

Academic Libraries and the EDUCAUSE 2017 Top 10 IT Issues

A quick glance at the EDUCAUSE 2017 Top 10 IT Issues reveals something quite interesting: three of those Top 10 IT Issues—*Strategic Leadership* (#4), *Sustainable Funding* (#5), and *Sustainable Staffing* (#8)—have more to do with leading an organization in uncertain times than with technology per se. Sustainability in funding and in staffing are clearly important challenges for any successful IT organization to meet, as is strategic leadership: “repositioning or reinforcing the role of IT leadership as a strategic partner with institutional leadership.”¹ But what exactly does this mean?

Two other 2017 Top 10 IT Issues—*Student Success and Completion* (#2) and *Higher Education Affordability* (#7)—provide some hints. Student success and completion—often measured by GPAs, retention and graduation rates, career placement, and earning potential—is the primary concern of today’s higher education, which has begun to operate more like a big business than an institution for public good.² The increase in jobs that require postsecondary credential is generating more demand for higher education.³ Combined with rising student debt, this growing demand makes higher education affordability even more critical. In this context, we can see that these two issues apply to higher education in general, not just to its IT groups. Colleges and universities are trying to leverage their IT organizations in order to successfully tackle these issues.

These two issues also present an informative backdrop for three other Top 10 IT issues: *Data-Informed Decision Making* (#3), *Data Management and Governance* (#6), and *Digital Transformation of Learning* (#10). The EDUCAUSE survey results show that higher education IT organizations are venturing into new areas such as business intelligence, reporting, and data analytics. Colleges and universities are asking their IT groups to be involved in big data analytics in support of data-informed decision making.⁴ It is in this context that proper institutional data management and governance becomes important. The survey results also reveal the expectation for higher education IT groups to be more closely involved in the digital transformation of learning by collaborating with faculty and academic leadership.

Can the different focuses of libraries and IT organizations in these areas of shared interests complement each other and lead to better institutional outcome?

Different Approaches Taken by Academic Libraries and IT Organizations

Interestingly, these three Top 10 IT issues—*Data-Informed Decision Making*, *Data Management and Governance*, and *Digital Transformation of Learning*—overlap with some of the areas that academic libraries have been pursuing to innovate and experiment with library services and operation in the changing environment of higher education. However, the approach of academic libraries in these areas shows some marked differences.

In data-informed decision making, higher education IT groups are pursuing business intelligence and predictive data analysis as a way to contribute to student success, whereas academic libraries have been focusing their efforts on the systematic assessment of library usage to prove their value to institutional outcomes.⁵ These efforts from academic libraries

led to the discovery of multiple statistically significant positive relations between library usage and student success, such as between checking out library materials or library instruction and a student’s graduating GPA.⁶ But it is unclear whether the discovery of those positive correlations significantly helped academic libraries to obtain more funding and other resources as a result.

Data management and governance is an area where both IT organizations and academic libraries are getting actively involved. While libraries’ interests are mostly focused on how to support researchers’ increasing need to manage and share research data to comply with federal funding agencies’ data-related requirements,⁷ the EDUCAUSE survey results show that IT organizations’ interests lie more in the aspect of protecting all institutional data and maintaining its integrity so that the data can be more effectively utilized for institutional benefits and decision making.

Digital transformation of learning directly relates to teaching and learning, an area where libraries have traditionally been heavily engaged. In this area, academic libraries have been testing and introducing emerging technologies to students and faculty. Their concentrated efforts in educating students and faculty about those technologies relevant to learning, teaching, and research activities are to enable and foster innovation and experimentation. For example, many academic libraries



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now provide 3D printing equipment and service along with educational workshops and consultation to increase the awareness and knowledge of this new technology that brought significant changes in the STEM area.⁸ Some academic libraries also expanded their service to new areas such as digital media production, software development, statistical and qualitative data analysis, and geographic information systems.⁹ In contrast to a wide range of these technology-related services that libraries provide, IT organizations are likely to focus more on supplying instructional design support for individual courses and to concern themselves with learning analytics to identify key metrics to improve student outcomes and higher education affordability.

