Collaborations among informational professionals

This lively session, lead by Joan Lippincott, associate executive director of CNI, and Susan Perry, college librarian and director of Library and Information Technology Services at Mount Holyoke College, was formatted to encourage audience discussion on three related topics: examples of collaboration at their institutions; comments on current CNI initiatives that foster collaboration; and suggestions for future CNI initiatives in support of collaboration.

Lippincott provided the context by presenting an excellent introduction to defining a true collaborative venture, emphasizing that collaborations require a common vision, a shared vocabulary, resources contributed by both parties, and agreement on work procedures.

"Exchange relationships" are often misnamed as collaborations, and some other attempts to collaborate fail because one party imposes a vision on the other group instead of creating a shared vision.

Lippincott also provided a quick overview of current CNI initiatives, including the New Learning Communities, the Electronic Dissertation Project, the Assessing the Academic

Networked Environment initiative and the Working Together project. Further information about CNI projects is located at www.cni.org/archives/.

Audience members shared experiences about campus collaborations, and one of the dominant themes that emerged was the need for collaboration with the academic side of campus technology programs: teaching and learning with technology initiatives; instructional technologists; and campus centers for faculty development for excellence in teaching. Some discussion centered on campus collaborations that focus on student learning outcomes that include information literacy.

Suggestions were made for CNI to offer workshops for campus teams, similar to CNI's Working Together workshops originally targeted to senior library and information technology leaders who attended as teams to develop campus plans. The most recent Working Together workshops have included archivists, records managers, and information technologists. Suggestions were made to expand these workshops to bring together librarians and instructional technologists and academics to address pedagogical issues related to teaching and learning with technology.—*Patricia Iannuzzi*

IMS E-Learning specifications

This project briefing featured a technical update on the IMS E-Learning Specifications by Thomas D. Wason, technical liaison, and Ed Walker, CEO of the IMS Global Learning Consortium, Inc. (IMS).

IMS is concerned with standards for learning servers, learning content, and the integration of such capabilities. Although IMS was initiated in the higher-education environment, it now includes corporate and government training, K-12, and continuing education. IMS is developing specifications to address key problems and challenges in distributed learning environments.

The project briefing provided discussed the specifications' potential use in mechanisms for locating, retrieving, and using networked learning objects. IMS specifications and instructional designs enable the learning process.

IMS specifications will enable content from multiple publishers to run on multiple management systems such as content metadata, student profile and performance information,

and course structure. An example would be LAN-based training modules surrounded by an Internet-compatible launcher object. IMS Working Groups gather functional requirements and technical capabilities from end users, purchasers, and managers and consolidate these into one or more specifications.

IMS members include such organizations as Apple Computers, Blackboard, universities, Educause, Cisco, Microsoft, government agencies, and many others. IMS is working on specifications to address basic functionality of labeling and finding content, moving content from one place to another, running content, and tracking student performance data. In the future, specs will support additional features.

IMS specifications and tools are free to the public. The developed specifications are technical standards, not academic or pedagogical standards. IMS metadata can help evaluate materials and establish repositories of IMS metadata containing reviews and certifications of products.

This briefing, although "technologically challenging," helped me understand better the complexities of teaching and learning support in the electronic environment, specifically, since I use Blackboard in some graduate teaching. For additional information about IMS see www.imsproject.org.—*Hannelore B. Rader*

Web preservation

During the project briefing on a Web preservation project entitled "Oh, What a Tangled World Wide Web We Weave," Cassy Ammen from the Library of Congress (LC) discussed two recent projects at LC to collect and preserve a selective group of Web sites. The first prototype project focuses on more than 25 Web sites on a variety of subjects and content types. Through this project, LC plans to explore the complex issues surrounding Web archiving and develop procedures that will enable the prototype to be scaled up to a more comprehensive level.

The second project concentrated on more than 150 Web sites pertaining to the 2000 presidential election. This project required the daily capture of text, images, and complementary software related to the presidential election until the site activity ceased or Inauguration 2001.

Ammen discussed the many technical issues and challenges involved in Web

archiving, including how often to capture, how to handle imbedded external links, problems with multiple languages on a site, copyright issues, levels of cataloging, and long-term archiving/preservation.

The project briefing on Scientific Communities: Evolving Options Online, provided an update on two SPARC initiatives for effective and affordable scholarly communication. The first, Project Euclid, is a new initiative from Cornell and Duke University Presses to help independent journals in theoretical and applied mathematics and statistics by setting up an infrastructure to empower the participating journals to publish over the Web. The project is funded by a grant from the Andrew W. Mellon Foundation, aided by the development partners, and supported by the participating scholarly societies, SPARC, and Sun Microsystems.

Project Euclid seeks to support an affordable and vibrant online information community with fast dissemination of high-quality papers, the ability to search across all journals at once, and the inclusion of rich reference linkages. In addition, these journals will have better visibility and long-term preservation of their digital archive. This project is in the very early stages of development. More information is available from <http://euclid.library.cornell.edu/project/>.

