## Higher Ed Leadership and Ed Tech in the 21st Century

Innovations and advances raise questions of how new academic leaders should help choose the best products and develop the best practices, writes Terri E. Givens.

By Terri E. Givens

June 20, 2019

Software and technology have been a part of higher education since the first computers came online. Despite this, many new academic leaders have much to learn about the latest developments in the world of ed tech. Advances in software and new apps raise questions of how leaders should choose the best products, as well as how best practices can be developed.

The world of educational technology was mainly focused on learning management systems when I started my academic career in the late 1990s. Blackboard was new, and soon we would see new entries such as Canvas and Moodle. Then, when I joined the provost's office at University of Texas at Austin in 2006, it was clear that the campus was going to need a new student information system -- the mainframe version was getting outdated. The efforts to develop data-gathering systems for faculty went through several fits and starts. I recall trying out one of the beta systems that allowed me to put all of the information for my annual review into an online form. But that initial system was abandoned when it didn't work properly, so my efforts were in vain.

When I became provost at Menlo College in 2015, one of my goals was to learn more about the ecosystem of educational technology in Silicon Valley. Also, as a board member for several organizations that support college-bound students from underserved communities, I became interested in the ways that companies were using educational technology to help first-generation and low-income students succeed in college.

At Menlo, the first step for me was getting a better understanding of the software systems and apps that we used across the campus. I knew that we used one system to gather our student information and another as our customer relations manager for admissions. We were also in the process of adding another data management system for our alumni and donors. The transfer of data from each of these systems could be complicated by data entry errors, and keeping track of the status of students often ran into issues. I also soon learned that there wasn't a good solution that covered all three components of a student's passage through the college, and even if there were, it could be prohibitively expensive to try and migrate to a new system.

The imperatives of a changing student body led the college to try various apps for student engagement, particularly those that would work on mobile phones. It was clear that students were rarely reading email and that getting important information to them would require using text messaging. Our student affairs division tried several apps that would not only send important messages but also track student use of services such as advising, the career center and attendance at campus events. Campus security was also a factor, as the need arose to be able to reach students in case of emergency, such as a natural disaster or security threat.

**Using Technology to Improve Student Outcomes**

Since I left my position as provost last summer, I have been working with several ed-tech companies and attending conferences that emphasize ed tech, such as [ASU/GSV](#) or those focused on a tech topic, like one at *[Inside Higher Ed](#)*. Most recently, I started my own company, [the Center for Higher Education Leadership](#), which has a mission of empowering leaders and providing a portal for professional development opportunities. Although we provide support for a broad range of administrative issues, information on the latest in ed tech is an important component of our professional development offerings.

I have become interested in applications that use artificial intelligence to try to improve student outcomes. Several apps are available that can send students text messages with reminders or ideas for improving their class performance. This includes [Study Tree](#), which started off as a way to connect students with peer tutoring and has evolved into a broader approach to student success -- one that helps with studying and access to complementary resources for courses.

About a year ago, I was invited to an event at the [Salesforce.org](#) headquarters in San Francisco, and I also attended their [Higher Education Summit](#) in Washington, D.C., where student success was a major theme. I learned about the ways that other universities, like Georgetown University, were using technology to reach students in a variety of ways. And I became aware of companies like Civitas that use predictive analytics to track student progress and improve student outcomes.

The use of data to track and support students has [raised some concerns](#) about student privacy and tracking of students in ways that might negatively impact lower-income students. However, it was also clear that

these types of data could be used to improve graduation rates, if used properly.

Such concerns led, in fact, to the collaboration among several large research institutions through the University Innovation Alliance. The universities, including my former employer, the University of Texas at Austin, share best practices for using predictive analytics to improve student success, with a focus on improving graduation rates. For example, former University of Texas senior vice provost David Laude, who had been charged with improving graduation rates, encouraged the use of predictive analytics and also developed new practices in his own biology courses that improved student retention. He focused on helping students complete those courses rather than using the big lecture classes to weed out less prepared students.

But before they could move forward with their ambitious agenda, members of the alliance found that they had to go back to their institutions and determine what data resources already existed and develop an inventory of data and processes. Similar to my experience at Menlo College, it was important for campus leaders to gain a better understanding of how different units on campus were using data and software, from admissions to student life to alumni outreach. All of the campuses involved have achieved improvements in graduation rates, but the progress has perhaps been slower than expected.

Laude and other representatives from the UIA presented their results at a leadership forum held at the recent ASU/GSV conference. Many organizations such as *Inside Higher Ed* are working to bring higher ed leaders together to learn more about the best practices around student success that are happening at places like ASU, Georgia Tech and the University of Texas at Austin. But more outreach needs to be done, and I'm hoping that my own

platform and others will be the means of sharing best practices, not only for four-year institutions but also community colleges.

Collaboration can be difficult, even within college campuses, given the varying needs represented by all the academic and administrative units and the demands of accreditation. The burgeoning world of educational technology is working to address many of the issues that college campuses face, but the results are often piecemeal approaches to different aspects of a student's journey from high school student to alum. It is important to break down the silos across a campus so that institutional leaders can understand the current use of technology, develop plans for collaboration, reduce the redundant use of software and develop a technology strategy that can reduce costs and increase innovation. Meetings of key stakeholders are a vital component to developing these strategies, but it will have to be guided by top leaders and chief information officers who have a handle on the broader tech landscape.

Another takeaway for me has been that higher education leaders and those in the ed-tech world need to work to understand and communicate more with each other. This process must start with education. New higher ed leaders need to take the time to learn about the tech landscape and gain a better understanding of the variety of offerings available. Attending conferences like ASU/GSV or Educause is a good introduction to the world of educational technology and will provide new campus leaders with a quick introduction to the variety of offerings that can help their campuses support students and improve their infrastructure. Our newsletter, *Higher Ed Connects*, is an additional resource for those who cannot make it to a conference or want the latest on ed-tech issues for administrators.

K-12 and higher education institutions must also collaborate more on these fronts. That could be done through creating more connections between high

school representatives who are advising college-bound students and college academic advisers. Finding ways to share information could help students have an easier transition from high school to college. This could be done through existing organizations like NACAC and NACADA, who bring together professionals who work with students in college admissions and advising.

The stakes are high as we work to improve access and provide support for students so they can be successful in college and in their careers. Higher education is an important gateway to jobs that will evolve as technology like AI continues to reshape the working world. As I watch my own son enter college, I hope he will benefit from a liberal arts education that takes advantage of the latest innovations, providing him with a strong background for whatever career he may choose. That includes the latest innovations in educational technology. This is an evolving topic, and I will continue exploring in future articles the ways that campuses across the country are addressing it.

## Bio

*Terri E. Givens is chief executive officer of the Center for Higher Education Leadership. She previously served as vice provost at the University of Texas at Austin and provost at Menlo College.*

*Read more by Terri E. Givens*

https://www.insidehighered.com/views/2019/06/20/higher-ed-and-ed-tech-leaders-need-understand-and-communicate-each-other-opinion?utm_source=Inside+Higher+Ed&utm_campaign=54e64bbcf9-WNU_COPY_01&utm_medium=email&utm_term=0_1fcbc04421-54e64bbcf9-199133009&mc_cid=54e64bbcf9&mc_eid=6f67a838c9