Teaching, Learning, and IT Issues: Points of Intersection

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Comparing IT and teaching and learning (T&L) perspectives on key issues is a bit like looking at a mountain from different perspectives: the mountain is the same, but it will look different if you’re observing it from the north face or the west face. The “mountain” in question here is higher education, and the “faces” are the EDUCAUSE Top 10 IT Issues and the EDUCAUSE Learning Initiative (ELI) Key Issues in Teaching and Learning surveys.

Since 2011, ELI has been surveying the wider teaching and learning (T&L) community, which includes all campus units that support the academic mission of higher education, including centers for teaching and learning, the IT organization, the library, and the dean and provost offices. Similarly, the Top 10 IT Issues survey is developed by a panel that includes IT and non-IT leaders, CIOs, and faculty members; it is then voted on by EDUCAUSE members. Together, the annual results of these two surveys provide perspectives that are complementary in nature, making it useful to closely examine the points at which they converge.

This year, there are important points of intersection: information security, student success, institution-wide IT strategy and digital integrations, and academic transformation. Indeed, we can see further intersections no matter the direction in which we look. For example, the issue of Data Management and Governance (#8, tie) is not just about learning analytics, but also about learning data standards. In what follows, we will highlight some of the more notable intersections, with the caveat that the intersections of IT and T&L issues are more abundant than space allows us to describe.

Information Security (#1)

Information Security is once again the top issue for the IT community—and with good reason: it’s a major and unrelenting challenge for all of us. Until now, the T&L community has been a sympathetic observer and supporter of the IT organization’s information security efforts. But in light of recent developments (e.g., the massive data breaches at Equifax and Yahoo), this is now an important issue for T&L as well. With the advent of open standards for learning data, all learning applications can now contribute data into a centralized aggregation point (sometimes called a learning record store). But with more data comes more responsibility, and this development has heightened awareness in the T&L community about both security and privacy. As progress is made in using open standards to architect new digital learning environments, T&L will need to partner closely with the IT organization in the ongoing pursuit of information security. Education about information security will now need to be a component of faculty development efforts.

But also emerging within the T&L community is a renewed concern about student privacy, a concern driven in part by the anticipated impact of the learning data standards. New approaches to privacy have surfaced (e.g., the Data Use Label proposed by the IMS Global Privacy and Security Task Force), as well as possible ways to automate privacy vetting.

Student Success (#2)

The Top Ten IT Issues and the Key Issues in Teaching and Learning surveys are reflecting institutional efforts to reorganize resources and evolve initiatives to support student success in more effective and collaborative ways. In the 2016 Top 10 IT Issues, Student Success: improving student outcomes through an institutional approach that strategically leverages technology ranked #3. In 2017, Student Success and Completion: effectively applying data and predictive analytics to improve student success and completion ranked #2. And in 2018, Student Success: managing the system implementations and integrations that support multiple student success initiatives also ranked #2 but was joined by Student-Centered Institution: understanding and advancing technology’s role in defining the student experience on campus at #3. In the Key Issues in Teaching and Learning survey, integrated planning and advising systems for student success first appeared in 2014 and has been ranked in the top 20 ever since. However, the Key Issues survey includes additional student support elements: learning analytics, assessment of learning, adaptive teaching and learning, and competency-based learning. Something perhaps not evident in the surveys is the way that these technology-enabled supports are becoming integrated and how the institutional units (including the IT organization, academic affairs, institutional research, and student affairs) that support these areas are also collaborating toward a common goal. Some of the technologies and systems that support student success have matured over the past twelve months, but higher education is also learning about effective change management, leadership practices, and organizational models that support the learner in a holistic way.

Institution-wide IT Strategy (#3) and Digital Integrations (#8, tie)

In the Digital Integrations section of the 2018 Top 10 IT Issues article, the authors write: “The age of the ERP (enterprise resource planning) system is ending. Institutions are moving to enterprise architectures based on multiple products.” This shift mirrors, fairly precisely, a development on the T&L side: the concept of the next generation digital learning environment (NGDLE). The NGDLE entails a movement away from overreliance on a single LMS toward an architecture based on a confederation of various learning applications, tools, content, and resources. At the heart of the NGDLE concept is the idea of integration via open standards. The IT and the T&L visions are thus fairly congruent: integrating disparate applications so that they offer our communities a consolidated environment and more customizable functionality. These are invigorating and also daunting challenges.

The good news on the T&L side is that open standards, when implemented widely, do work. The IMS Global standard
LTI (learning technology integration) has proven to be an effective and cost-efficient way to integrate disparate learning applications. As already mentioned, learning data standards (e.g., Caliper Analytics and Experience API) offer similar potential. And there are conversations under way about additional standards that relate directly to T&L areas of interest, such as digital badging and credentialing, transcripts, and assessment. This experience has shown that the ideal of integrating diverse applications into a unified architecture is no pipe dream but is, rather, a very real possibility. Due to this alignment, we expect that there will be many important opportunities for enterprise IT and T&L professionals to find common ground on future architectures for all of our digital environments.

Academic Transformation (#3, #7, #10)

For the past six years, academic transformation has been among the top four issues for the T&L community. Similarly, the 2018 Top 10 IT Issues survey demonstrates the need for academic transformation support in various areas: #3, Institution-wide IT Strategy: repositioning or reinforcing the role of IT leadership as an integral strategic partner of institutional leadership in achieving institutional missions; #7, IT Staffing and Organizational Models: ensuring adequate staffing capacity and staff retention in the face of retirements, new sourcing models, growing external competition, rising salaries, and the demands of technology initiatives on both IT and non-IT staff; and #10, Change Leadership: helping institutional constituents (including the IT staff) adapt to the increasing pace of technology change. Today, success in academic transformation depends on a cohort of campus leaders committed to leveraging technology and effective pedagogical practices to attain strategic goals. The capability of organizational evolution and adaptation to better serve today’s learner through new instructional models, new business models, and new student support models has been slow to develop in higher education. An institution that employs some means of managing and supporting change, whether administrative or pedagogic, is more likely to succeed—protecting its resources, financial and human, and positioning itself in an educational ecosystem where changes are becoming more frequent and more pervasive. It’s worthwhile to educate teams across an institution on how change management can provide support between the existing campus culture and a critical project.

Notes


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