ACRL 2020 Top Trends

*[draft – citations in red to be properly formatted before submission to C&RL]*

Introduction

This article summarizes trending topics in academic librarianship from the past two years. These highlights provide a starting point or an update, depending on one’s familiarity with the topic. Overarching themes across the profession continue to emphasize the significant amount of change our institutions are driving, managing, and navigating.

# Change Management: New Skills for New Leadership

A recent Association of Research Libraries report focuses on managing change in libraries and states that there are “…three categories of urgent changes: changes in the research library relationship with institutional partners, changes in the research library organization, and changes in skills.” [Kennedy, 2020] (Page 18). The urgency described in this report indicates a need for preparing a workforce for uncertainty and ambiguity. A 2017 *Library Journal* article encourages new skills for library leaders to manage change in a VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world and a need to “get it right.”[Bell, 2017]

Managing change on this scale requires academic library leadership to be steeped in best practices for systematically adjusting the work of an entire organization. If our libraries are going to be successful in a VUCA world, current and future leaders will need to develop their change management skills. There exist a number of leadership courses, workshops, and residential programs; those which focus on these needed skills will be of greatest use to leaders looking to move their libraries into the future quickly and confidently.

# Social Justice, Critical Librarianship, & Critical Digital Pedagogy

Social justice and critical librarianship initiatives continue to gain momentum in academic libraries of all sizes. One study notes that “The LIS classroom is where the values of LIS that are associated with social responsibility are introduced to future librarians, and by extension where the ability to create positive change begins" [Helkenberg et al, 2018] (p. 270). Many areas of library work are seeking to incorporate these principles. One example considers information literacy and the use of learning outcomes to “illuminate the social justice, critical thinking, and higher order thinking elements of information literacy.” [Branch, 2019] In seeking a transformative paradigm, the author calls for librarians to purposefully design instruction that has the potential to highlight important social issues as well as better engage with students.

Examples of critical librarianship and social justice at work in libraries span research and user services to areas of collections and technical services. [Berthoud & Finn, 2019] Librarians have taken this mission outside of the library, connecting and forming partnerships with community organizations. [Khailova and Ladell] Critical librarianship’s increasing influence has led librarians to take a more critical approach to using digital tools for teaching and learning. This “critical digital pedagogy” is “as much about using digital tools thoughtfully as it is about deciding when not to use digital tools, and about paying attention to the impact of digital tools on learning” [Hybrid Pedagogy, n.d.]. Librarians are finding close alignment between critical digital pedagogy and critical information literacy [Waddell & Clariza, 2018], digital libraries [Digital Library Federation, n.d.], privacy and digital identity [Wilson, 2018], and open pedagogy [Jhangiani & Green, 2019]. Underlying all of this seems to be a vigorous emphasis on student agency and a resistance to corporate influence in higher education, especially from technology and publishing companies.

However, as interest in critical librarianship has increased, so too has suspicion, with some criticizing the movement “for being inaccessible, exclusionary, elitist, and disconnected from the practice of librarianship”. [Nicholson & Seale, 2018]

# Learning Analytics

ACRL’s 2018 *Top Trends in Academic Libraries* report [ACRL RPRC, 2018] identified the use of learning analytics (LA) as an emerging trend. LA advocates argue that by collecting and analyzing student learning data, including data related to library usage, institutions can better understand student learning behaviors, intervene when problems arise, and potentially even predict problems before they occur. Libraries are becoming increasingly interested in how they might use LA to communicate their value to stakeholders [Oakleaf, 2018].

While this trend continues, criticism of the use of library learning analytics has grown significantly since the previous *Top Trends* report. Many academic librarians are growing ever more skeptical of the value of LA, especially as their use relates to student privacy, student agency, library ethics, and student trust in libraries as institutions [Hathcock, 2018]. The Data Doubles project seeks to “study library LA and the privacy issues from a student perspective,” which, the research team explains, is lacking from the conversation [Data Doubles, n.d.]. Additionally, the summer 2019 issue of *Library Trends* was devoted exclusively to the question of LA in libraries. As the profession continues to wrestle with the “ethical dissonance” of LA, “growing evidence suggests that learning analytics should not be pursued without carefully considering and attending to the ethical quandaries and information policy challenges stemming from the inherent student privacy issues” [Jones, 2019].

