Transforming Research Libraries: An Introduction

Barbara I. Dewey, *University of Tennessee, Knoxville*
Transforming research libraries: an introduction

Barbara I. Dewey

Introduction

Transforming Research Libraries for the Global Knowledge Society explores critical aspects of change necessary for successful transition into our vastly different 21st century multicultural environment. Research library leaders from different parts of the globe with real world experience navigating transformational change discuss key aspects of the evolving future of research libraries, academic librarianship, research collections, scholarly communication, and the changing nature of global scholarship.

Examining research library transformation from a global perspective acknowledges the broad context of scholarship as well as the imperative for international perspectives and connections in the teaching and learning process. Global perspectives take into account the rapidly changing formats of scholarship to digital with increasing accessibility via the web. Research libraries throughout the world are, more and more, managing abundance rather than scarcity of resources. However, this kind of management is different and requires acute comprehension of relevant physical and virtual environments. Effective support for research, teaching, and learning depends on connections, collaborations, and partnerships at levels never seen before.

Why is the study or analysis of transformation so vital? Are we not always in the transformational process as evidenced throughout history? The difference today is the need,
based on technological and societal changes, to reconceptualise the role of the research library and its relationship to the unending renewal and continuity of the human record. Lougee (2002) noted three themes: growth of distributed technologies, development of open paradigms, and the emergence of the library as a diffuse agent.\(^1\) Her analysis of the diffuse library holds truer more true as we make our way deeper into the first quarter of the 21\(^{st}\) century.

At the same time the research library remains a physical entity placed within the context of a college or university. While we continue to embrace descriptions of the library as the essence, the heart, or the core of the university, it is actually part of the unending continuum consisting of the human intellect including thought and knowledge from the past, and the promise of new discovery and insight into the future. The future of the library is bright primarily because it is such a fundamental part of the continuum and to describe it as a singular or separate entity is virtually impossible. The research library’s coreness goes beyond the center. It permeates throughout the world and so must its leadership.

*Transformation from different perspectives*

The chapters in this book explore key aspects of change in the transformation process. The first section, “Framing the 21\(^{st}\) Century Research Library,” begins with Jim Neal’s groundbreaking discussion on the emergence of radical collaboration as the foundation for redefining research libraries using the example of the Columbia-Cornell 2CUL project. Graham Jefcoate provides provocative views of the future and what it might look like for the research library, especially in terms of our human resources. Jennifer Younger continues this theme through her exploration of
the role of leadership in the changes and transformations needed to support next generations of users as we have served multiple generations in the past. Anthony Ferguson uses the experience of Chinese research libraries to discuss themes of transformation from another cultural lense. Neal, Jefcoate, Younger, and Ferguson provide a context and general overview of directions, issues, and challenges underlying the changes necessary for research libraries to remain relevant and successful.

The section, “Organization and the University Context,” focuses on the imperative for transformations achieved in concert with institutional goals and priorities. Brinley Franklin provides insight into reorganizing staff and effort aligned with programmatic and strategic direction rather than primarily with function. Jeffrey Trzeciak explores organizational transformation using human performance technology methods as a framework harnessing analytical tools and techniques to implement change. Franklin and Trzeciak articulate the need to transform library organizations based on 21st century campus needs and measured by how well we meet these needs.

“Partnerships and Collaborative Environments” includes an overview of the expanding partnerships and collaborations reflected throughout the research library Nancy Noe and Bonnie MacEwan examine partnerships and connections in terms of the library as a crossroads where people not only meet but come together to work and accomplish commons goals. Allison Bolorizadeh and Rita Smith use the growing transformations of library space combined with Web 2.0 technologies to describe opportunities to infuse intercultural experiences into the research library, physically in collaborative environments such as learning commons, and
virtually throughout the library’s web presence. These chapters underscore the importance of collaborations and connections harnessing technology and incorporating the imperative for diversity.

“Creating Accessible and Enduring Scholarship” examines new roles for research libraries in the creation, dissemination, and preservation of knowledge in a networked global environment. Gunilla Widén explores scholarly communication within the context of web 2.0 and poses questions about the academic library’s role in this new environment of scholarship. Linda Phillips explores the new and expanding role of research libraries in publishing scholarship and making it more visible through local initiatives. Fred Heath, Christian Kelleher, T-Kay Sangwand, and Kevin Wood provide a detailed view of the Human Rights Documentation Initiative, a collaborative project to appropriately preserve and disseminate critical aspects of the human record. All of these authors focus on the creation of new knowledge, the preservation of the often fragile human record within the context of ethics, professional values and commitment for future generations.

