Educating the Research Librarian: Are We Falling Short?

May 7, 2015
Deanna Marcum
Ithaka S+R is a strategic consulting and research service provided by ITHAKA, a not-for-profit organization dedicated to helping the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways. Ithaka S+R focuses on the transformation of scholarship and teaching in an online environment, with the goal of identifying the critical issues facing our community and acting as a catalyst for change. JSTOR, a research and learning platform, and Portico, a digital preservation service, are also part of ITHAKA.

Copyright 2015 ITHAKA. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. To view a copy of the license, please see http://creativecommons.org/licenses/by-nc/4.0/.

ITHAKA is interested in disseminating this brief as widely as possible. Please contact us with any questions about using the brief: research@ithaka.org.
For the entirety of my professional career, it has been a hobby of most practitioners to fret about library education. Practitioners have complained that the schools of library and information science were not preparing professionals as well as they might for particular segments of the profession—school libraries, public libraries, academic libraries, etc. The professional schools have responded that their job is to prepare students to work in all kinds of information organizations, not just libraries, and that these skills are highly transferrable from one environment to another. Recent meetings I have attended that focused on library education have rekindled my interest in this topic.

**Conversations in the community**

In January, Simmons College’s School of Library and Information Science hosted an invitational conference funded by the Institute of Museum and Library Services. The purpose of the session was to use design techniques to develop a map for the future of library education. Simmons received a grant from the Institute of Museum and Library Services to bring together a distinguished group from the technology, futurist, education, foundation, and library sectors to consider how schools of library and information science needed to be thinking about education for future professionals. Over the course of three days, facilitators led the group through a design process (replete with drawings by a graphic facilitator) to arrive at an understanding that could form the basis of a white paper to be delivered to IMLS later this year.  

Perhaps the diverse backgrounds of the participants guaranteed the utter impossibility of developing a general curriculum that will meet all needs. For many of the younger representatives, technology was the main concern. How do we prepare new professionals to take full advantage of social media and emerging technologies to deliver information services to all who need them? Library buildings, legacy collections, and preservation—these were all topics that hardly registered on their list of interests. Nicholas Negroponte of MIT’s Media Lab argued passionately that the purpose of a library and information school is to produce a cadre of individuals devoted to the universal right to access to information. Public librarians at the conference believe that new librarians must be trained as community activists focused on civic discourse. With no common vision for the library’s role, there could be no agreement on how library schools should prepare the next generation of students.

---

1 During the time I was drafting this Issue Brief, Eileen Abels of Simmons, notified attendees that IMLS had granted a one-year extension for the project.
The participants in the session were mostly “alternative” professionals, that is, they are in the information profession, but very few of the participants are engaged in work in an academic or public library. Everyone present at the event cares, and cares deeply, about the societal role of libraries, but almost none of them is worrying about what it takes to be an active professional in that setting. Many of the participants, especially those from the technology sector, had a strong interest in the library’s ability to set policy standards for the communities they serve. Negroponte, for example, urged the group to think of library education as a way to advocate for access to information as a basic human right. The futurists saw library education as a means of ensuring that societal values are given due consideration in information policies. Technologists tended to see the many opportunities for lowering barriers to access through networked channels that will be available to all. If the archivists in the group have their way, students will learn the importance of preservation of cultural heritage. And on and on........

The essential challenge

What became quite clear is that there is no common understanding of what library and information science education should be. Everyone agrees that there are some fundamental skills and values that will apply to all types of jobs in the information professions, but it surprised me that there was almost no interest in what goes on in a library organization. Most of the participants seemed to have already concluded that the interesting work is elsewhere.

The differences in perception about what constitutes appropriate library and information science education grows out of the great difficulty we have in defining the profession itself.

The differences in perception about what constitutes appropriate library and information science education grows out of the great difficulty we have in defining the profession itself. The pre-Internet library profession was built around collections—books, journals, and other formats. Every library, no matter what type or size made their collections available for use to their specific communities. Books and journals were a relatively scarce commodity. Not every community had a well-stocked bookstore, and even when bookstores were abundant, not all members of the community were able to purchase all that they wanted to read. Libraries, both public and academic, ensured equitable access
to knowledge for all members of their respective communities. Library schools could reasonably offer courses in collection development, cataloging, and reference services that applied generally for all professionals. While the types of books that made up the collections varied greatly from one type of library to another, the methods for acquiring, describing, and serving those collections were basically the same.

Our environment today is entirely different. Collections are no longer the defining feature of libraries. Collections that are important to users are found everywhere—and a great preponderance of the information sought by users can be found through digital collections that are made freely available by other libraries, individuals, or organizations or through licensing agreements from publishers. Academic and public libraries now distinguish themselves increasingly through the services they offer. The university library has become a partner organization for the scholarly community in support of teaching, learning, and research. The public library has become a community hub where citizens can get assistance with basic social services, engage their neighbors in discussions about issues of importance to the community, or learn how to use the technologies that unlock access to critical information resources. And these services are radically different. It is not so easy for schools of library and information science to offer courses in services provision that apply uniformly across types of libraries. It is quite possible that the underlying values of the professionals providing services in both types of libraries are basically the same, but it is hard to build a professional education curriculum on values alone.

