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Coalition for Networked Information

Program
2004 - 2005

MISSION

The Coalition for Networked Information (CNI) is an organization to advance the transformative promise of networked information technology for the advancement of scholarly communication and the enrichment of intellectual productivity.

Background and History

The Coalition for Networked Information (CNI) is a joint project of the Association of Research Libraries (ARL) and EDUCAUSE. ARL represents the research libraries of North America. EDUCAUSE champions the use of information technology among its broad array of members in the higher education community and the associations, organizations, and corporations that serve that community.

In establishing CNI, these sponsor organizations recognized the need to broaden the community's thinking beyond issues of network connectivity and bandwidth to encompass networked information content and applications. Reaping the benefits of the Internet for scholarship, research, and education demands new partnerships, new institutional roles, and new technologies and infrastructure. The Coalition seeks to further these collaborations, to explore these new roles, and to catalyze the development and deployment of the necessary technology base.

The Coalition is supported by a Task Force of about 200 dues-paying member institutions representing higher education, publishing, networking, information technology, government agencies, museums, libraries, and library organizations. Membership in the Coalition's Task Force is open to all organizations — both for-profit and not-for-profit — that share CNI's commitment to furthering the development of networked information.

The Task Force will meet twice in 2004-2005: once in Portland, Oregon, December 6-7, 2004, and again in Washington, DC, April 4-5, 2005.

The Coalition's program is guided by a Steering Committee chaired by Richard West of the California State University system. As sponsor organizations, ARL and EDUCAUSE each appoint three representatives to the Steering Committee drawn from their member leadership. Three "at large" representatives on the Steering Committee contribute additional perspectives. The executive directors of ARL, EDUCAUSE, and CNI serve as *ex officio* members of the committee.

CNI was founded in 1990 by ARL and EDUCAUSE's two predecessor organizations, Educom and CAUSE. Paul Evan Peters was the founding executive director of the Coalition, serving until his untimely death in 1996. Joan Lippincott, now CNI's associate executive director, served as interim executive director until the appointment of Clifford Lynch as the new executive director in July 1997.

Program Themes

The work of the Coalition is structured around three central themes that we believe are the essential foundations of the vision of advancing scholarship and intellectual productivity:

Developing and Managing Networked Information Content
A network that will play an integral role in scholarly discourse and productivity must be rich in content and information resources. The Coalition seeks to

mobilize and bring together the many diverse communities that create and manage content. It works with these communities to develop methods of creating, organizing, evaluating, managing, and preserving networked information resources. The Coalition also furthers the development of economic, policy, social, and legal frameworks to sustain the creation and management of networked information and facilitate its access.

Transforming Organizations, Professions, and Individuals

The use of networked information is transforming institutions, professions, and the practices of learning and scholarship. For academic institutions, success in the new environment requires an unprecedented degree of collaboration among libraries, information technology groups, faculty, instructional technologists, museums, university presses, and other units; it demands new alliances and partnerships with publishers, information technology and network service providers, scholarly societies, government, and other sectors. Organizations must develop and share new strategies, policies, and best practices. Professions need to develop new competencies and enter into new dialogues that cross traditional disciplinary boundaries. The Coalition seeks to facilitate these collaborations and dialogues and to help professions and institutions work together in program strategy formulation.

Building Technology, Standards, and Infrastructure

The networked information environment relies on the development and deployment of standards and infrastructure components in order to enable the discovery, use, and management of networked information. The ability to use collections of resources in a unified, consistent fashion is essential and requires a continuing focus on interoperability of services. At the same time, promising new technologies need to be explored, assessed and tested, and sometimes adapted to the needs of the CNI community. No one institution acting alone can build the needed infrastructure or explore the full range of new technologies as they become available. Accomplishing these goals requires a coordinated community-wide effort. CNI seeks to provide leadership in this undertaking, to offer a context for collaborative experiments and test beds, and to serve as a focal point for sharing knowledge about new technologies.

The specific program initiatives that further these themes evolve from year to year. The initiatives and strategies planned for 2004-2005 are described below; most build upon and continue efforts already underway. Many of the initiatives seek to make strategic progress relevant to more than one theme.

