

Why IT Matters to Higher Education

# EDUCAUSEreview

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## Corporate Perspectives on the [EDUCAUSE 2020](#) [Top 10 IT Issues](#)

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Three community leaders, representing industries dedicated to serving the higher education IT sector, offer unique insights and recommendations on the EDUCAUSE 2020 Top 10 IT Issues.

### **Sarah Carey**

Executive Director, Product Management, McGraw-Hill Education, EDUCAUSE Bronze Partner

### **Ling Chai**

President and CEO, Jenzabar, EDUCAUSE Platinum Partner

### **R. Andrew Sroka**

President and CEO, Fischer Identity, EDUCAUSE Silver Partner

These leaders shared their perspectives on four of the EDUCAUSE 2020 Top 10 IT Issues:

[Information Security Strategy \(#1\)](#)

[Digital Integrations \(#4\)](#)

[Student-Centric Higher Education \(#5\)](#)

[Student Retention and Completion \(#6\)](#)

### **Information Security Strategy (#1)**

**Sroka:** Information Security Strategy is again at the top of the EDUCAUSE Top 10 IT Issues list for 2020. And it should be. Higher education is faced with some of the most complex security challenges that exist today, and too often institutions are challenged with resource and talent deficits at the same time. In a world of increasing complexity and diminishing resources, how institutions innovate and plan for future information security issues while maintaining their ability to thwart current threats is a complicated endeavor. And institutional leaders must realize that this endeavor is not just an IT problem.

Modern academics are driven by information, and the number of systems and digital services that institutions need to manage can be extensive. This means that access vulnerabilities can occur almost anywhere. To compound the issue, the ownership and responsibility for these digital services can often be murky, and many will cross functional and operational boundaries. Meanwhile, students and faculty alike are clamoring for more efficient and user-friendly services in

every area of campus life. As we build the truly digital campuses of the future, a comprehensive information security strategy that involves every stakeholder in the institution should be on everyone's to-do list.

CISOs and CIOs can craft the best policies and procedures, purchase and deploy the best tools, and hire the best and brightest talent they can afford, but without organization-wide support, these efforts can fall short. Successful strategies require support and buy-in from the entire organization—from the president at the top to the help-desk intern on the front lines. And these strategies need to be a fluid process, one that is constantly evaluated and evolved as new threats emerge. This is not a small task, but when it comes to risk, we live in a "when, not if" world, and leadership needs to recognize that as an institutional priority.

### **Digital Integrations (#4)**

**Chai:** The number of systems in use across higher education campuses exponentially increased during the past decade as technologies matured and users became more accustomed to web-based applications and 24/7 connectivity. Forward-looking institutions must embrace new demands brought about by this connected lifestyle and adapt their IT ecosystems to accommodate the "always-on" needs of users. The challenge lies with orchestrating applications and ensuring seamless, end-to-end environments.

Integration will play a major role in the adoption and use of technology in 2020. While institutions would be wise to adopt pre-integrated and unified platforms that deliver all the functionality that users (both students and staff) require, this may not always be an option, especially if IT departments pursue best-of-breed or a la carte solution strategies. The vast expanse of available IT offerings has encouraged new levels of freedom of choice and flexibility, and it will be up to institutions to support this trend.

Fortunately, the cloud can give institutions the flexibility and scalability they need while also providing an environment that can support a range of applications. The cloud helps IT staff ensure that all applications speak together through orchestration platforms and that all systems properly align with industry standards and best practices. Digital integration platforms, APIs, and other solutions that can mitigate interoperability challenges in any environment, cloud or otherwise, will grow in importance in 2020, helping institutions leverage the platforms they need without worrying about complex networking issues.

In 2020, institutions must focus on interoperability and usability, which will drive the successful use of technology and, ultimately, underpin institutional success.

Carey: McGraw-Hill's focus on technology is not just for its own sake. Educational technology is a crucial link between institution-wide systems and our own curated content and learning tools. We hear from institutions around the country that LMS integrations are a true differentiator for us. What this has taught us is that digital integrations and interoperability aren't just nice-to-have—they're an imperative.

Beyond our work on deep LMS integrations (and our current work building toward the even more beneficial LTI Advantage specifications), our development of new, LTI-based components for our online platforms is rapidly evolving the way we offer unique products for over ninety different

disciplines. It allows us to maintain a solid, platform foundation and yet offer more flexible configurations that can service a wider market. We've used LTI-built components to offer functionality such as the following: online communication (fostering more vibrant and collaborative means of assessment); automated writing feedback (serving critical areas around reading/writing while also easing the burden of grading); virtual, hands-on lab and training experiences in sciences and health professions (in a rapidly growing online space); and practical, real-life simulations that foster better workplace skills.

