

# Prospects for Systemic Change across Academic Libraries

JAMES G. NEAL

**James G. Neal ([jneal@columbia.edu](mailto:jneal@columbia.edu)) is Vice President for Information Services and University Librarian at Columbia University.**

Charles J. Henry, in the January/February 2011 column for the E-Content department, challenged readers to focus on a fundamental repositioning, consolidation, and convergence and to steer away from isolation and adhococracy in the future development of the academy and its critical components. I will focus here on the academic library, and argue further that primal innovation, a basic commitment to risk and experimentation, and deconstruction—breaking down the current incoherence and rebuilding according to new axioms—are the essential instruments. Understanding and acting on the critical trends affecting academic library progress is essential. After that, translating those influences into bold and systemic change is imperative.

Those of us involved with academic libraries are confronted by users' rapidly shifting behaviors and expectations, a demand for customized and personalized information environments, and individual participation and control. Therefore, the aging and ineffective service paradigms that academic libraries sustain will not work. Our users have too many viable alternatives and will not tolerate rampant information-discovery failure.

Many academic libraries continue to maintain redundant and inefficient library operations, automating old workflows and resisting new combinations and outsourcing strategies to carry out the basic work. They are missing opportunities to take advantage of scale and network effects through aggregation and to move core functions and services to the cloud. Mobile technologies have accelerated the pace of collective innovation, a

global apps revolution. Another key development is mutability—a state of constant change, hybrid structures, and maverick strategies. But academic libraries tend to be built for a slower pace of change and too often fail to link structures and resource allocations to priorities.

Academic libraries are seeking to squeeze into a learning and scholarly framework increasingly defined by openness: open architecture, open design, open knowledge, open data, open source, and open access. Our support for the new majority learner, often with an episodic, distant, other-directed, and career-focused relationship with the college/university, is challenged. Our response to the deformatism and destructuring of scholarship must help to address the future of the scholarly journal and scholarly monograph, the often chaotic and diverse repository movement, new forms of quality review, and the presentation of the born-digital cultural, scientific, and intellectual record.

We face heightened accountability and assessment. The institutions and governments that fund academic libraries want to understand if we are advancing college/university goals, supporting users' objectives, and serving state and national interests. Have we created effective measures of user satisfaction, market penetration, success and impact, cost-effectiveness, and productivity? This is clearly linked to the new economic context of smaller budgets, reduced purchasing power, less political support, and intense competition for resources.

Academic libraries are moving from *kumbaya cooperation* to *radical collaboration*. We know how to cooperate on a significant scale in such areas as cataloging, interlibrary loan and document delivery, and licensing databases, for example. But we need a deeper integration of operations in the areas of mass production, early co-investment as we build new infrastructures and new initiatives, and commitment to a shared network of centers of excellence.

Given these powerful trends, what are the systemic responses that

academic libraries should collectively pursue? First, after extended study and discussion, we should implement a national network of "last copy" print repositories. The rapidly expanding and dependable access to electronic copies as the primary path to information for users presents a remarkable opportunity to significantly reduce the book warehouses (aka print collections) on thousands of campuses across the country. The mass digitization of books from research library collections and the successful electronic publishing experience enable early coordinated movement. We will need to decide how many copies, and where, and with what standards and accountability. What will be the registry, business, and service models and requirements?

Another transformative direction is the prospective creation of the so-called National Digital Library (NDL). Articulated and advanced by Robert Darnton, director of the Harvard University Library, and an expanding circle of advocates and enablers, this library has the goal of making available, on a national if not global scale, the full-text digital collections that are being created among and by libraries across the United States. Focused perhaps initially on the historical public-domain products of mass-digitization projects, the NDL could be rapidly expanded to embrace a wide range of content including in-copyright works contributed by publishers, authors, and organizations. This "knowledge commons" could incorporate sound, video, data, web, software, and archival content and could integrate tools for effective discovery and application of the vast resources. The NDL could link with peer national libraries around the world; some advocates have suggested a "dot-LIB" domain on the web as an effective framework that would allow for widespread and distributed participation and less cumbersome implementation.