# Machine Learning and AI

As is the case with many professions, librarianship is on the cusp of dramatic change owing to developments in machine learning and artificial intelligence (AI). Libraries and librarians have a long history of incorporating new technologies into their spaces and practices.Two reports published in 2019 call on us to act now to ensure that our professional values are “baked in” to new computational tools and research support services.

In his 2019 Library Technology Report, Jason Griffey argues that libraries should invest in developing these systems internally. [Griffey, 2019] AI and machine learning are powerful tools, but without care may manifest algorithmic bias, erode privacy and intellectual freedom, and potentially enhance confirmation bias and information filtering of the sort present in contemporary media. Griffey argues that localized machine learning and AI environments (i.e., those developed internally) allow libraries to critically examine training data and computational processes to ensure that bias present in data is not amplified through those processes, and professional values are baked into data collection and computational processes. The report also contains several examples of what library investment in these areas could look like.

An OCLC report, *Responsible Operations,* explores potential impacts of machine learning and AI across librarianship, as well as recommendations for guiding their adoption in responsible ways. [Padilla, 2019] Beyond the substantial recommendations for technical infrastructure and strategies in cultural heritage, metadata creation, and other venues, libraries should “consider using information literacy instruction as a vector to introduce algorithmic concepts and their ethical implications” (ibid, 19). Data and programming literacies are increasingly important for contemporary students and libraries are gradually integrating them into their pedagogy [Pugachev, 2019; Herther, 2019]. As librarians continue to explore the uses and potential misuses of AI and machine learning environments, there are opportunities to expand curricula focused on literacies to include ethical considerations in AI and machine learning.

# Evolving Integrated Library Systems

In December 2019, Ex Libris announced a deal to purchase Innovative [Ex Libris, 2019]. Questions immediately arose among Innovative's customers, wondering how and when this might affect them. Innovative provides a number of integrated library system (ILS) products, including Sierra and Polaris, but its saturation of the ILS market for academic libraries is relatively low compared to its market share within public library systems. In contrast, Ex Libris controls a much larger market share within academic libraries, primarily thanks to Alma, its cloud-based library management system (LMS). Ex Libris is likely to focus its near-future efforts on transitioning and expanding its public library business to cloud-based systems, rather than making immediate large-scale changes within its academic library business [Schonfeld, 2019].

Large mergers like this tend to reignite concerns of interoperability between all the different systems, platforms, and devices that now comprise modern library systems. FOLIO (the Future Of Libraries Is Open) is one of the products aiming to quell those concerns, with beta testing well underway and a general release planned for 2020 [FOLIO, n.d.]. FOLIO is an open-source LMS being built around the idea of flexibility, with different modules available (and interchangeable) depending on need. It seems the National Information Standards Organization (NISO) is preparing for further development along these lines with the FASTEN document [NISO, n.d.]. The FASTEN document was posted for public comments during Q4 2019, and contains recommendations for vendors and organizations on steps they can take to streamline and improve the interoperability of their library systems. The wider launch of FOLIO and the potential adoption of FASTEN will need to be closely watched.

The goals driving the development of both FOLIO and FASTEN are touched on in a recent issue brief by the Ohio Library and Information Network (OhioLINK) and Ithaka S+R [Evans & Shonfeld, 2020]. However, the document quickly moves past them to look even further ahead. It describes the challenges seen with current ILS products and imagines what the ILS of the future should be, highlighting four qualities and recommendations: true "next-generation" systems should be user-centered, enable the use and access of facilitated collections, integrate with other institutional platforms, and provide modern business intelligence capabilities.

# Open Access: Transitions and transformations

The past few years have brought major developments in the OA landscape - from major big deal cancellations to new agreements between libraries and publishers. Following the UC system’s Elsevier cancellation in early 2019 [Hiltzik, 2019], the University of North Carolina announced in late 2019 that their license renewal negotiations with Elsevier will continue into 2020 [Westbrook, 2019]. Resources for institutions considering this route include SPARC’s Big Deal Knowledge Base and Big Deal Cancellation Tracking [SPARC, n.d.], and University of California’s Negotiating with Scholarly Journal Publishers Toolkit [UC PSN Task Force, 2019], Guidelines for Evaluating Transformative Open Access Agreements [UC OSC, n.d.], and Guide to Transitioning Journals to Open Access Publishing [UC OSC, 2019a].

