Chapter Ten

Fostering Collaboration in the 21st Century Research Library

Elliot Shore (PhD)

Association of Research Libraries
Executive Director
Association of Research Libraries
Washington, DC
USA
Email: elliott@arl.org

Kathleen Shearer

Association of Research Libraries
Partnership Consultant
Association of Research Libraries
Washington, DC
USA
Email: m.kathleen.shearer@gmail.com

Abstract

The 21st century research library can no longer exist in isolation. In today's world, the challenges of providing access to and preserving research content, as well as supporting new educational models, requires entering into deep relationships and collaborations with other libraries and stakeholder communities. Research data management, scholarly communications, digital preservation, content licensing, MOOCs, digitization- the success of all of these services will be determined based on our ability to work successfully with others.

In 2014, the Association of Research Libraries (ARL), an association with 124 members from research libraries in the US and Canada, began a profound transformation in order to foster greater collaboration and innovation amongst its members. A key component of the new approach involves catalyzing action within the broader ecosystem of higher education, through a "system of action". A system of action is made up of interrelated components that affect the way people do things. These components are also interdependent. A change to one component affects the response of all the other components. Through collaboration within this system of action, ARL aims to catalyze collective action.

Introduction

This article describes the results of strategic thinking and design work that was undertaken by the US-based Association of Research Libraries from the fall of 2013 through the spring of 2014 which has resulted in a new Strategic Framework and innovative approach to the work that ARL undertakes on behalf of its members. This article draws significantly and builds on a report published on the ARL website documenting the process to develop the strategic framework.

The Association of Research Libraries (ARL) is a nonprofit organization of 124 research libraries at comprehensive, research institutions in the US and Canada.

In these times of rapid change, libraries must become adaptable and responsive in order to offer relevant services to their user communities. Networked technologies, in particular are profoundly transforming all aspects of our society, including research and education, libraries and users, the nature of our collections, resource discovery and so on. David Weinberger, a senior researcher at Harvard's Berkman Center for Internet & Society, describes the near term future as looking like this: "There will be full, always-on, 360-degree environmental awareness, a semantic overlay on the real world, and full-presence massive open online courses."[1] Internationalization of research is another important trend that cannot be ignored by libraries. This growing internationalization is shifting us to a "global knowledge and innovation geography" that diminishes the importance of international boundaries and increasingly requires libraries to collaborate across jurisdictions, geographies and language. Further related trends include greater openness and inclusivity, and the shrinking distinction between formal and informal publications. In the words of Carla Hesse, Professor of History at the University of California, "in the future, it seems, there will be no fixed canons of texts and no fixed epistemological boundaries between disciplines, only paths of inquiry, modes of integration, and moments of encounter."[2]

The ARL Strategic Thinking and Design (ST&D) Process was fuelled by the deep desire of the ARL members to rise up to the challenges facing libraries and higher education in the 21st century, and was funded by grants from the Institute of Museum and Library Services and the Andrew W. Mellon Foundation.

This was an unprecedented project for ARL because, unlike most typical strategic planning initiatives, the process did not list the challenges and trends that research libraries face and then try to meliorate them. In fact, it was specifically not a planning exercise, because the notion of planning in the 21st century is likely a futile exercise. The word planning itself assumes stability and slow change – we used the terms thinking and design to denote what we were aiming for. The process—which engaged more than 360 people drawn from the library community in Canada and the United States and from other important stakeholder communities- used a technique called "worldbuilding," coupled with deep research into the strategic planning in which higher education institutions have already invested heavily, to fashion a "System of Action" for ARL to achieve its desired future.

The genesis of the ST&D process was a 2012 ARL Fall Forum lecture, "Changing How We Think About and Lead Change"[3], delivered by John Seely Brown, Visiting Scholar, University of Southern California, in which he warned the audience about the competency trap: because we are experts in what we know, when we confront problems, we do more of what we already know, rather than look to the larger context for completely new solutions. The moral of his story: "incremental change lands you on the rocks."