One of the digital content objectives that demands a more coordinated national strategy is the collection, curation, and archiving of websites and web documents. Libraries need to advance a national plan, carefully working with the Internet Archive and the Library of Congress, to make sure

that the intellectual, cultural, and scientific record is captured and preserved for permanent availability and use. This is a "collection development" imperative that will ensure that born-digital resources will not be lost to learning and research and that the "bibliographic rot" we are now experiencing will not undermine the integrity and productivity of the scholarly infrastructure.

A further digital arena for which a systematic solution is required is e-research cyberinfrastructure and research information management. The open data and archiving mandates linked to federal agency funding have spawned a number of researcher, government, and vendor solutions. The scope and rigor of data capture and curation may defy institutional solutions. Researchers note how important data extraction, distribution, collaboration, visualization, and simulation will be to their work. Is there a role for academic libraries to partner with their data centers and their researcher communities in providing leadership and coordination that will enable a regional or a disciplinary or even a national suite of solutions?

One of the important achievements of the U.S. academic library community is the breadth and depth of global resources that have been collected and made available. Starting in the 1950s, there have been calls for a more coordinated approach to maximize the coverage of foreign acquisitions and to leverage the language, regional, and disciplinary expertise required to build these international collections. The globalization of learning and research and the growth in international partnerships have made these print and electronic resources even more important. But at the same time, we are seeing many academic libraries retreat from this commitment. Even though organizations like the Center for Research Libraries, through its Global Resources Network (<http://www.crl.edu/grn/>), have worked to fill in the gaps, the model of shared responsibility for global resources must be reactivated and a more systematic approach organized.

Similarly, we must raise the question of why the overwhelming majority of

academic libraries in the United States continue to maintain a full suite of technical services operations. The acquisition, management, cataloging, preservation, and digitization of library resources—the mass-production aspects of library work—should be integrated into a network of regional service agencies. This would enable efficiencies and quality that may not be achievable on the local level. But more important, doing so would release staff resources to be focused more aggressively and productively on working with the user and on partnering in the learning and research work of the campus.

All of these initiatives prompt a reconsideration of academic library space standards and utilization. We must advance from the *trompe l'oeil* library facilities we currently maintain to new strategies for learning, intellectual, social, and collaborative spaces characterized by flexibility, adaptability, and usability. We need to focus less on statistical and operational formulas, designing for the user rather the collection. We need to bring the classroom and the academy into the library, thinking more about playground and less about sanctuary.

Academic librarianship is an "information-poor" information profession. We need to develop—together and in partnership with our IT colleagues and appropriate faculty—a robust R&D capacity to enable data-driven decision making and progressive services. We need new knowledge creation through a network of laboratories for experimentation that can help us move ideas much more quickly from concept to market.

One of the important byproducts of an expanded R&D enterprise would be the building of a national library program to create and distribute applications that support innovative and effective information discovery and use. The apps revolution spawned by the proliferation of smartphones and tablets demonstrates the general hunger for such capabilities. Who is defining and advancing the applications that support learning, teaching, and research? We need a higher education "apps store" where we can

share our technology and together build creative solutions and functionality.

The systemic actions outlined above will increasingly depend on supportive national information policy. In the legal and legislative wars, the higher education and library communities are generally losing the battles. We are represented by organizations that are advocating for us, but the time may be right to create a library political action committee (PAC) that can provide support for political candidates who speak on our behalf and that can endorse and oppose legislation of core interest to our work. The information policy agenda we care about is extensive: intellectual freedom, privacy, civil liberties, telecommunications, government information, workforce policy, funding for education and research, and copyright, for example.

The vision for academic libraries is shifting rapidly, but the multiple personalities of our work persist. We will collectively be legacy, responsible for managing centuries of societal records in all formats. We will be infrastructure, an essential combination of space, technology, systems, and expertise. We will be repository, ensuring the long-term availability and usability of our scholarly and cultural output. We will be portal, serving as a sophisticated and intelligent gateway to expanding multimedia and interactive content and tools. We will be enterprise, more focused on innovation, business planning, risk, and "collaboration as the new competition." And we will be public interest, defending and expanding access to information.

© 2011 James G. Neal

*EDUCAUSE Review*, vol. 46, no. 2 (March/April 2011)