



The Power of Technology to Drive Change

By boosting technology investments, institutions can adopt modern teaching systems, ensure equity and diversity among students and faculty, and capitalize on data-driven services and operations.

FOR MANY COLLEGES AND universities, the global pandemic served as a wake-up call about the need for more innovative teaching models. They discovered that remote learning is no longer an occasional tool for specific situations. Instead, a mix of in-person and online platforms has become an imperative for ensuring equity and educational excellence.

In a hybrid flexible (HyFlex) model, students can decide whether to participate in person,



Close collaboration between faculty and technology teams is also important as both groups adapt to new teaching models. To ensure clear communication, many institutions will need to invest in cameras, microphones and speaker systems, and many classes would benefit from a technology assistant who keeps track of the messages students post and resolves any technical issues.

log in remotely during their scheduled class time or access the recorded session at their convenience. Each modality should provide an equivalent learning experience: As a recent **Educause Review article** put it, “the goal of HyFlex is to make the online and in-person experiences equal for students.... The online

experience should not be a lesser version of the in-person experience; it should be an alternative to it.”

HyFlex learning has the potential to improve access to higher education, and that has profound implications for institutions, students and the country as a whole. By offering a mix of learning environments, a college or university can attract more diverse students and faculty members and create a richer educational environment. That can lead to higher student success rates, loyal alumni who contribute financially to the college or university, and an enhanced institutional reputation in today’s competitive landscape.

In a recent survey of Campus Technology readers, 70% of respondents agreed that the importance of diversity, equity and inclusion is driving their institutions to be more innovative in the use of technology for teaching.

When the pandemic began, many colleges and universities had to scramble to make remote learning available, and subsequent research has shown mixed results. An **article** from the University of Pennsylvania notes that “a study published in Economics Letters ... found that online learning during the COVID-19 pandemic hurt student learning, but did not hurt particular demographic groups more than others. However, they did find that if the instructor used active learning techniques, students were more engaged and thus learning outcomes improved.”

Even before the pandemic, researchers cited the importance of course design and the need for a pedagogical shift to ensure success in blended learning. Now, many believe that as faculty and students become more proficient with the technology and adapt to online education, outcomes will improve.

One **UCLA professor** said remote technology is already enriching his classes in part because students who might not speak up have the opportunity to compose their thoughts and share them via a chat function. While acknowledging the equity problems

THE PANDEMIC'S IMPACT ON SUPPORT FOR IT IMPROVEMENTS:

- 59% said there is more support
- 16% said there is less support
- 25% said the level of support has stayed the same



associated with unequal access to broadband connections, the same professor points out that the ability to attend college in person raises its own equity issues.

A Partnership Between Teaching and Tech

The *Educause Review* article notes that “a HyFlex implementation can only be successful if multiple stakeholders are involved in the planning, strategizing and design process. A HyFlex approach includes investments in technology, personnel, faculty development and student support.”

During the pandemic, professors gained valuable experience with online teaching and began designing activities that were equally engaging for in-person and remote students to boost their skills even further. Fortunately, many online platforms have evolved to give users a

variety of options for encouraging connections between instructors and students and among students themselves. For example, professors can set up multiple chat streams and create breakout rooms for small groups of students to work on projects together.

Close collaboration between faculty and technology teams is also important as both groups adapt to new teaching models. To ensure clear communication, many institutions will need to invest in cameras, microphones and speaker systems, and many classes would benefit from a technology assistant who keeps track of the messages students post and resolves any technical issues.

Incorporating such modern tools alongside institutions' legacy solutions presents a diverse set of challenges. In the Campus Technology survey, staying within budget constraints (44%) was the top challenge cited by respondents, and it goes hand in hand with choosing the right products, services and solutions (41%). Technological challenges also include getting legacy and modern solutions to work together (36%), sharing data between legacy and

TOP FIVE CHALLENGES TO BALANCING LEGACY SOLUTIONS AND MODERN TOOLS:



- Staying within budget constraints
- Choosing the right products, services and solutions
- Overcoming resistance to change among users
- Getting legacy and modern solutions to work together
- Minimizing the productivity impact for employees, teachers and students



modern systems (27%), and managing and securing a diverse IT ecosystem (25%).

With **ransomware increasingly targeting** higher education institutions and more students logging into campus networks remotely, cybersecurity is a key concern. A continuous, modular approach to modernization can help institutions address security issues while they build more immersive platforms for hybrid learning. The ultimate goal is a secure IT environment that offers agility, flexibility and operational efficiency.

Fortunately, institutions seem willing to meet these new demands. When asked how the pandemic has affected their ability to make the business case for IT changes at their



7 in 10

IT professionals said the need for diversity, equity and inclusion is driving the innovative use of technology for teaching

institutions, 59% of Campus Technology's survey respondents said there is more support for improvements while 25% said the level of support has stayed the same. Only 16% said there is less support.

The Need for Data-Driven Insights

Another key element of modernization is making better use of data to enhance decision-making and service delivery. Data-driven insights can give institutions a clear understanding of how to improve the student experience and build a diverse, talented faculty. Once institutions adopt modern approaches to capturing and analyzing data



HOW WIDELY INSTITUTIONS ARE USING DATA ANALYTICS TO TRANSFORM THE STUDENT EXPERIENCE:

- 17% haven't begun to think about it
- 26% are still exploring the technology
- 11% have devised a strategy
- 20% have begun to implement a strategy
- 26% are already using data analytics in everyday operations

across departments, they can apply artificial intelligence and automation, such as chatbots, to improve nearly every campus operation.

As a **Harvard University article** states: "Over the past few years, colleges have quietly rolled out chatbots to help students navigate areas as diverse as admissions and financial aid, IT support, academic advising, and career services." Furthermore, "AI is also improving instruction in ways that boost engagement, retention and success."

In Campus Technology's survey, a total of 57% of respondents said their institutions have devised a data strategy, have begun to implement a strategy or are already using data analytics in their daily operations.

Those signs of progress are promising. The global pandemic gave colleges and universities a taste of how they can use technology to solve some of their biggest challenges. By investing in further modernization, they will boost their ability to meet current demands while giving themselves the flexibility to respond to unknown challenges ahead. **(Source: Campus Technology)**