Dr. Seely Brown's lecture challenged ARL to

[1] http://www.pewinternet.org/2014/10/09/killer-apps-in-the-giga-bit-age/#link2
[2] http://www.arl.org/storage/documents/publications/ff12-brown.pdf (pg. 7)
[3] http://www.arl.org/storage/ documents/publications/ff12-brown.pdf

design meaningful experiences that tap into intuition more than reasoning, to encourage innovative practices around authorized ones, and to do this in a rhythm that balances the dramatic with the systematic by conceiving of a vision that is compelling, strategically ambiguous, positive, and aspirational.

ARL embraced these ideas by embarking upon an extensive, broadly engaging strategic thinking and design process that aimed to frame the critical work of the Association and define ARL's role in higher education. Focusing on these two elements will enable the association to be more responsive to rapidly changing priorities and member institutions' needs. The timing intentionally coincided with new leadership for ARL, and also reflected the evolutionary path of research libraries and the need to align ARL with contemporary contexts and issues of its members.

The Context

ARL has historically played the role of enabling individual research libraries to operate more effectively within parent institutions. Programs have helped inform and educate the membership and stimulate advocacy within individual institutions and within contexts ranging from scholarly communication and publishing to public policy.

ARL's mission and those of its member institutions are, by definition and intent, deeply intertwined. In the latter part of the 20th century, ARL and its member libraries were focused on and structured around library functions such as collections, access, preservation, and so on. In 2005, a new ARL strategic plan shifted the organizational focus toward three primary strategic directions: Advancing Scholarly Communications, Influencing Public Policy, and Transforming Research Libraries. Throughout its history, ARL has also provided enabling resources and support for organizational capacities such as diversity and statistics. And now, the association has turned its attention to a new type of relationship among and with its member libraries. With a change of

leadership at ARL and a strategic plan that was initiated about eight years previously, the Association decided that it was time to fashion ARL into a force for getting things done.

The ST&D process was framed by Dr. Seely Brown's compelling articulation of the environment in which organizations exist today: Change is frequent, and previous strategies are no longer effective.

Three issues were noted:

1. The challenges we face are both fundamental and substantial.
2. We have moved from an era of equilibrium to a new normal—an era of constant disequilibrium.
3. Our ways of working, ways of creating value, and ways of innovating must be reframed.

In the last several years, ARL and its members began to recognize that the traditional committee structure at ARL, whereby members convened to discuss topical issues two times a year, was not a suitable mechanism for addressing many of the challenges for research libraries in the coming years.

Shaping a Framework for ARL

Working with a design consultant, the ST&D process incorporated content analysis of library and institutional strategic plans, 10 regional meetings attended by over 360 participants (Figures 1 and 2), and five "design studios" to give shape to a new action-oriented framework for the organization. The initiative was led by an architect – Ann Pendleton-Jullian – who scaffolded for us a process that allowed the best thinking to emerge.

The ST&D process used a distant time horizon, 2033, to design for longer-term changes and the evolutionary path forward for research libraries, while acknowledging the changing nature of planning in the context of the contemporary dynamic environment. Rather than creating a static plan, the design process recognized the need for a more organic framework that would reflect the

agile structure and more active roles necessary for research libraries and for ARL.

An ST&D Working Group was tasked with creating a framework based on the information gathered in the process above. The group described the context in which planning for both ARL and for research libraries must be situated:

- Research libraries are intimately engaged in and support the full life cycle of knowledge discovery, use, preservation, and sharing in diverse contexts of the university's mission.
- Within two decades, the research library will have transitioned its focus from its role as a knowledge service provider within a single university to become a collaborative partner within the broader ecosystem of higher education.
- ARL enables and catalyzes research libraries to leverage and mobilize individual assets toward the collective advancement of learning, research, and societal impact.