Many new transformative agreements were announced between publishers and libraries or library consortia over the past year [ESAC, n.d.]. Transformative agreements can be defined as a contract seeking shift the contracted payment from a library or group of libraries to a publisher away from subscription-based reading and towards open access publishing." [Hinchliffe, 2019] There are various flavors, including offsetting agreements, read-and-publish agreements, and publish-and-read agreements. Since 2018, read-and-publish agreements have been signed between Royal Society and MIT [Fay, 2018], De Gruyter and Iowa State University [Merkel-Sobotta, 2019], Cambridge University Press and University of California System [UC OSC, 2019b], SAGE and UNC-Chapel Hill [SAGE, 2019], and Elsevier and Carnegie Mellon University [CMU, 2019]. In Europe, Projekt DEAL signed with Wiley [Wiley, 2019] and Springer Nature [Springer, 2019], and the Swedish Bibsam Consortium signed with Elsevier [Elsevier, 2019].

After hundreds of responses from publishers, academic libraries, and researchers, cOALition S made some changes to its Plan S, which "aims for full and immediate Open Access to peer-reviewed scholarly publications from research funded by public and private grants." [cOALition S, n.d.] Noteworthy differences: plan implementation is delayed to 2021; no cap on the cost of OA publication; tweaked rules around hybrid titles and transformative agreements; ignore the prestige of journals when making funding decisions; and more restrictive open licenses will be allowed when approved by the funder [Else, 2019].

Further transitions are happening at the society publishing level. The group, Transitioning Societies Publications to Open Access (or, TSPOA) formed at the October 2018 Choosing Pathways to OA Working forum. They “aim to provide relevant resources/experience working in collaboration with society publishing partners to help them develop an open access publishing model that is appropriate, effective and sustainable.” [TSPOA, 2019]

# Research Data Services (RDS): Ethics and maturation

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In recent years, conversations about research data management have transitioned. While open data faces obstacles in health science and social science research [Ford et.al. 2019; Houtkoop et.al., 2018], since its first publication in 2016 [Wilkinson et al., 2016], the FAIR (findability, accessibility, interoperability, and reuse) data principles, on the other hand, have become a widely accepted guideline for research data management (RDM), emphasizing machine actionable data standards. Responsible RDM is the central theme of the International Science Council’s Committee on Data (CODATA) [CODATA, n.d.] Currently, a cross-national GO FAIR Initiative is building a network to advocate the FAIR principle through coordinating policy, technology, and awareness and skill-building activities. [GO FAIR, n.d.]

The scholarly communication revolution has started to touch the ethical core of scientific practice as well as its technical workflow - from open access, open data, and open science, to citizen science. Several national and international groups are working to coordinate open science and research data efforts, to align science with societal values and strategically plan for public access of data. [Canada, n.d.; OpenAIRE, n.d.; NASEM, 2018]

Despite these developments, researchers seem slow to respond. The State of Open Data 2019 Report revealed that although the majority of responding researchers support national and funders’ open data mandates, FAIR data principles are still relatively unknown to them, primarily due to apprehensions about the misuse of openly shared data [Fane et al., 2019].

Further developments of RDS within academic libraries face potential opportunities and practical difficulties in light of this dichotomy. New studies based on North American academic libraries [Tenopir et al., 2019] and beyond [Cox et al., 2019] reported a similarity of commitments and strengths: a majority of responding libraries’ RDS are still an extension of the library's traditional advisory and training services. Of the libraries that offer advanced RDS, including training or assistance on data analysis, data visualization, and data integrity, most started the service in the last three years. Barriers to developing RDS include lack of resources (financial, staffing, and skills) and researcher engagement. The US Data Curation Network examined 114 ARL institutions and reported that about 44% of them had a dedicated data repository, but information about data curation support is rarely available on these websites. [Johnston & Coburn, 2020]

A potential model to combat the resource obstacles in individual libraries involve collaborative data curation networks. The grant-funded Data Curation Network (DCN) project has developed extensive curation workflow and checklist resources [DCN, n.d.], and the Canadian Data Curation Forum is designing a national data curation network based on the US DCN model [CDCF, n.d.]. The Greater Western Library Alliance (GWLA) found that most libraries with data repositories already have staff who assist researchers with creating metadata and data documentation. [Murray et al., 2019]

A National Library of Medicine workshop identified seven skill categories for librarians working in data science and open science, including computational ability and program and service development. [Federer, 2020] As a result, many current data librarians will need more technical-intensive and advanced RDM training.