Our commitment to LTI and the development of a plug-and-play ecosystem is also an acknowledgment of something vitally important: we want to encourage the use of learning tools regardless of what platform is being used. This allows us to be more flexible in delivering cost-appropriate solutions to a wider variety of users and learning environments. The benefit of creating more configurable solutions while maintaining a consistent, seamless experience for educators and learners is also better for us in the long run. It forges a clearer path and allows us to take our toolbelt with us.

### **Student-Centric Higher Education (#5)**

**Chai:** Higher education is in a precarious position; if institutions do not deliver the experiences that the new, nontraditional student wants, they risk closure. This "do or die" mentality is becoming more urgent as the sheer size of the student population rises. As an increasingly large number of more diverse students pursue higher education, institutions must evolve to avoid obsolescence.

Institutions need to take note from web-scale enterprises like Amazon, Facebook, Apple, and Google, which set themselves apart and drove the consumer revolution by putting customer satisfaction on a pedestal above everything else. Just like the consumer technology market, student experience will be the driving force that will shape tomorrow's higher education landscape.

Institutions must adopt a student-centric approach—one that prioritizes the experiences of students and highlights the characteristics that students need to showcase in order to boost student enrollment, retention, and completion. Institutions need to spotlight student life, success, and support so that they can better differentiate themselves and stand out.

Thanks to the rapid evolution and adoption of technology, higher education institutions have an abundance of data at their disposal—data that can be analyzed to better understand students. This data analysis, comprehension, and utilization is a must for 2020; with real insight into students' tendencies, goals, and habits, faculty and staff can communicate with individuals more seamlessly and can potentially intercept trajectories if students are not on the path to success.

Yet technology is only one piece of the student-centricity puzzle. Students obtain an education at different paces and by different means. New learning strategies, competency-based education programs, and other models are growing in demand, encouraging higher education institutions to embrace new policies and practices in order to cater to the unique learning requirements of all their students without segmenting or excluding any groups.

The pace of change in the higher education landscape is faster than ever. Institutions must learn from the business world and follow the path laid by the big four: experience will drive success.

## Student Retention and Completion (#6)

**Carey:** Educational technology is unlike any other business. Success isn't solely measured by how many people use a product, or by how profitable it might be—there's the added responsibility of building a product that can help students learn. And to be successful—in a way that improves students' mastery—we have to embrace the onus of improving student outcomes. This requires (1) focus, (2) a deep understanding of the learning material, and (3) a strong connection to the real experts: educators. This trifecta needs to be woven into everything we do. The sophisticated use of technology and data analysis are helping our industry design new tools and methodologies that can forge successful pathways for all students. At McGraw-Hill, we are using data analysis to provide nuanced insights for institutions and instructors who want to motivate and better guide students.

In one recent example, our partnership with a large state university and its use of ALEKS (our adaptive platform for math and chemistry) helped students flourish in a historically difficult subject area: Introductory Math. Using daily data pulled directly from ALEKS, this university is now able to more accurately identify at-risk students—informing how it approaches early intervention and outreach. Data analysis (by clearly showing instructors which topics are most challenging for students) has also helped the university refine its core curriculum.

Another institution leading the way is the College of Health Care Professions (CHCP), a multi-campus college that specializes in healthcare education. The college's overarching goal in using McGraw-Hill technology was to create a predictive model that could help pinpoint signs of at-risk students; to make outreach techniques more effective; to make adjustments to the curriculum; and to give practical advice to students to help them succeed. Utilizing performance data from McGraw-Hill's online platform Connect along with CHCP's own student information systems, we were able to collectively identify two important metrics: low percentage submission (LPS) and a procrastination index (PI). LPS tracks students who fail to submit all of their assignments during the first two weeks of class. PI is a percentage indicating how often a student starts assignments in the last quartile of time before the due date. Both metrics have allowed CHCP to spot students who are at risk of failing: only 25 percent of LPS students ended up passing their course, and 70 percent of students who had a high PI ended up failing. These data points helped inform outreach and preventative measures and revealed variables that showed strong correlations to a student's chances of success. As a result, CHCP was able to better hone its student messaging campaigns—encouraging and motivating learners with tips drawn straight from the research findings.

While the benefits to CHCP are clear, McGraw-Hill too has benefited from analyzing the trends found through this partnered study. Metrics like PI and LPS are evident in the entire Connect user population, which will allow us to explore how we can deliver important insights on student behavior to our entire market.