The ST&D process surfaced a rich array of metaphors to capture the ways that technology and associated changes in research and learning have transformed the research library's role. The language that emerged during the process spoke to the ubiquity and pervasiveness of knowledge construction in contemporary times. Changes within disciplines, requirements for productive research and learning, and societal pressures on the academy are drivers of change. There is evidence of critical evolutionary change within the knowledge environment, moving farther down the path from largely disciplinary lines toward more inquiry-driven, individually motivated, and collaboratively constructed teaching, learning, and research. These changes have had and will continue to have profound impact. ARL was then challenged to transform these compelling metaphors into a plan for collective action.

Several principles guided the ST&D working group's progress toward a new ARL Framework.

- The framework should recognize the emergent roles and historic strengths of the organization and its membership.
- The framework should articulate a vision for the organization (in the context of the future of research libraries and their institutions), and it should reflect new, more active roles for ARL.

As noted by the working group during the process: "ARL is our vehicle for getting things done together with key partners." These emergent roles characterize a set of actions in which ARL may inspire, introduce, and catalyze efforts to improve the research library ecosystem. ARL might in some cases broker, connect, and mediate partnerships. Or it might facilitate, scaffold, structure, or support new developments. The association may work toward shaping, designing, influencing, or even building new coalitions or new infrastructure that it might manage, run, or spin off. These new roles will be balanced on the bedrock of ARL's historic strengths in policy and advocacy, diversity and leadership, and statistics and assessment.

The rationale for this thinking is that if the research library shifts from its role as a knowledge service provider within the university to become a collaborative partner, then it becomes a more valuable knowledge and service partner for the university, which is becoming more distributed and more connected. And if we can change our thinking from libraries as single units serving an individual institution and more as a collective then they can take on other roles and other partners and have a much more profound impact on our environment.

ARL Strategic Framework 2015+

Out of this process emerged the ARL Strategic Framework 2015+, which contains the following vision and principles:

In 2033, the research library will have shifted from its role as a knowledge service provider within the university to become a collaborative partner within a rich and diverse learning and research ecosystem.

From Incremental Change to Systems of Action

The ARL Strategic Framework aims to take organizational roles to a more active level, facilitating work across institutional boundaries, enhancing impact, and improving efficiency by making ARL's resources work better for member institutions. ARL's engagement is not singular, but will be increasingly collaborative with other related organizations and stakeholders.

A key component of ARL's new approach involves catalyzing action within the broader context—or ecosystem—of higher education, through a "system of action". A SoA initiative is "made up of interrelated components that affect the way people do things. These components are also interdependent. In their forthcoming book, Seely Brown and Pendleton-Jullian explain that a change to one component affects the response of all the other components. And they are interactional, meaning that single actions or events can reverberate throughout the entire system. It may be easier to conceive of ARL's investments in the future as individual initiatives within discrete systems. However, each initiative affects different parts of the research library ecosystem in ways that are ultimately interrelated. Strategies to address the System of Action have a critical characteristic—they scale.

A System of Action affects the way people do things in order to close the gap between the current state and the imagined/goal state. A good example of a System of Action is El Sistema, a music education program started in Venezuela in 1975 by economist and musician José Antonio Abreu.[4] El Sistema started as one school that gave children a productive place to be every day, rather than on the streets. The program does not simply teach music, it forms orchestras, teaching children how to work together as a community. The system is credited with giving its members ambition and positively changing the communities in which it operates. El Sistema is a model of how a music program can both create great musicians and dramatically change the life trajectory of hundreds of thousands of a nation's neediest kids.[5]

So, the challenge of the new ARL framework is to develop system of action initiatives that impact the system in ways that create positive and profound progress to achieve the vision.