# Streaming media

Streaming media has been an active and changing space in the past few years; libraries are trying to figure out a responsible path forward that supports users’ needs and expectations for selection and accessibility. With increasing support for online and hybrid courses, as well as flipped classroom pedagogy [Horbal, 2018], the appeal and desirability of streaming content is clear.

Various articles document different components of these challenges - from acquisitions workflows, to pricing, to accessibility. Many libraries are updating and publishing their decision-making workflows for streaming media collection development, with accessibility considerations forming a large piece of several libraries' decision trees [Wahl, 2017; Schroeder, 2018]. The accessibility license language used by the Big Ten may be of particular interest to those looking to conduct third-party evaluation for licensed content. [Schroeder, 2018]

Kanopy is one of the largest and most written-about players in the streaming media market. Articles document public and academic libraries forays into licensing Kanopy content, only to end their agreements due to unsustainable costs. The Delaware County Community College (DCCC) began a Kanopy trial in March 2018 and describes efforts, including content curation and mediation, to avoid unaffordable use. Nevertheless, their allotted budget was spent within a few months due to unanticipated usage. Their lessons learned and adjustments going forward point to increased user education about pricing and the challenges of the Patron Driven Acquisition vs Pay Per Use model often employed by public libraries. [Rodgers] Various articles in the New York Times [Kenny, 2017], and Entertainment Weekly [Lenker, 2019] were touting it as just that -- streaming movies for free through your library -- without conveying the costs to libraries. A user education-directed post in Film Quarterly discusses the cost differences for consumer and institutional media pricing, encouraging film scholars and teaching faculty to be aware of how their choices impact others in the market [Cagle, 2019].

# Student Wellbeing

In recent years, a number of academic studies and news stories have reported on the rising rates of college students struggling with depression, anxiety, sleep deprivation, food insecurity, family responsibilities, and other factors impacting student wellbeing. For example, one study reported that “the percentage of all students nationally who reported being diagnosed with or treated for anxiety disorder climbed from 10 percent in 2008 to 20 percent in 2018” [Kane, 2019] and another cited National College Health Assessment data showing approximately two-thirds of students report “overwhelming anxiety” [Flannery, 2018]. One review suggests that college students are at increased risk of food insecurity compared to the general population [Nazmi et al, 2019]. Wise (2018) reports that nearly half of college students indicated having “more than a little problem to a very big problem with sleepiness during daytime activities.” [Wise, 2018]

As a result, institutions are increasingly looking at supporting students holistically and promoting student wellbeing as possible contributors to their success and retention, and libraries are well-positioned to help, due to their central locations, longer operating hours, and perception as a safe space [Ramsey and Aagard, 2018]. Studies cited stress the importance of collaborating with campus partners, social service agencies, and professionals [Ramsey and Aagard, 2018; Godfrey et al, 2017; Hines, 2017]. An Ithaka report found that “students frequently named the library as the most promising source of support” for these types of services [Blankenstein et al, 2019].

In order to promote mindfulness and support the spiritual wellbeing of students, a number of libraries have created meditation rooms [Bremer, 2019; Wachter, 2018], offered free yoga sessions [Casucci and Baluchi, 2019], and even created labyrinthine walking spaces [Zucker et al, 2016]. In a national survey of academic libraries in 2017, "50% reported that their academic library currently provides or previously provided a prayer space" [Mross and Riehman-Murphy, 2018]. One author suggests providing complementary therapies (e.g., hypnotherapy) and promoting mind-body practices [Sparks, 2017]. Other libraries set up food pantries [Udell, 2019], nap spaces [Wise, 2018; Hsu, 2017], a therapy dog program [Lannon and Harrison, 2015], and family-friendly reading rooms [Godfrey et al, 2017].

Studies have also discussed the increasing rates of autism spectrum disorder (ASD) and the need for colleges and libraries to support the wellbeing of a neurodiverse student population [Anderson, 2018]. One particular recommendation is using universal design for instruction and space improvements to better support autistic students [Cho, 2018]. Other recommendations include offering quiet spaces, providing space for autistic students to use their expertise to tutor others, offering chat reference for asking questions, developing personal librarian programs, and conducting campus outreach to raise autism awareness [Shea and Derry, 2019]. A book providing practical advice on supporting autistic students in academic libraries was also recently released [McMullin and Walton, 2019].

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