It is important to recognize that the networked information environment is still changing rapidly. CNI is continually adapting its activities in response to new developments and opportunities. Indeed, the Coalition believes agility is essential in the current environment and invites a continuous dialogue with the members of the Task Force on the need for additional program initiatives. Because of this, the 2004-2005 Program Plan should be viewed as a snapshot of our thinking about priorities and opportunities as of late 2004 that will inevitably develop further during the coming year.

Policy and Consultative Activities

In addition to specific initiatives to address these overarching themes, the Coalition actively conducts an ongoing program of collaboration and advocacy to advance the development of networked information and its role in transforming organizations and scholarly activities. This is accomplished through both print-based and network publications; through participation in conferences, meetings, workshops, and committees on an institutional, regional, national, and international level; through contributions to standards efforts; through collaboration with key funding agencies, such as the National Science Foundation, the Institute of Museum and Library Services, the National Endowment for the Humanities, the Department of Education, and the Andrew W. Mellon Foundation; and through participation in organizations such as the Internet Society. Of particular note in this area are our contributions to the Library of Congress's efforts to map out a National Digital Preservation Program, to various studies and programs conducted by the U.S. National Research Council, and, more recently, to the Commission on Cyberinfrastructure for the Humanities and Social Sciences, established by the American Council of Learned Societies (ACLS). On an international level, we collaborate with other organizations concerned with networked information, including the U.K. Office for Library Networking (UKOLN) and the Joint Information Systems Committee (JISC) in the United Kingdom, the German Initiative for Networked Information (DINI), the German Research Foundation (DFG), and SURF, the Dutch higher education and research partnership organization for network services and information and communications technology.

Our contributions extend to the programs of our sponsor organizations, ARL and EDUCAUSE, in particular to the National Learning Infrastructure Initiative (NLII) and Net@edu. We also support, contribute to, and collaborate closely with other organizations that share in specific aspects of our programmatic interests and priorities as a strategic part of our own program work. These include:

The University Corporation for Advanced Internet Development (UCAID) manages the Internet2 initiative to promote advanced networking and applications within the higher education community. CNI works with UCAID on numerous interests, including video and multimedia applications and standards and high-bandwidth content-intensive applications.

The Council on Library and Information Resources (CLIR) addresses a broad range of issues involving the scholarly communication system, higher education, and libraries. The Digital Library Federation (DLF) is a CLIR program focused on the use of digital library technologies within research libraries. CNI collaborates extensively with CLIR and DLF on issues ranging from digital preservation to metadata.

CNI and IMS Global Learning Consortium have formed an alliance designed to explore the development of common architectural and functional models leading to joint specifications and improved technical interoperability in both digital libraries and learning object repositories.

The Coalition also contributes to the development of the networked information community by hosting electronic discussion groups, such as the CNI –COPYRIGHT forum, and acting as a distribution point for materials via its Web site and the CNI-ANNOUNCE e-mail list.

Meetings

The Coalition's semiannual Task Force meetings, scheduled for December 6-7, 2004, in Portland, Oregon, and April 4-5, 2005, in Washington, DC, not only allow CNI to highlight activities related to its program themes and to focus attention on significant new thinking and technology developments, but also provide an opportunity for the members to showcase and discuss a wide range of emerging issues and developments in networked information. Each member organization is invited to send two delegates, typically a senior information technologist and a senior librarian. Meeting participants are introduced to new developments that may reshape institutional plans in a forum that encourages collaborations and dialogues with others who share common interests.

CNI regularly co-sponsors a conference in partnership with JISC and UKOLN as part of our ongoing collaboration with these programs. Planning is underway for the next conference in summer 2006. The previous conference was held July 8-9, 2004, in Brighton, England. CNI, JISC and SURF are planning an event in the Netherlands in spring 2005.