Improving the Bottom Line Together

Higher education IT organizations and academic libraries are going through similar challenges that are important for their organizational success. Strategic leadership, sustainable funding, and sustainable staffing are imperative for both groups to be able to continue to innovate their services and operations to meet the evolving needs of their users and parent institutions while maintaining existing services in high quality. Improving student outcomes and higher education affordability are clearly the bottom line of today's higher education, which both academic libraries and IT organizations must address in their strategies for the future. It is with this same goal of improving the bottom line that both groups are trying new initiatives in areas of data-informed decision making, data management and governance, and digital transformation of learning—with somewhat different approaches.

Shared challenges and areas of interests naturally raise the question of potential collaboration. Can the different focuses of libraries and IT organizations in these areas of shared interests complement each other and lead to better institutional outcome? An example at Bucknell University seems to give an affirmative answer to that question. At Bucknell, the successful merger of the library and IT departments resulted in the elimination of many traditional distinctions between those

two units and produced four significant initiatives: digital scholarship, summer course redesign grants, open educational resources, and business intelligence and analytics. The new Library and Information Technology unit started partnering and co-teaching with the academic faculty, offering its expertise in instructional technology; it began to award technology-integration grants based on student learning outcomes; it prioritized supporting faculty regarding the exploration and creation of open educational resources; and it created a new team for the business intelligence initiative to establish a data warehouse for student data following an open-access model.¹⁰

It is encouraging to see student success and operational efficiency being pursued as one integrated goal in these initiatives rather than as two separate and sometimes conflicting priorities residing in different silos. This is a mindset that academic libraries and higher education IT groups need to adopt to successfully tackle the two major challenges of today's higher education, student success and higher education affordability, together. ■

Notes

1. Wyatt Kash, "New Top 10 List Reflects Changing Complexion of IT Issues Facing Higher Education Leaders in 2017," *EdScoop*, October 26, 2016.
2. Andrew Rossi, "How American Universities Are Ripping Off Your Education," *Time*, May 22, 2014.
3. Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, *Recovery: Job Growth and Education Requirements through 2020* (Washington, DC: Georgetown University Center on Education and the Workforce, 2013), 2. See also Anthony P. Carnevale, "Higher Education and Democratic Capitalism," *EDUCAUSE Review* 51, no. 6 (November/December 2016).
4. Brenda J. Allen, "Optimizing Technology's Promise," *EDUCAUSE Review* 51, no. 6 (November/December 2016).
5. Megan Oakleaf, *The Value of Academic Libraries: A Comprehensive Research Review and Report* (Chicago: Association of College and Research Libraries, 2010).
6. John K. Stemmer and David M. Mahan, "Investigating the Relationship of Library Usage to Student Outcomes," *College & Research Libraries* 77, no. 3 (May 2016). Also see the publications listed in the bibliography section of Oakleaf, *The Value of Academic Libraries*.
7. For examples, see DMPTool (<https://dmp.cdlib.org/>) and an open-data initiative led by the Association of Research Libraries, SHARE (<http://www.share-research.org/>). Many academic libraries also offer assistance and consultation in research data management.
8. Bohyun Kim et al., "Makerspace Task Force Report," working paper, University of Maryland, Baltimore, July 2014. Regarding 3D printing services offered by academic libraries, see Section 2.A and Appendix 1.
9. See Digital Media Commons, University of Michigan Library (<http://www.lib.umich.edu/digital-media-commons>); Media Production Studios, NCSU Libraries (<https://www.lib.ncsu.edu/spaces/media-production-studios>); Programming & Software Development Consultation Services, George Washington University Libraries (<http://library.gwu.edu/services/computers-wireless/coding>); Statistical Consulting, Kent State University Libraries (<http://www.library.kent.edu/about/departments/statistical-consulting>); and GIS & Statistical Resources @ Yale, Cushing/Whitney Medical Library (<http://library.medicine.yale.edu/services/crs/gis-statlab>).
10. Param Bedi and Jason Snyder, "Making a Difference: Moving Your Organization from Transactional to Transformational," *EDUCAUSE Review*, March 16, 2015.

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