A recent report from *The Chronicle of Higher Education* on "Views on Academic Innovation" (with a teaser video)[1] caught my attention. Given the forces at work in library scholarship and practice, innovation is one of those topics that I always consider, especially in the context of higher education. Overall, the report (which is really a summary of a round table discussion) brought together several different academic leaders to discuss a number of issues influencing change and innovation on campuses. There were several points made that are particularly relevant to academic libraries, not just as issues with which libraries are struggling but also as potential opportunities for libraries to engage with the larger campus efforts: the barriers to collaboration, the traditional incentives that undermine innovation, and the external forces that provoke a reactive rather than a thoughtful, planned approach.

One of the major topics brought up in the conversation by Kevin Pollock is "silos" in higher education. It seems like this is a universal concern. Certainly we see silos or barriers between colleges and administrative departments, as well as among disciplines. These barriers are often built into the structure of the institution and remain in place even when university leadership espouses the importance of interdisciplinary research and collaboration—which is problematic, to say the least.

Another participant, Jaime Lester also refers to the walls "between faculty and administrators around decision making and who has responsibility for what area of the institution." She asserts that "We need more matrix forms of decision making on college campuses that remain very hierarchical." The highly controlled environment, at all levels and across disciplines and departments, undermines the ability of the organization to be agile, creative, and interdisciplinary in its efforts. Such an environment can stifle organic and grassroots efforts to innovate or build new knowledge.

Wendi Kaspar is *C&RL* editor and policy sciences librarian at the Texas A&M University Policy Sciences and Economics Library, email: warant@tamu.edu

Not unrelated to the issues of structure are the rewards and incentives that may also be built into the organization. Dean Chang asserts in this round table discussion that "incentives at the individual level are not set up to encourage innovations. . . ."

It may be outdated, but B. F. Skinner's writings on operant conditioning,[2] that behavior is influenced by its consequences, still informs the understanding of rewards systems. In short, individuals do what they are rewarded for, they may cease to do what is ignored (unless they have an intrinsic reward or reason to do it), and they will likely cease to do what they are punished for.

Think about the mission of higher education—which has, admittedly, evolved (and continues to) at a fast pace. Those who are closest to the teaching mission—the faculty who create the curriculum, transmit the subject matter and skills, and work with the students—are incentivized and rewarded based on research activity (grant dollars, number of articles, number of citations, etc.).

The fundamental role of promotion and tenure systems is to reward reputation and metrics that contribute to the perceived excellence and impact of the researcher and the institution. Additionally (and somewhat ironically), many of those metrics and standards for promotion and tenure are bound in traditional publishing models. Rewards or incentives are one type of driver for behavior, on the positive or motivating side—that factor that can motivate behavior (a new vision, a new building, additional funding). On the less positive side is the threat—that force or driver that if it is not addressed or mitigating, something bad may occur (funding will be cut, tenure status will be taken away, or some similar potential loss).

It is the external environment that is driving a lot of what is happening in higher education, either as threat or opportunity, and that institutions are scrambling to react to these drivers. Pollock states that "A sense of urgency sometimes drives innovation." Chang also addresses the external driver as an incentive that "innovation as creatively solving the world's toughest problems." Therefore, it is entirely possible that the external drivers may

actually motivate organizations to change an innovation and make a positive change.

Another participant, Louis Soares, recalls that "Land-grant universities came from outside pressure" and the mission of the land-grants encompassed teaching, research, and extension, underscoring the importance of educating the public, creating new knowledge, and sharing that new knowledge to address society's problems. Soares underscores that this responsibility to society is growing in importance with his statement, "Higher ed is going to become a more intentionally managed enterprise in the next 25 years. Because you can't get the outcomes that society seems to be wanting."

Academic libraries have been built on the mission of service to their universities but also to society more broadly. When we talk about innovation in the library, much of it is driven by external factors in an effort to be responsive to the environment and the evolving needs of our communities. Librarians are in a unique position to break down the silos and the walls in institutions of higher education, to be the bridge for interdisciplinary collaboration and change, and to help disseminate knowledge and increase access to information. As proponents of access, librarians work hard to break down the barriers to innovation, particularly as it influences service.

The slate of articles in the January issue of *C&RL* demonstrates the variety of ways in which libraries have engaged in innovation—from adopting new practices and transdisciplinary methods, to serving new communities and assessing existing services for purposes of evolving and improving them.

"Lab-Integrated Librarians: A Model for Research Engagement" by Alex Carroll, Honora N. Eskridge, and Bertha P. Chang. To gain firsthand insights into the daily workflows of researchers and to create opportunities to engage in the full research life cycle, engineering librarians at North Carolina State University launched a pilot project to embed themselves into campus research groups by attending weekly lab meetings. This article provides details on the program's implementation, the ethnographic assessment methods used to capture the activities of researchers during weekly lab meetings, and an analysis of the data collected. Based on these findings, the authors provide potential implications for professional practice, offering suggestions for how this pilot program could be expanded into an enterprise-level service as well as areas for further research.

