



Key Considerations for the Next Wave of Higher Education Technology



In March 2020, the COVID-19 pandemic forced U.S. higher education online with unprecedented speed, creating significant challenges for learners and institutions but also a singular opportunity for online learning and higher education technology. Institutions of higher education were forced to adopt online learning nearly wholesale—and to innovate and redesign their instruction in order to maximize its benefits for learners.

Even prior to the pandemic, new technologies had been transforming what higher education looked like and how it operated. For instance, institutions had begun using [artificial intelligence](#) and [machine learning](#) to help schedule courses more efficiently, create personalized learning programs, and identify students who need additional academic or financial support.

Some of these technologies, before and during the pandemic, have worked well for higher education, while others have been a poor fit for the sector. But the results have illuminated best practices that we can all learn from going forward.

The Presidents Forum is currently hosting a series of convenings, entitled [Learners First](#), that bring together higher education experts from across the country. The most recent convening discussed what we can learn from the newest wave of technological innovation and how to ensure that it truly moves higher education forward.

The experts identified five key considerations for how institutions think about and leverage learning technologies in an ever-changing world. We all have a responsibility to reflect on and learn from our collective experience during this tumultuous time and leverage new best practices to more effectively meet the needs of all learners.

We all have a responsibility to reflect on and learn from our collective experience during this tumultuous time and leverage new best practices to more effectively meet the needs of all learners.



Eloy Oakley, chancellor of the California Community Colleges, was the first person from his immediate family to finish college, and his educational journey impacts how he serves learners who may have similar lived experiences.

“Many of us who came out of poverty or communities of color, those experiences live with you and shape who you are,” he [said](#). “And I have always tried to hang on to those experiences because ... certainly if you went back and talked to some of my friends from grammar school or high school and you told them I had become the chancellor of the California Community Colleges, they would laugh.”

“It’s the institutions, the educational pathway, all the things around the students themselves that need to be reformed and reassessed,” said Rahim Rajan, deputy director of postsecondary success at the Bill and Melinda Gates Foundation. “It’s crucial that we focus on the needs of students and revamp the educational experience to meet those needs. To me, that goes to the very heart of what equity is.”

Purdue University Global has promoted equity in part by investing in first-generation learners, who comprise almost half of its student body.

Purdue University Global has promoted equity in part by investing in first-generation learners, who comprise almost half of its student body. Last month, the university [announced](#) a new scholarship specifically for first-generation students who have completed at least three terms of study and pledged to provide additional supports for these learners.

Many institutions have also leveraged technology to open up access and support student success, such as by providing more digital and asynchronous learning options or [new guaranteed admissions pathways](#). However, technologies are only as good as the systems they are in—and higher education [was originally designed](#) to serve the privileged. While advancements have occurred to be more inclusive, the system remains in desperate need of innovation and reinvention to meet the needs of all learners.

As we think about redesigning the system, it is important to be open to ideas that come from unexpected sources or challenge established truths. Insights from people who have worked in other industries are critical for challenging the assumptions baked into traditional higher education, avoiding groupthink, and designing a system that serves all learners.

“Many of us who came out of poverty or communities of color, those experiences live with you and shape who you are. And I have always tried to hang on to those experiences because ... certainly if you went back and talked to some of my friends from grammar school or high school and you told them I had become the chancellor of the California Community Colleges, they would laugh.”

– [Eloy Oakley](#) | California Community Colleges

THINK OF TECHNOLOGY AS A VEHICLE—NOT THE DESTINATION.



Just as the higher education system can stifle innovation, existing technologies may also reflect outdated assumptions about who learners are and what they need. It may be time to retire those technologies and build something for the current moment.

Technologies that support online learning are particularly ripe for reconsideration. Many people still think of online or in-person learning as a binary—with learners either watching on a computer or sitting in a classroom—but in reality, the proliferation of hybrid options means that people can learn from nearly anywhere, any time, on any given day. As a result, institutions need to think strategically about which aspects of learning are best done face-to-face versus online—synchronously or asynchronously—and find technologies to support those modalities.