System of action initiatives will fall into one or more of five domain areas that were defined during the ST&D process. The domains for each initiative within the system of action reflect areas for collective action as well as areas for individual institutional attention. The scope of each domain area, outlined below, will be further refined and developed by ARL design teams over the summer of 2015:

Collective Collections: ARL will motivate the creation of deep and wide platforms for ensuring that knowledge resources are accessible and sustained through federated networks of print, digital, data, and artifactual repositories, created and managed by collectives of institutions in North America and beyond. In all cases, the work of supporting the most effective access, retention, and preservation will take place through a collective investment that respects and supports local interests, while leveraging collective collections. ARL's work will not only seek to guide the creation of governance, shared protocols, best practices, trusted relationships, and financial models, but will in some cases extend to convening parties to pursue the creation of new entities that conduct work in this space.

Scholarly Dissemination Engine: In order to promote wide-reaching and sustainable publication of research and scholarship, ARL libraries will mobilize efforts to achieve collaborative infrastructure and financial models for publishing. These efforts will ensure that the publications produced retain and enhance rigor and quality, embed a culture of rights sympathetic to the scholarly enterprise, and use financial models that are sustainable. These publishing efforts will

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[4] http://www.elsistemausa.org/el-sistema-in-venezuela.htm

[5] Ibid

focus on the widespread and critical dissemination of scholarship as a permanent record of research institutions.

Libraries that Learn: ARL-organized enterprises will incubate the design, funding, and building of coalitions of libraries that make decisions through evidence-based investments enabling the creation of new concepts, theories, and operational designs in support of research and learning environments. These projects will seek to employ integrated analytical strategies that will mine data for guidance in transforming those environments.

ARL Academy: ARL will foster the development of an agile, diverse workforce and the inspiring leadership necessary to meet present and future challenges. Requisite expertise and skills will come from new as well as traditional domains, stimulating opportunity and challenging existing research library culture. Coordinated action within ARL will continue to focus on critically important diversity initiatives and leadership programs. To ensure the development of the talent and expertise necessary for future success, ARL will seek partners in establishing a formal, potentially credentialed curriculum for library professionals and for those new to libraries. ARL could further explore partnerships to develop agile research nodes or centers of excellence that would engage leading academic librarians and faculty to take on research and develop projects.

Innovation Lab: ARL will develop an Innovation Lab, an incubator for new ideas and the seeds of change. A fluid, multi- institutional enterprise, the Innovation Lab will take the form of coordinated, collective activity that supports principled opportunism regarding new developments. ARL, through its coordinating role, may secure new capital and use investment to spur innovation.

System of action initiatives can cut across a number of domain areas. Indeed, the overlaps are important as they encourage collaboration across silos of interest and activity. This paper will present the conceptual framework underlying this new approach and provide some examples of the kind of collaborations made possible for research libraries by this approach. System of action initiatives will be managed and actualized in the context of these broader domain areas to ensure appropriate organization support and resources are provided.

Essential Capacities

Cross cutting the topical areas, ARL also recognized that there are a number of important enduring and new capacities that are needed to be able to support system of action initiatives.

These essential capacities serve as the foundational elements that support ARL's future directions. The capacities reflect work that must be done in order for ARL to successfully implement current and new activities. The capacities are not stand-alone in scope and action. Rather, they will be considered and integrated into future initiatives.

The six essential capacities are:

Advocacy and Policy covers a wide and expanding range of activities that advance and promote research libraries and their growing portfolio of roles. While this capacity includes analysis of legal and legislative public policy issues, it also encompasses advocacy for issues of timely importance to the higher education community.

Assessment incorporates existing and new strategies that support ARL's work. Data will be collected that offer information and support decision-making (e.g., annual statistics). Processes for collecting and disseminating analytics and metrics will be created. Some ARL initiatives will include a research and development element that will be instituted in this capacity.

Communication and Marketing is an ongoing activity of ARL that will be strengthened. This capacity includes basic activities such as the ARL website and communications disseminated to ARL members and the larger community. Marketing will further fuel the organization's advocacy potential in new realms.

Issue Incubator recognizes ARL's role to surface trends and opportunities of importance to

research libraries, leveraging expertise and early intelligence of strategic partners, such as CNI and SPARC, as well as other organizations.