...it is hard to build a professional education curriculum on values alone.

The enormous changes occurring in research libraries are not matched by the pace of change in library program curricula. Required courses have often failed to keep up with changing practices and needs, but practitioner-led and distance learning courses, both of which can help, too often lack for modern pedagogies. Even though the norm among university libraries is to require applicants for their positions to hold a master’s degree in library and information sciences,² we have the unenviable logical dilemma of

² At the Columbia Library Symposium on March 20, 2015, Mark Puente of the Association of Research Libraries reported on an analysis of requirements for the positions announced in 2014: 14.5% had no formal MLIS requirement; 29.1% required an MLIS or equivalent; 50.9% required an MLIS degree; and 5.5% preferred a PhD.
disrespecting the professional schools that produce our colleagues and while also requiring that new professionals must have the same training we received.

Surely the library profession is not unique in its tensions between professional education practices and typical job requirements. The best law schools produce legal theorists (who then get on-the-job training via clerkships and at firms) rather than attorneys. The best medical schools produce researchers as much as they do clinicians. But schools of library and information science tend to produce practitioners, and so the field of librarianship does not look to the schools to produce the researchers and thinkers about our future.

I would urge the schools to focus on discovery and use of information resources, which is user-centric, rather than organization of information, which is collections-centric.

Practitioners of the profession would like to see the professional schools produce graduates with all of the skills needed for success immediately in a position. At the same time, they often have trouble articulating precisely what these needed skills actually are. When academic library directors speak about this topic, they tend to focus on the computational skills and the soft skills of collaboration, decision-making, critical thinking, and leadership, rather than any of the things one might reasonably learn in a professional education program. Following on my assertion that research libraries are becoming more focused on services than collections, I would urge the schools to focus on discovery and use of information resources, which is user-centric, rather than organization of information, which is collections-centric, as one example. And if the services diverge between different segments of the profession such as academic, public, and school, it may be appropriate to return to a conversation about whether specialization should be encouraged during one’s degree via separate tracks within a school, or specialization at the school level.

**Generalists and experts**

I have been struggling with this issue for most of my career. Years ago, as dean of the School of Library and Information Science at the Catholic University of America, I worked aggressively to create joint degrees within every humanities department in the university, and I wrote extensively about the need for students to prepare for academic library careers by earning both a subject-based master’s degree and a library and information science degree. Later, while president of the Council on Library and...
Information Resources, I took the then contested position that subject expertise was even more important than the general library and information science degree and launched, with support from The Andrew W. Mellon foundation, the CLIR Fellows program that invited recent humanities PhDs to apply for year-long appointments in academic libraries where they could bring their subject expertise to digital library developments. Some academic research librarians responded angrily that we were trying to undermine the profession by encouraging those without the MLS degree to take positions in the academic research library. My response was that I was not as concerned about the academic credentials as the role that we need to play in the academic community.

As more research libraries move toward embedding librarians in academic departments so that the needs of faculty as teachers and as researchers can be better met, the role of the generalist who holds the MLS degree is not so much in demand, and other types of skills are at a premium. At the Columbia Library Symposium (March 20, 2015), one of the panelists who spoke during the session on “Whatever Happened to the Library Degree Requirement?” noted that the typical composition of a research library’s staff is now one-third functional experts, one-third disciplinary experts, and one-third librarians. She mentioned the particular interest in hiring more project managers, GIS experts, data analytics staff, i.e., the types of professionals who can assist scholars with their research by building tools, assembling databases, or helping them do a better job of teaching their students. While library schools may touch on these issues, an academic library that wants to provide campus-wide expertise will be looking for graduates from other programs to fill these needs.

In both of these sessions at Columbia and Simmons, there was a strong sentiment that the generalist librarian has been rendered obsolete by technology. So much of the journal and book literature that was once difficult to locate is much more accessible through Internet sources. Reference services for most students have been replaced by simple Google searches, and even as reference librarians argue that the results are not as good, students view them as good enough.

Library education, though, currently focuses on educating the generalist. This has not always been the case. When Melvil Dewey formed a library school at Columbia University, he thought of library education as a fifth year to supplement the liberal arts education of the students. They had a firm foundation in a discipline and added the dimensions of librarianship to this foundation. The assumption was that librarians needed to be steeped in a discipline before they learned the professional concepts of librarianship.
Technology as a foundational requirement

Questions about the role of librarians in a research university become more pronounced as libraries become more digital. There are more urgent needs for staff with highly sophisticated computer skills. Consider something as seemingly simple as digitizing collections to make them more accessible. Specialists are needed to convert analog materials to digital format, highly specialized equipment must be purchased and maintained, camera operators must be hired and supervised, metadata specialists must consider what types of schema will be necessary to make those digital materials discoverable, the requirements for digital storage must be developed, and specialists who know about digital preservation will be needed to ensure that the collections will remain accessible decades from now. While some of the more recently trained professionals may have acquired these skills in an educational setting, these may be new skills that have to be added to the library’s capacities. Throughout the session at Simmons, the group called for technology to be embedded in every aspect of the curriculum, noting that the book and journal library is quickly giving way to the digital library. As one participant put it, “the Internet is a way to make what we have collected matter.”