**Relevance and effectiveness**

Confirmation of research library relevance and effectiveness moving forward depends on our ability to do the following:

- Lead and support university/college priorities and initiatives
• Embed scholarly resources, tool, and services from all sources into teaching, learning, and research processes
• Create compelling intellectual, social, and cultural environments for students, faculty, and scholars
• Provide intuitive and enduring access to scholarship
• Embrace multi-institutional approaches
• Harness networked digital content and spark its creation
• Provide leadership for diversity and global connections

We must, in a global way, create, collaborate, and connect scholarship for and with users at a level never seen before to ensure lifelong learning and the ability to solve the world’s continuing challenges inclusive of all cultures, time periods, and approaches.

Who are our 21st century students and scholars? What does it mean to be an educated person on planet Earth as we move into the second decade of the new millennium? The new global scholar is competitive, visible, attuned to excellence and quality, collaborative, high tech, and embracing new modes of communication and commentary in their work. New generations of students are always “on,” skimmers rather than deep divers, instant communicators, and highly motivated but often lost in the vast networked world of information. The global research library, in order to respond to these new students and scholars, must deeply incorporate faculty and student centered approaches throughout the organization in partnership with others. And, at the same time, address sweeping changes in technology transforming all aspects of creating, disseminating, and accessing scholarship in a multi-cultural world.
How institutions are organized can be a significant barrier to collaborating with 21st century technologies or even 19th century technologies. Hierarchical organizations where information typically flows in one direction run counter to the diffuse nature of collaborative communication. Organizations tend also to be set up to address a workflow based on the organization’s success rather than on success from the user or customer point of view. In the case of research universities, the customer is students and faculty. The product is positive teaching and learning as well as productive and meaningful research which advances humanity. Today’s organizations are often more concerned about how technology or other forces affect them rather than how these forces change the behaviour of their customers. This is especially true in research universities where cutting edge discovery and scholarship is occurring within an organization encrusted in tradition.

Research libraries are beginning to reconsider their organizational structure in terms of shifts in student and faculty behaviour as they go about their work. And, this reconsideration has at its core the notion of collaboration. Luce (2008) notes that “libraries can be convenors that establish a commons ground among different players. Collaboration and partnering are essential in the eResearch environment.” Other shifts include preference for digital scholarship, existence of social, cultural, and intellectual virtual and physical spaces, changes in where research and teaching is occurring, and the need to be connected to resources from multiple locations. Libraries, therefore, should organize themselves by the unique needs of different user
populations rather than primarily by function. For example, undergraduate students have a
different suite of needs than graduate students and faculty. Scientists have different ways of
working than humanists, and use scholarly resources differently.

*Creation literacy: an example of the transformation journey*

Creation literacy is a term coined to illustrate the kinds of transformation journeys we must take
in research librarianship. Creation literacy is the ability to create and disseminate new knowledge
in meaningful ways in our global networked society. Aspects of creation literacy include model
skill sets, platforms for delivery, and strategic placement of creation literacy services in 21st
century libraries.

Creation literacy goes beyond information literacy in that it focuses on research output and its
impact beyond the process of finding appropriate resources and solving problems for a given
project or task. Research libraries in particular are reprioritizing their primary roles to emphasize
strategic support and direct involvement in the creation of new knowledge. The open access
movement has further underscored the imperative for vastly greater access to new knowledge
from a worldwide perspective. Thus, creation literacy deals also with the knowledge and skills
needed to choose a format and a venue for one’s scholarship with high impact and access in
mind.

Creation literacy programs also include attention to the development of multiple global and local
platforms as well as infusing awareness about new platforms and instruction about how
“authors” deposit or publish their work. These platforms include, but are not limited to institutional repositories, library-based digital presses, open access journals/publication series, and blogs. Thus, creation literacy includes a grounding in open access, impact factors, and venue choices which have the greatest reach.

New roles for librarians implied in developing creation literacy programs include much earlier involvement in the cycle of scholarship and more involvement throughout the cycle. Librarians should take a holistic approach including the tools and resources needed for an individual to create new knowledge in a particular area. Creation literacy, therefore, includes the ability to formulate and use tools for the desired outcomes. Examples include citation management, data curation, editing tools, digitization services and tools, and a host of current and yet to be determined technologies, needed to support networked scholarship. In a world where information resources are almost infinite, creation literacy includes very early consultation with librarians and information specialists to harvest what has gone before for the creator who will continue the flow of knowledge on that particular topic.