“If done right, technology can open so many doors for learners looking to acquire skills and complete their education,” said Scott Pulsipher, president of Western Governors University. “But it can also be the shiny object that distracts from the broader goals of promoting access to and success in higher education. Moving forward, we have to make sure we continuously design and redesign technology to match what learners say they need, not default to using whatever technology is on hand.”

“We can have a lot of forward motion in the sector without bringing everybody along. If we spend our time worrying about whether a given institution is going to adopt competency-based learning or permanently offer hybrid classes, I think we’ve lost.”

— Ted Mitchell | American Council on Education

CREATE A COALITION OF THE WILLING.



The push for progress in higher education does not have to be unanimous. Instead of spending time convincing recalcitrants of the value of embracing new technologies or hybrid learning, enthusiastic leaders can experiment with new ideas and adopt what works—and let the results speak for themselves.

“We can have a lot of forward motion in the sector without bringing everybody along. If we spend our time worrying about whether a given institution is going to adopt competency-based learning or permanently offer hybrid classes, I think we’ve lost,” said Ted Mitchell, president of the American Council on Education. “We will achieve much more if we build a coalition of leaders who are ready to reimagine what higher education looks like and focus primarily on them.”

The American Council on Education has put this idea into practice by working with six institutions, including Ivy Tech Community College and Excelsior College, on [a pilot program](#) to award learners up to 45 credits for completing apprenticeship programs.

A collaboration among Dallas College, the University of North Texas at Dallas, and the Dallas Independent School District further illustrates the power that a coalition of the willing can have. The three institutions [decided](#) to work with GreenLight, which provides a technology platform that allows learners to securely access and share their educational records with employers and education providers. As a result, learners can more easily apply to college or for jobs. Since that initial collaboration, several other Texas institutions [have signed on](#) to work with GreenLight, creating an opportunity for the model to scale statewide.

These collaborations show that what is good for learners can also benefit institutions. “All too often ... the evolving demands of students are seen to be at odds with faculty mores and preferences,” [said](#) Richard Senese, president of Capella University. “Our experience flies in the face of that conventional wisdom.”

EXPERIMENT, THEN EVALUATE.



Institutions saw the benefits of large-scale experimentation when everyone shifted to online learning during the pandemic.

“Before the pandemic, we were focused on improving the quality of our online offerings, so we were able to adapt to online delivery faster than many of us ever thought possible,” said Sue Ellspermann, president of Ivy Tech Community College. “There were obviously growing pains, but higher education is better for having the additional digital and hybrid options that COVID-19 forced us to adopt. We showed ourselves how nimble and responsive we can be.”

As institutions raced to convert in-person offerings to online, though, they did not always build in ways to evaluate the effectiveness of the online options. Some learners felt that the quality of education they were receiving did not measure up to the tuition they were paying—and institutions didn’t have any data to suggest otherwise.

This problem is also evident in credentialing, as there are [nearly 1 million unique credentials](#) in the United States but few mechanisms for learners to determine which credentials are valuable or good fits for them. This experimentation in how learners acquire skills and prepare for the workforce is laudable, but it needs to be coupled with robust evaluation in order to truly serve learners well.

Beyond the unique demands of a pandemic, experimentation and evaluation could be the recipe for encouraging continued innovation in higher education. Southern New Hampshire University president Paul LeBlanc said that this combination is what makes the U.S. Department of Education’s demonstration projects—which waive select federal regulations for participants to encourage responsible innovation—so impactful. In fact, more than two decades ago, in the case of online learning, [a demonstration program](#) showed that learners could receive a quality education entirely online, leading to the elimination of a rule restricting how many online courses learners could take.

Experimentation and evaluation could be the recipe for encouraging continued innovation in higher education.

“Before the pandemic, we were focused on improving the quality of our online offerings, so we were able to adapt to online delivery faster than many of us ever thought possible. There were obviously growing pains, but higher education is better for having the additional digital and hybrid options that COVID-19 forced us to adopt. We showed ourselves how nimble and responsive we can be.”