The profession is challenged by its failure to incorporate technology as part of the curriculum at the time it became apparent that the future was technological.

The profession is challenged by its failure to incorporate technology as part of the curriculum at the time it became apparent that the future was technological. Perhaps it stems from the development of OCLC in the 1970s as a collaborative service. Catalogers continued to do what they had always done, except that they did their work on a computer screen. OCLC made it possible for librarians to share the results of their work with others so that bibliographic records could be reused. There was no systematic examination of how technology could be used to restructure the bibliographic system. The MARC record created at the Library of Congress in 1968 had a similar effect. Librarians had to learn the names for “fields,” but the way in which they identified the elements of the bibliographic record remained fixed. The effect of the technology was to reduce the number of professionals required to produce the bibliographic records, but the workflow and intellectual effort were not affected.

Meanwhile, schools of library and information science recognized that automation was changing the nature of libraries, and many of them adapted to this recognition by
allowing students to substitute a programming class from the computer science department for the foreign language requirement that had been in place for many years. The Fortran class was not specific to the library environment, and for the most part, the professors in the library schools did not adapt any of their courses to include computer programming. In other words, both educators and practitioners understood at a deep level that technology would change their worlds, but they did not make the changes in either their workflows and habits or their curricula. They talked about the influences of technology, but they did not adopt it as their own.

It is not sufficient for me to complain about the past. Digital technology has forever altered the information landscape. Research libraries are seeing quite clearly that the services they have been providing (acquiring, organizing, and making accessible books and journals to support the curricula of their institutions) are no longer needed in the same way they once were, and they now have to add skills and services that allow them to partner with teachers and researchers, rather than provide information resources to support them. Faculty and students alike need help with using GIS technology, gaining access to and finding tools to manipulate large data sets, understanding new trends in technology and tools, and they also need help understanding how these new innovations can be useful to them.

The skills that are urgently needed in today’s research libraries may require business courses, computer science training, legal understanding, or other specialized courses. Would it be possible for schools of library and information science to partner with other professional programs to create a specialized training program that meets the needs of those who will be working in research libraries? Rather than trying to teach “library management” or “library copyright,” why not find ways for MLS students to be exposed to the best in current theory, practice, case law, etc., on these topics?

Many of the tools and techniques now most valued in the research library environment will not be found in faculties of library and information science. Most of the schools deal with this by hiring practitioner adjuncts that can offer the occasional course. Why don’t we consider using online courses for offering assistance to aspiring research librarians by having the few great experts in this field develop a course that is available to everyone. Similarly, data curation, a field that is becoming increasingly important for the research library community, will not be a big attraction for everyone enrolled in schools of library and information science. Can’t we join forces to create a really great course that will be widely available online? It could also be helpful to current practitioners who need to upgrade their skills for the environment.

Excellent online courses made available to a wide swath of professional schools that will be useful to future research librarians is but one idea for how to ensure quality
preparation for future professionals. The CLIR Fellows program continues to do a good job of encouraging young PhDs in the humanities and social sciences to move into research libraries as a career. The Association of Research Libraries and the Association of College and Research Libraries make continuing education and training programs available for professionals working in the academic environment who want to enhance their skills and expertise. But what is missing is a sustained commitment to tackling the future of the research library, with an important component of that being the staffing requirements.

In conclusion

I began this essay by describing the two conferences that stimulated my thinking about how research libraries will change and the implications of those changes for professional education. Perhaps the greatest change is that research libraries will not have the luxury of being independent organizations any longer, as national infrastructure and initiatives are finally put in place to address the issues of global scholarship and massive online education. Governance issues, collective funding of national and international initiatives, providing local services in support of national programs—all of these require new skills that are not now part of professional education programs. The individual school of library and information science or the individual research library may fade into the background as scholars and students begin to participate more broadly in a scholarly network.

As directors of research libraries think about transforming their organizations to meet the requirements of future scholars, they are forced to confront the profound need for diverse staff with a range of expertise.

As directors of research libraries think about transforming their organizations to meet the requirements of future scholars, they are forced to confront the profound need for diverse staff with a range of expertise. Where will they find the talent required for a new organization built on a foundation of services rather than collections? David Ferriero,
Archivist of the United States and former research library director of two institutions, remarked at a recent Institute of Museum and Library Services convening that he considers himself—not the student—to be the customer of schools of library and information science. He bemoaned the fact that until the Simmons conference in January, he had never been asked by the schools to describe what he was looking for in their graduates. If research library directors are to continue to count on the schools to produce students who can work in the transformed research institutions, it is imperative that we have meaningful conversations about expectations of the graduates of these programs.

3 University Librarian, Duke University and The Andrew W. Mellon Director of the Research Library, New York Public Library
4 A webcast of David Ferriero’s remarks will be viewable until April 28, 2016 at http://www.tvworldwide.com/events/IMLS/150428/default.cfm.