Organizational structures within the library will change with the development of creation literacy programs along with librarian roles. For example, library departments whose primary role is to create unique scholarship might cluster and forge strong ties with instructional and subject librarians who will, in turn, interact with knowledge creators through the comprehensive creation literacy program. An array of expertise within and beyond the library will coalesce for creation literacy purposes. Most importantly two major goals will be accomplished: deeper integration
into the research process by librarians and greater efficiency, impact, and reach of knowledge creators benefiting the universe of scholarship.

**Knowledge creation is global**

Knowledge creation is a global phenomenon and increasingly produced, accessed, and preserved in the virtual, digital environment. Decision making to improve our collective ability to advance these virtual knowledge systems needs to be collaborative and transcend departmental, institutional, governmental, and organizational boundaries.

Scholarly inquiry is the source of knowledge creation. Research universities are at the nexus of the process and steward the end result. Research libraries, virtual and physical, play a critical role in knowledge creation as the iconic environment for access to scholarship and creative work leading to new scholarship. New technologies for group work and social networking are making it possible for research libraries to develop, through collaboration, tools to support new methods of collaboration. New and emerging trends in global research reflect a growing trend towards virtual laboratories of dispersed experts working on interdisciplinary problems. These laboratories or virtual organizations require support and coordination. Research libraries are beginning to understand their role in providing expertise on appropriate communication systems, data management, access, and preservation. Sciences, social sciences, and humanities formulations of what is often referred to as cyber infrastructure are emerging at different levels and on different scales. Collaborative support in research institutions, research libraries, and
governmental agencies is key to developing the support mechanisms needed for sustainable cyber infrastructure. Lynch (2008) notes:

Probably the greatest challenge of cyber infrastructure at the campus level will be the design and staffing of the organizations that will work with the faculty: helping faculty access cyber infrastructure services locally (and, when necessary, globally); assisting faculty in managing their data – including observational data, the construction of research and reference collections, or data from analysis or simulation – and preparing this data for handoff to appropriate data repositories and curators at the appropriate time; and aiding faculty in parallelizing computations or organization data for reuse, mining, and mashups. Staff will be needed to assist in the setup of virtual organizations and also to help with their breakdown.

Collaboration internally and externally will be needed in defining, shaping, and financing a suite of services basic to running a 21st century virtual organization.

**Conclusions: building to scale at the interfaces of cultures**

*Transforming Research Libraries for the Global Knowledge Society* is meant to spark discussion and provide ideas and direction for the way forward. The variety of content by research library experts throughout the world is reflective of the complexity and magnitude of our work. I once used the term “building to scale at the interfaces of cultures”² to describe certain dimensions of research librarianship. The second part of the title is taken from a book by Michael Harris Bond. In it he talks about examining the psychology of the known, the repository of taken-for-granted constructs and propositions that constitute the cultural legacy for its members. He talks about
challenging people by exposing them to alternative ways of thinking and living. He says
“reaching such questions requires that one travels in atypical ways, one must first expose oneself
to the unfamiliar.” Basically his book is about work at the interface of cultures. And, perhaps
librarians are doing just that in the sense that we are working at the interface of a process of
discovery with different people, different disciplines, and different levels of understanding.

A relevant and vibrant future requires that research libraries navigate at the interface of a hugely
diverse set of campus and academic cultures that approach learning and scholarship in very
different ways. Librarians, themselves need to work even more adeptly between the interface of
scholarly, professional, and management roles. We need to learn from cross-cultural research in
building collections and services based on how these different cultures work and what they
require rather than what we think they require.

“Building to scale” refers to the need, when working at the interface of cultures to build
collections, programs, services, and physical spaces to meet the scale of the large university, its
departments, students and faculty and to effectively deal with the enormity of scale of traditional
and digital resources. Successfully building to scale is how to scale up to reach the large number
of students, faculty, and global scholars we serve as well as how to rethink traditional buying and
storage models. Calculating the proper scale is more of an art than a science, and is a
fundamental requirement for future success of research libraries worldwide. The contents of this
book provide insight needed to build research libraries to the scale required of our network,
abundant world of scholarship and learning.