CNI occasionally convenes invitational or public workshops to advance specific elements of its program plan and acts as a sponsor or co-sponsor for other meetings relevant to the CNI agenda. This year, such events include an invitational meeting to be held by CNI, RLG, OCLC, and ALA in January 2005 to examine issues related to the standards landscape; the EDUCAUSE Policy Conference, to be held in Washington, DC, April 6-7, 2005; the Joint Conference on Digital Libraries, scheduled for June 7-11, 2005, in Denver, Colorado; and the IS&T Archiving Conference, April 26-29, 2005, in Washington, DC. On October 15, 2004, ARL & CNI co-sponsored the forum *E-Research and Supporting Cyberinfrastructure* in Washington, DC.

Developing and Managing Networked Information Content

The Coalition has broad interests across all forms of digital content that can be used to support research and education. We provide a forum for information on leading projects in this arena, including a showcase at the CNI Task Force meetings for innovative faculty projects from our member institutions. In addition, we track developments and promote strategies for the creation of digital collections, digital libraries, and federated services in support of digital content. Further, because digital content cannot be divorced from the processes of teaching, learning, and scholarship that both create and rely upon that content, CNI is deeply involved in issues involving changing practices of scholarship, the restructuring of scholarly publishing and the broader transformation of scholarly communication, and innovation in teaching and learning. Through our Task Force meetings, specialized conferences and workshops, collaborative initiatives with other organizations, and publications, we provide leadership on digital content policy and scholarly communication.

Institutional Content Resources and Repositories

A centerpiece of CNI's work on networked information is built around the broad theme of the stewardship of institutional content resources – materials created by members of the institutional community, or that document the work, processes or intellectual and cultural life of an institution. The practice of such stewardship, which includes management, preservation, and access, is a central role for higher education and cultural memory organizations in the digital age. Our work here has two major components. One is to understand and help to advance and structure the wealth of new digital content. The program includes strategies and best practices for capture and documentation of performance events (in the broadest sense); our continuing efforts to understand and highlight experiments in the creation of new types of scholarly works for the digital medium, such as successors to the scholarly print monograph or the development of electronic theses and dissertations; and the availability of digital surrogates for existing collections of content. The second major effort focuses on approaches to manage the wealth of new content through development of institutional strategies such as the deployment of institutional repositories. Here CNI is addressing the full range of issues from policy and strategic planning through system architecture and standards for the management of complex digital objects (for example, the Metadata Encoding and Transmission Standard [METS] effort or approaches to the documentation of rights associated with content objects).

In 2004-2005 we plan several specific new efforts within this broad framework; these include the preparation, in collaboration with the Networked Digital Library of Theses and Dissertations (NDLTD), of a guide to management and stewardship issues for digital theses, and an effort to examine video resources (ranging from those held by public broadcasting organizations affiliated with educational institutions through those created by institutional programs to capture scholarly or cultural events) and how they can be accommodated within institutional content management and repository strategies. We also plan to conduct a study on the current state of institutional repository deployment, with particular focus on the nature of the content being deposited.

Digital Preservation

Closely related to the programmatic focus on stewardship of institutional content resources is the Coalition's continuing work on more broadly-based preservation of digital content. This is a central issue not only in the shift to network-based scholarly communication, but also in ensuring the continuity of cultural and scholarly memory in the digital age. It also continues to emerge as a fundamental social and public policy issue with wide-reaching implications. CNI works closely with ARL, DLF, CLIR, the Andrew W. Mellon Foundation, JSTOR, and RLG on the full range of technical, economic, and strategy issues surrounding digital preservation. We will also continue to collaborate with the Library of Congress in their efforts to develop and build consensus around a national digital preservation strategy and the infrastructure to realize that strategy, and in 2004-2005 CNI will have a particularly important role in disseminating information about the first round of pilot programs that are part of the Library of Congress National Digital Information Infrastructure and Preservation Program (NDIIPP). CNI also continues to explore issues at the juncture of records management, archival practice and digital preservation through its support of the Arizona State University Electronic College and University Records (ECURE) conferences (the next of which is scheduled for March 2005). Digital preservation progress will continue to receive extensive coverage at the CNI Task Force meetings.