"A Cross-Institutional Study of eBook Demand-Driven Acquisition (DDA) Use and Efficacy of Eight Large Academic Libraries" by Kay Downey and Yin Zhang. This study is the first of its kind to analyze and compare demand-driven acquisition (DDA) ebook programs on a large scale by using eight academic libraries. The purpose is to understand which factors contribute to successful collection management practices and sustainability. Study findings also offer insight into weeding practices and suggest that ebooks removed from the discovery pool too soon may impact service to library users. Furthermore, findings based on formula analysis show that return on investment (ROI) for serviceable content is better achieved through a sustained straight DDA model without short-term loans.

"Re-Inventing Ourselves: New and Emerging Roles of Academic Librarians in Canadian Research-Intensive Universities" by Ada Ducas, Nicole Michaud-Oystryk, and Marie Speare. The academic library profession is being redefined by the shifting research and scholarly landscape, the transformation in higher education, and advances in technology. A survey of librarians working in Canada's research-intensive universities was conducted to explore new and emerging roles. This study focuses on librarians' activities in Research Support, Teaching and Learning, Digital Scholarship, User Experience, and Scholarly Communication. It addresses the scope and nature of the new roles, the skills required to provide new services, and the confidence librarians have in their abilities to perform the new roles. It also reports on librarians' job satisfaction and their perceived impact on the academic enterprise.

"Community College Librarians and the ACRL Framework: Findings from a National Study" by Susan Wengler and Christine Wolff-Eisenberg. This study explored community college librarians' engagement with the Framework for Information

Literacy for Higher Education. A national online survey with 1,201 community college librarian respondents reveals limited familiarity with and integration of the Framework into community college instruction to date. Findings indicate an openness to future adoption, as well as substantial interest in targeted professional development and a version of the Framework adapted for community college campuses. These results contribute benchmark instructional data on an understudied section of academic librarianship and add to the growing body of research on how librarians have updated teaching practices in response to the Framework.

"Diversity Initiatives to Recruit and Retain Academic Librarians: A Systematic Review" by Janice Kung, K-Lee Fraser, and Dee Winn. Libraries across Canada and the United States are adopting diversity initiatives to encourage inclusive library environments and services. Many policies and frameworks have a user-centered approach. However, there is little focus on encouraging diverse service providers in the library. The aim of this study is to determine the strategic approaches that academic libraries are using in their efforts to recruit and retain diverse librarians. A systematic review involved searching databases, Google, and grey literature composed primarily of information from library associations' and organizations' websites using terms related to diversity, ethnicity, gender, socioeconomics, academic library, librarians, recruitment, and retention. Using a modified version of the CASP Qualitative Checklist, the publications were critically appraised to evaluate the validity of the findings. Fifty percent of the publications included an assessment component to determine the value of the intervention. Although a number of programs exist to recruit minorities to academic librarianship, the number of visible minorities in the field has remained stagnant for decades.

"Student Perceptions of the Library during Times of Terror: Exploratory Research Surveying Students Affected by the October 1 Shooting and Their Impressions of Safety in the Academic Library Community" by Kelsey Lupo Mazmanyan. On October 1, 2017, the history of Las Vegas, Nevada, was forever changed when a mass shooting claimed the lives of 58 innocent people at a concert site on the Vegas Strip. Only three miles away, the University of Nevada-Las Vegas (UNLV) and its main branch, Lied Library, became a space where students sought shelter and answers. To understand how this event impacted students' perceptions of safety at UNLV, nine qualitative interviews were conducted asking students to consider the various qualities of a public place that make it feel safe. Students' responses were analyzed to determine similarities and differences of "safe" locations on campus. Although each participant shared unique viewpoints as to where they would seek shelter and why, it was discovered that most students did not alter their actions regarding spatial use after the incident. More research must be conducted to determine if the majority of UNLV students feel similarly about their campus spaces and how the university can improve upon feelings of safety in the academic community.

"Perceptions of Academic Librarians Toward LGBTQ Information Needs: An Exploratory Study" by John Siegel, Martin Morris, and Gregg A. Stevens. While previous studies have examined lesbian, gay, bisexual, transgender, and queer (LGBTQ) information needs, none have addressed librarian confidence in addressing LGBTQ-themed information needs or the factors affecting this confidence. The authors used a mixed-methods survey to assess the knowledge and perspectives of academic librarians in responding to information inquiries related to sexual orientation and gender identity. Based on an exploratory factor analysis, three variables were identified: duty of care/vulnerability of inquirer, public visibility of work conducted, and personal biases and prejudices. These factors can reduce or otherwise influence the ability to meet LGBTQ information needs.

Notes

1. Goldie Blumenstyk, "What Would Make Innovation Easier in Higher Ed? We Asked Four Experts," *The Chronicle of Higher Education* (October 3, 2019), https://www.chronicle.com/article/What-Would-Make-Innovation/247218.

2. Burrhus Frederic Skinner, *The selection of behavior: The operant behaviorism of BF Skinner: Comments and consequences* (Cambridge University Press, 1988). ✍