The second project, BioOne, will facilitate Web access to the full text of high-impact bio-science research journals published by professional societies whose publications have only been available in paper. Currently 31 journals have licensed with BioOne with more in the pipeline. The project will include current issues and one-to-two years of backfiles. *BioOne* is a project of the American Institute for Biological Sciences, SPARC, the Big 12+ Library Consortium, Allen Press, and the University of Kansas, which hosts the online service. *BioOne* is planning to launch its beta release on March 1, 2001. The journals will be sold as a package. For more information, see <http://www.bioone.org/>.—*Nancy Baker*

Accounting for Archiving: Who Will Pay?

In the session "Accounting for Archiving: Who Will Pay?" Kevin Guthrie, president of JSTOR, first presented a clear picture of costs associated with housing and servicing scholarly jour-

Van de Sompel warned that libraries as organizations are slow moving, hosted by slowly moving institutions; that libraries are slow to recognize that a new technology may allow for new modes of operating; and that the information world runs on Internet time.

nals in library stacks and in remote storage, followed by a convincing description of the costs and benefits of digital storage and access. He then challenged attendees to recognize and fund digital preservation and access through a coordinated strategy supported by both acquisition and long-term collection maintenance expenditures, urging that library administrators convince university provosts and presidents that monies be diverted from "bricks and mortar" expenses to technological infrastructure and collaborative digital archiving solutions.

Session attendance was relatively small, but the attentive audience was largely comprised of senior library administrators including several library directors, most of whom seemed to be directly confronting these issues. The most noteworthy aspect of the session was that it was largely conducted as a dialogue among all of those in attendance, rather than in a presenter/audience format.

From the initial moments, participants, while agreeing with several of Guthrie's basic assertions, questioned the likelihood that institutional funding could be reallocated in the manner proposed. Others questioned whether library administrators were themselves prepared to publicly question "bricks and mortar" expenditures, in spite of their underlying assumptions about the information future. The session provided a fascinating glimpse of current complexities, and discussions continued well into the evening.—*Thomas Hickerson*

Metadata harvesting and implications for scholarly communications

Herbert van de Sompel, visiting professor in the Computer Science Department at Cornell University and former head of Library Au-

tomation at the University of Ghent in Belgium, delivered the closing plenary address on the Open Archives Metadata Harvesting (OAMH) protocol and implications for scholarly communication. His presentation can be found on the CNI Web site at www.cni.org.

Van de Sompel described the OAMH protocol as "a low-barrier interoperability specification for the recurrent exchange of metadata between systems." The OAMH protocol allows for federated services such as SDI, alerting, and linking services; database synchronization; and harvesting the deep Web. The OAMH protocol advances the interoperability of electronic preprints as a means to promote their global acceptance as a "decomposed" scholarly communication system.

Van de Sompel posited that in the current scholarly communication system, it is increasingly difficult for libraries to fulfill their fundamental role of safeguarding equality of access to scholarly information. He encouraged librarians

to rethink themselves and to become proactive in exploring alternatives for scholarly communications, like the OAI (see <http://www.openarchives.org/>).

Concluding that there are new opportunities for shaping a sustainable scholarly communication system, van de Sompel outlined the advantages libraries bring to the mix. Libraries are close to authors; are in a good position to archive institutional materials; are quick to embrace new technologies; have very knowledgeable people; provide a level of redundancy in services that is no longer required in a digital environment; and safeguard equity of access through global representation.

Van de Sompel warned that libraries as organizations are slow moving, hosted by slowly moving institutions; that libraries are slow to recognize that a new technology may allow for new modes of operating; and that the information world runs on Internet time.—*Betsy Wilson* ■

("Teaching students. . ." continued from page 143)

4. Leilani Hall, "A homegrown program for raising faculty information competence," *Computers in Libraries* 19, no. 8 (1999): 28–34.

5. Pixey Anne Mosley, "Creating a library assignment workshop for university faculty," *The Journal of Academic Librarianship* 24, no. 1 (1998): 33–41.

("Community sciences . . ." continued from page 162)

• **MedLine.** This is the primer biomedical database from the National Institutes of Health, which comprises the Index Medicus, Dental Literature Index, and the International Nursing Index. It provides the most comprehensive coverage from more than 3,500 journals in all areas of medicine. Access:

6. Gloria J. Leckie, "Desperately seeking citations: Uncovering faculty assumptions about the undergraduate research process," *The Journal of Academic Librarianship* 22 (1996): 201–08.

7. Janet R. Cottrell, "Information literacy, computer literacy, and good teaching practices: Firm foundations for faculty development." *Academic Exchange Quarterly* 3 (Fall 1999): 43–51. ■

<http://www.nlm.nih.gov/databases/freedmedl.html>.

• **UnCover.** Table of Content and fee-based fax document delivery service to more than 18,000 journal titles from 1988 to the present. Use the UnCover "C"omplete service for older material. UnCover also offers articles from more than 2,500 journals via UnCover Desktop Image Delivery. Access: <http://uncweb.carl.org/>. ■

("Building community . . ." cont. from page 167)

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Final recommendations

A final recommendation is the *University of*

Connecticut Libraries Partnerships guide. It includes "Selected Examples of Current Partnerships"; "Forming New Partnerships: A Guide"; "Library Criteria for New Partnerships"; "Reviewing Existing Partnerships"; and a "Partnership Proposal Form" (<http://spirit.lib.uconn.edu/information/PartnershipDocument.html>). ■



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