Institutional and Disciplinary Implications of E-Research

The Coalition has long been engaged in efforts to chart, understand and facilitate the transformation of scholarly practice through the use of digital content and advanced information technology as part of its fundamental mission. In the arts and humanities, CNI, in collaboration with partners such as the J. Paul Getty Trust, the American Council of Learned Societies (ACLS), the National Research Council (NRC) and ARL, has provided leadership in computing and the humanities and outreach to build collaborations with the museum community. In the sciences and engineering, CNI has recently been heavily involved in helping the higher education and library communities to understand and frame emerging issues in cyberinfrastructure and e-science. In the 2004-2005 program year we will refocus and extend this work in several ways. We will continue to advise the ACLS Commission on Cyberinfrastructure for the Humanities & Social Sciences, which is due to produce a report in 2005, and to support the follow-on dissemination and action planning work as a major thrust in advancing e-research practices in the humanities. We will also begin exploring issues specific to the infrastructure needs of university museums in this context, and how their resources might become better integrated into the broader networked information framework. Connecting our work in e-research directly to our program focus on institutional content resources, CNI will continue to examine institutional policy and planning implications of cyberinfrastructure initiatives in both the sciences and humanities, and how these can complement disciplinary-based activities; this will include events such as the October 2004 joint ARL/CNI *E-Research and Supporting Cyberinfrastructure* forum held in Washington DC. And we will continue to seek collaborations with national efforts such as the work of the Data Curation Centre (DCC) in the UK, the SURF national institutional repository strategy in the Netherlands, and the cyberinfrastructure programs of the US National Science Foundation.

Transforming Organizations, Professions and Individuals

The Coalition has a longstanding commitment to highlighting and advancing organizational initiatives that facilitate collaborations across institutional units and professional cultures, with particular emphasis on collaboration between librarians and information technologists. We have also done extensive work in evaluation and assessment strategies, recognizing the continuing need to understand the effects and contributions of advanced information technology and digital content.

We are also offering insights into the ways that the current generation of students access digital information, create information objects, and use learning spaces in order to better design virtual and physical information environments that meet their needs and encourage deeper learning. We will contribute a chapter on Net Gen Students and Libraries to an EDUCAUSE NLII e-book on Net Gen Students, which will be published early in 2005.

Learning Spaces And Collaborative Services Delivery

Many educational institutions are offering public service points or facilities where library and information technology staff share responsibilities to serve users; other institutions are establishing teaching and learning support centers that bring together instructional technologists, faculty, information

technologists and librarians. Often, these service points and centers are developed in conjunction with building renovations, expansions, or new building projects. CNI seeks to share experiences and plans in these areas, and to abstract out best practices from the community's work.

In 2004-2005 we will continue to feature our work on learning spaces, partnering with other organizations such as the EDUCAUSE National Learning Infrastructure Initiative (NLII), the National Institute for Technology and Liberal Education (NITLE), and the Association of College and Research Libraries (ACRL). We will offer preconferences or other sessions at several national conferences and project briefings on learning spaces at our Task Force meetings. CNI's work focuses on learning spaces that have a particular connection with information organizations and professionals, such as libraries, computing centers, multi-media centers, and centers for teaching and learning. These learning spaces may incorporate formal classroom spaces but classrooms are not our primary focus. CNI also highlights learning spaces that have a cross-sector component, such as multi-media studios or information commons administered or staffed jointly by the library and information technology groups. We will continue to highlight not only facilities but also collaborative organizational structures and programs for service delivery through our resource web site in this area.

The Coalition will also seek to integrate our work in this area with the emerging Association of Research Libraries initiative on the role of research libraries in teaching and research, particularly at the undergraduate level.

Risk Management Implications of Networked Information Services

The wide-scale adoption of networked information services and shift to digital content raises a set of new questions about risk management and business continuity planning for libraries and higher education institutions, connecting developments in new business models for scholarly publishing, security issues and questions about digital preservation strategies to institutional strategic planning in new ways. CNI plans to begin a survey of this new and poorly explored territory through preparation of a new EDUCAUSE Center for Applied Research (ECAR) Bulletin in the 2004-2005 program year.