– Sue Ellspermann | Ivy Tech Community College

CONTINUE TO PUT LEARNERS FIRST.



The concept of putting learners' needs first may sound obvious, but it's actually rather radical in higher education. Consider how tutoring sessions or office hours are typically tailored to the leader's preferences, rather than factoring in the unique needs of working adults or student parents. Or how there has rarely been flexibility for learners to pause their education to deal with financial, health, or other stressors, forcing them to drop out if they cannot keep pace with a rigid term schedule.

At Wake Technical Community College in North Carolina, student support includes drop-in tutoring offered at multiple times of the day, flexible online course scheduling even before the pandemic, and assistance finding internships and other work-based learning opportunities. "If I had applied for a job on my own without Wake Tech, I don't feel like I would have been considered as strongly," said Tiffany Harrell, a Wake Tech student and widowed mother of five whose internship experience as a student [led to a full-time job](#) at Lenovo. "Work-based learning changed my entire life."

Perhaps in part due to the hardships of the COVID-19 pandemic, colleges and universities are now listening to learners and hearing what they need with a greater degree of urgency and purpose.

"Our students are the experts when it comes to what works best for them," said Paul LeBlanc. "If we want them to feel supported and empowered to achieve their goals, we have to continually engage them and incorporate their voices in our decision-making process."

However, institutions struggle with consistently eliciting, capturing, and responding to learners' perspectives. Bridget Burns, the CEO of the University Innovation Alliance, said that institutions are most comfortable using quantitative data to inform their decisions, but they also need to consistently collect and act on inclusive and robust qualitative feedback from learners. That means thinking strategically about building the institutional muscle for consistent listening, reflection and follow up. Necessary steps include recruiting diverse and representative learners, developing pressure tested questions and protocol, and an internal problem management system to ensure capture and response.

The California Community Colleges' [Rising Scholars Network](#) offers one example of how to bridge that communication gap. The network helps colleges understand and address the specific needs of incarcerated and formerly incarcerated learners and develop pathways to help them enroll in and complete college. It currently has 56 on-campus programs as well as programs in prisons and jails. As University of Maryland Global Campus (UMGC) president Gregory Fowler and Rio Salado College president Kate Smith [have written](#): "For higher education to fulfill its democratic promise in the years to come, we must come to view serving ... ultra-diverse [learner] demographics – who are fast becoming our number one constituency – as core to the purpose of higher education. The first step in that journey is listening to, and respecting, the needs and aspirations of learners as they are, not as we wish them to be."

"For higher education to fulfill its democratic promise in the years to come, we must come to view serving ... ultra-diverse [learner] demographics – who are fast becoming our number one constituency – as core to the purpose of higher education. The first step in that journey is listening to, and respecting, the needs and aspirations of learners as they are, not as we wish them to be."

– Gregory Fowler, University of Maryland Global Campus and Kate Smith, Rio Salado College

CONCLUSION

With many students returning to campus this past fall, it may seem tempting to revert back to the 2019 status quo in higher education. But the sector has made many advances, in large part revolving around new technology and related processes, during the pandemic to help learners persevere and succeed in the face of acute challenges, and it would be foolish to stall that momentum.

“It’s like a rental car parking lot,” Ted Mitchell said. “Most institutions have driven past the tire spikes and the sign warning them not to back up. And if they back up now, they’re in deep trouble.”

“Online education has continued to progress and transform throughout the pandemic, as has face-to-face instruction,” said Kate Smith. “I look forward to the continued transformation of innovative virtual delivery modes to powerfully meet the needs of learners.”

The vision is straightforward, but it’s also revolutionary: an environment that gives every learner the technologies and tools to fit their education within their life, rather than the other way around. The result would be a system that allows every learner to succeed and be empowered, not by chance or privilege but by design.

The vision is straightforward, but it’s also revolutionary: an environment that gives every learner the technologies and tools to fit their education within their life, rather than the other way around. The result would be a system that allows every learner to succeed and be empowered, not by chance or privilege but by design.