Membership is critical to the Association's success, and the roles that members play are likely to evolve over time as members set the direction of the organization. The scope and criteria for membership in ARL may change over time as the ecosystem of research continues to expand.

Partnerships, including higher education, library, and other scholarly and research organizations, play an important role in ARL's success achieving its goals. Partnerships will be developed based on the scope and parameters of initiatives. The ongoing development and nurturing of partnerships is a responsibility of all ARL members, the executive leadership, and staff.

Case Study: SHARE

One example of a system of action initiative is SHARE (SHared Access Research Ecosystem). SHARE was launched in 2014 by three higher education organizations in the United States: the Association of Research Libraries (ARL), Association of American Universities (AAU) and the Association of Public and Land-grant Universities (APLU).

The aim of SHARE is to develop the tools and workflows that will allow us to better track the wide array of research outputs. SHARE will collect, connect, and enhance scholarly metadata in the context of a single registry or index, and therefore simplify how various research activities and outputs—from journal articles, to research datasets, to data management plans and grant proposal information—can be identified as elements of a single research project, institution, or funder.

Unlike commercial services, such as SCOPUS and Science Citation Index, SHARE will aggregate the metadata from a wider range of sources and research outputs including journal articles but also datasets, software code and so on. In addition, it will connect information about these types of outputs to other information related to

research data management, such as proposals, data management plans, researcher bios, and funder and institutional information. The SHARE index will be completely open allowing any user to mine and use the information for their own purposes.

By creating an open, comprehensive data set, SHARE will present opportunities for innovation in communication, visualization, and dissemination of information about research for the advancement of scholarship. As with El Sistema, SHARE has a short-term objective, but it is also anticipated that SHARE will have a more profound impact on the scholarly communication environment by advancing openness, and improving the discoverability and recognition of a wide range of research outputs have to date been ignored in our formal assessment and evaluation processes.

As with all system of action initiatives, SHARE is being developed with the issue of scale in mind. SHARE began initially by aggregating metadata from information providers in the United States and Canada, however, SHARE is expand and ultimately, the aim is to collect comprehensive metadata from major information providers from around the world.

SHARE is funded in part by a joint $1 million grant from the Institute of Museum and Library Services (IMLS) and the Alfred P. Sloan Foundation. SHARE has partnered with the Center for Open Science (COS), a non-profit technology company that provides free and open services to increase inclusivity and transparency of research, for infrastructure development.[6]

Conclusions

As stewards of some of the most significant repositories of the story of human civilization, library leaders are by the nature of their work sensitive to the long-term responsibilities that they carry: shepherding these carefully crafted institutions into the future while being mindful of their

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[6] http://centerforopenscience.org/

crucial legacy. However, in an era of constant dis-equilibrium, libraries and their related associations need to develop new strategies in order to manage and adapt to these changes. Furthermore, libraries must be responsive, while also retaining their traditional roles serving as the long-term preservers of societies collective knowledge.

To that end, ARL is crafting and implementing a comprehensive program through which the association can go beyond incremental change toward more profound impact via system of action initiatives. Some initiatives, such as the SHared Access Research Ecosystem (SHARE), are already in play or in exploratory phases, and others will be identified and nurtured over the coming years.

The prologue to this process is completed—and given the nature of the process, the association is currently actively engaged in transforming itself into an instrument that can effectively, flexibly and with agility, be an agent of change. It wants to allow itself to try large and small scale collaborations, looking to effect the higher education ecosystem in positive ways. To act decisively, quickly and purposely to translate the symbolic legacy of the research library into the dynamic world of linked information technologies.

References

Association of Research Libraries, 2014. *Report of the Association of Research Libraries Strategic Thinking and Design Initiative.* [Online]. Available: http://www.arl.org/storage/documents/publications/strategic-thinking-design-full-report-aug2014.pdf [Accessed 25 June 2015].