Organizational Policy Implications of Learning Management Systems

We will continue to pursue ideas first articulated in the 2002-2003 program year with the paper "The Afterlives of Courses on the Network: Information Management Issues for Learning Management Systems" (EDUCAUSE Center for Applied Research Bulletin 2002: 23) and to help interested member institutions to explore these policy issues. This work examines institutional policy implications related to the archiving and reuse of material originally hosted or created within the context of a learning management system (LMS). In addition, we will promote a clearer understanding of the role that access to digital information resources and information services through LMS can play in enriching curricula by contributing a chapter on libraries and course management systems to an EDUCAUSE book on next-generation learning management systems.

Executive Roundtable

At the Fall 2003 Task Force meeting, CNI inaugurated the Executive Roundtable, a new program which builds on the theme of collaboration between librarians and information technologists that has been at the foundation of the Coalition. Each Executive Roundtable event brings together leadership teams

(usually the chief librarian and chief information technology officer) from about ten institutions for a focused two-to-three hour discussion of a specific topic of interest on the morning of the first day of the Task Force meeting. In 2003-2004 the Executive Roundtable topics were institutional repositories and identity management; the first 2004-2005 roundtable will focus on learning spaces.

Building Technology, Standards and Infrastructure

CNI continues to be actively engaged in key areas of standards and infrastructure development. The Coalition is particularly concerned with facilitating the difficult and delicate transition of standards and technologies into operational infrastructure for the research, higher education and library communities.

In addition to the major program initiatives described here, the Coalition is involved in continuing discussion and tracking of a wide range of developments in areas as diverse as identifiers, digital books, metadata standards, distributed and federated network services, harvesting technologies, recommender systems and personalization technologies.

As we look at an evolving landscape that includes commercial web search engines, traditional library automation tools such as online catalogs, stand-alone abstracting and indexing databases, systems deployed by scholarly publishers, museums, and other content providers, and learning management systems, the Coalition is concerned with architectural and standards frameworks that can facilitate integration and interoperation. This perspective has motivated much of our work over the last few years on institutional repositories, the Open Archives Initiative, and learning management systems.

Interoperability and Interfaces Between Learning and Information Environments

In 2003 CNI launched a major collaboration with the IMS Global Learning Consortium to explore the interoperability issues and technical and standards interconnections between information and learning environments. The result of this work, a joint CNI-IMS white paper "Interoperability between Information and Learning Environments – Bridging the Gaps" was issued in the spring of 2004; earlier discussion drafts of this white paper formed the basis for various workshops and sessions at CNI and IMS meetings. Considerable work has already been launched as a result of this white paper, including examinations of repository functionality in various contexts and discussion about overlapping content packaging metadata approaches. During 2004-2005 we will continue to work together with IMS and other groups to address many of the issues mapped out in the white paper.

Authentication, Authorization and Access Management

Authentication and authorization have emerged as essential infrastructure components for network-based services and have become a particularly critical need as institutions increasingly rely on site-license agreements with information providers, implement online and distance education initiatives and form consortia for resource sharing or educational initiatives. The Coalition has been pursuing a program to define technology approaches, standards, best practices and policy and business issues for such an inter-organizational authentication and authorization infrastructure, and to help early adopter Task Force member

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organizations structure pilot projects, explore interoperability issues and share implementation experiences. Working in partnership with Internet2, EDUCAUSE's Net@edu program, and the Digital Library Federation, we will continue to seek to advance progress in this area. Of particular interest is the ongoing development and deployment effort surrounding the Shibboleth distributed authorization system and related technologies and organizational issues, federated identity initiatives, and public key infrastructure.

The Coalition takes a broad view of security, integrity and access management issues as they relate to the management of licensed resources and the stewardship and preservation of digital content. New technological capabilities — peer-to-peer resource sharing and the ability for users to amass and maintain massive personal digital libraries which include large amounts of copyrighted material drawn from licensed databases — continue to raise complex questions with both technological and policy dimensions. CNI believes that we must continue to explore these new behaviors and practices and to reflect this broad view in the focus on systems and network security within the higher education community. To help in our understanding of new issues in this context, we will be convening a group to discuss newly emerging privacy issues raised by the changing networked information landscape during this program year.

The System of Standards Development

The community relies on a system of standards development (which includes the scoping and drafting of standards, the building of consensus around them and the resolution of disagreements, education and publicity, and the subsequent maintenance of standards after they are formalized) and on various organizational structures that gather and commit resources to conduct this work; this is a key but too often unrecognized part of the infrastructure for information technology and digital content. While it is clear that the nature of the standards we use has changed dramatically in the past decade, and that the way in which standards are produced, codified, and maintained has also shifted substantially, there has been little systematic examination of the characteristics of these changes and of the success or failure of the standards-making infrastructure to respond to them. This is in spite of awareness of a number of disturbing problems, often having to do with resources and organizational issues, in the evolution and management of various key standards over the past few years. In response to these concerns, CNI, OCLC, RLG and the American Library Association are convening an invitational workshop in January 2005 to explore issues related to the changing standards landscape through a series of case studies. In addition, Clifford Lynch is chairing an external review committee for the National Information Standards Organization (NISO), one of the key formal standards development organizations, with a report due out in early 2005.

Recent Publications by CNI Staff

Joan K. Lippincott, "Libraries, Information, and Course Management Systems," forthcoming in Patricia McGee and Colleen Carmean, eds., *Course Management Systems for Learning: Beyond Accidental Pedagogy* (Information Science Publishing, 2005).

Joan K. Lippincott, "New Library Facilities: Opportunities for Collaboration," forthcoming in *Resource Sharing and Information Networks* 17:1/2 (2005).

Clifford A. Lynch, "The New Dimensions of Learning Communities," *Threshold* (Winter 2004).

Clifford A. Lynch and Neil McLean, "Interoperability Between Information and Learning Environments—Bridging the Gaps," a white paper produced jointly by IMS Global Learning Consortium and the Coalition for Networked Information (May 2004).

Clifford A. Lynch, "Life After Graduation Day: Beyond the Academy's Digital Walls," *EDUCAUSE* Review 38: 5 (September/October 2003).

Clifford A. Lynch, "The Visible Classroom," *EDUCAUSE* Review 38: 4 (July/August 2003).

Clifford A. Lynch, "Reflections Towards the Development of a 'Post-DL' Research Agenda," *Wave of the Future: NSF Post Digital Libraries Future Workshop*, June 15-17, 2003, Chatham, Massachusetts.

Clifford A. Lynch, "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age," *ARL Bimonthly Report* 226 (February 2003).

Joan K. Lippincott and Malcolm Brown, "Learning Spaces: More than Meets the Eye," *EDUCAUSE Quarterly* 26:1 (2003).

Clifford A. Lynch, "Colliding with the Real World: Heresies and Unexplored Questions about Audience, Economics and Control of Digital Libraries," *Digital Library Use: Social Practice in Design and Evaluation*, Ann Bishop, Barbara Buttenfield and Nancy Van House (eds.), (Cambridge, MA: MIT Press, 2003), pp. 191-216.

Clifford A. Lynch, "Preserving Digital Information to Support Scholarship," in Maureen Devlin, Richard Larson, and Joel Meyerson, eds., *The Internet & the University: Forum 2002* (EDUCAUSE, 2003).

Clifford A. Lynch, "The Afterlives of Courses on the Network: Information Management Issues for Learning Management Systems," *EDUCAUSE Center for Applied Research Bulletin* 2002:23 (November 2002).

Clifford A. Lynch, "Digital Collections, Digital Libraries, and the Digitization of Cultural Heritage Information," *First Monday* 7: 5 (May 2002).

Joan K. Lippincott, "Developing Collaborative Relationships: Librarians, Students, and Faculty Creating Learning Communities," *College and Research Libraries News* 63:3 (March 2002).

Joan K. Lippincott, "Cyberinfrastructure: Opportunities for Connections and Collaboration," *E-volving Information Futures: Conference Proceedings for the 11th Biennial Conference of the Victorian Association for Library Automation*, February 6-8, 2002, Melbourne, Australia.

Most publications, as well as selected presentations and interviews, are available online via: http/www.cni.org/publications.

Membership List

(As of November 2004) *Charter members are listed in italics.*

American Library Association
American University
Andrew W. Mellon Foundation
Arizona Department of Library, Archives and Public Records
Arizona State University
Associated Colleges of the South Technology Center (ACSTC)
Association of College and Research Libraries
Auburn University
Baylor University
Binghamton University, State University of New York
Boston College
Boston Public Library
Brigham Young University
British Library
Brown University
Bucknell University
California Institute of Technology
California State University, Office of the Chancellor
Canada Institute for Scientific & Technical Information
Canadian Heritage Information Network
Carnegie Mellon University
Case Western Reserve University
Center for Educational Technology (CET)
Center for Research Libraries
Centers for Disease Control and Prevention
Clemson University
College Center for Library Automation
Colorado State University
Columbia University
Connecticut State University
Cornell University
Council on Library and Information Resources
Countway Library of Medicine
Dartmouth College
Deutsche Forschungsgemeinschaft (DFG)
Eastern Michigan University
Elsevier Science Publishers B. V.
Emory University
Endeavor Information Systems, Inc.
Enoch Pratt Free Library
Ex Libris (USA), Inc.
Five Colleges, Inc.
Florida Atlantic University
Florida State University
Gates Center for Technology Access/Bill & Melinda Gates Foundation
George Mason University
George Washington University
Georgetown University

Georgia Institute of Technology
Georgia State University Pullen Library
Harvard University
IMS Global Learning Consortium
Indiana University
Indiana University-Purdue University at Indianapolis
Internet Society
Iowa State University
Ithaka
J. Paul Getty Trust
John Wiley & Sons, Inc.
Johns Hopkins University
Joint Information Systems Committee
JSTOR
Kent State University
Las Vegas Clark County Library District
Library and Information Technology Association
Library of Congress
Library of Virginia
Los Alamos National Laboratory Research Library
Massachusetts Institute of Technology
Mayo Foundation
McGill University
Metropolitan New York Library Council (METRO)
Miami University of Ohio
Michigan State University
Midwest Instructional Technology Center (MITC)
MINITEX Library Information Network
Mississippi State University
Missouri State Library
Mitre Corporation
National Agricultural Library
National Archives and Records Administration
National Institute for Technology and Liberal Education (NITLE)
National Institutes of Health Library
National Library of Australia
National Library of Canada
National Library of Medicine
Naval Research Laboratory
New York Public Library - Research Libraries
New York State Library
New York University
North Carolina State University
Northeastern University
Northwestern University
OCLC, Inc.
Ohio State University
Ohio University
Old Dominion University
Oregon State University
Pennsylvania State University

Princeton University
Pro Quest Information and Learning
Public Library Association
Publishers Licensing Society
Purdue University
Rensselaer Polytechnic Institute
Research Libraries Group, Inc.
Rice University
Rochester Institute of Technology
Rutgers University
Sage Publications
Sirsi Corporation
Southern Illinois University at Carbondale
Southern Methodist University
Stanford University
State & University Library (Aarhus, Denmark)
State University of New York at Albany
State University of New York, System Administration
State University System of Florida
Sun Microsystems, Inc.
Syracuse University
Temple University
Texas A&M University
Texas Tech University
Thomson Scientific
Tufts University
United States Department of Education, National Library of Education
United States Government Printing Office
Universiteit Van Amsterdam
University of Alabama
University of Alaska
University of Arizona
University of British Columbia
University at Buffalo, State University of New York
University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, Office of the President
University of California, San Diego
University of California, San Francisco
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University of Michigan
University of Minnesota
University of Mississippi
University of Missouri at Columbia
University of Montana
University of Nebraska at Lincoln
University of Nevada, Las Vegas
University of Nevada, Reno
University of North Carolina, Chapel Hill
University of North Carolina (System)
University of North Dakota
University of North Texas
University of Notre Dame
University of Oklahoma
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University of Pennsylvania
University of Pittsburgh
University of Rochester
University of San Francisco
University of South Carolina
University of Southern California
University of Tennessee
University of Texas at Arlington
University of Texas at Austin
University of Toronto
University of Utah
University of Vermont
University of Virginia
University of Washington
University of Wisconsin at Madison
University of Wisconsin System
University System of Georgia
Vanderbilt University
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Virginia Polytechnic Institute and State University
VTLS, Inc.
Washington Research Library Consortium
Washington University
Wesleyan University
Yale University