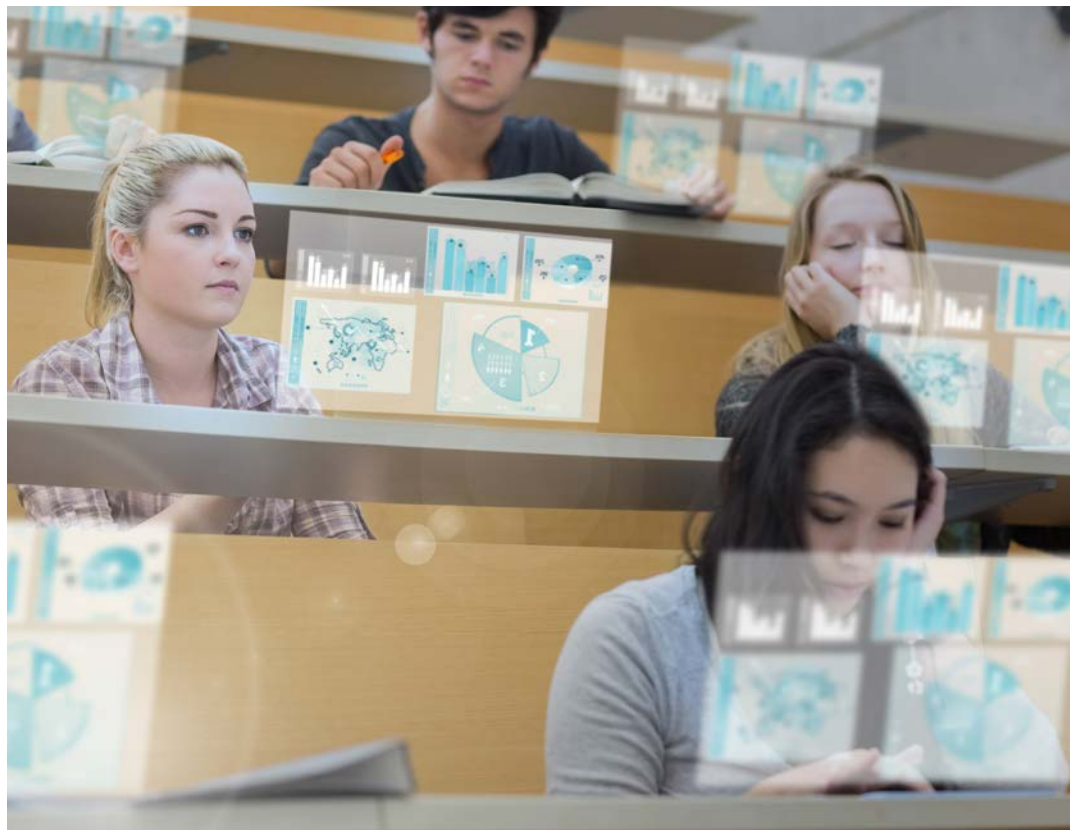


The Faculty and Student Experience, Year 2030



- Transformed learning
- Climate adaptation
- Career-focused curriculum
- Classroom redesign

According to the architect and futurist Buckminster Fuller, in 1900 the amount of knowledge doubled every 100 or so years. By the mid-1940s, it was every 25 years. Now it's approximately every 12 months, and with increased computing power and artificial intelligence, the amount of knowledge

may soon double [every 12 hours](#). That puts a lot of pressure on humans, many of whom get twitchy when their iPhone update moves the search bar from the top of the screen to the bottom, to keep up.

This ever-changing explosion of knowledge and the technology that accompanies it is going to affect the way college students learn, what they learn, and where they learn.



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The bridge to possible

As we look ahead to the faculty and student experience in 2030, however, we're looking at planning that is beginning now and will exponentially change and grow as we get closer to the next decade.

The Covid-19 pandemic has given colleges a glimpse into the future. Within months, classrooms went virtual, students with Covid were housed separately, and fraternity parties and student gatherings vanished. The college experience for many was transformed, with institutions adapting and making changes that normally would have taken years, in a matter of months.

As new variants of the virus – and new zoonotic diseases – possibly emerge, the effects of climate change continue to disrupt, and technological advances continue to accelerate, the colleges of 2030, to stay current, will have to be even more nimble to deal with factors only now scratching the surface. Here are some developing trends experts say may shape the faculty and student experience in the next decade.

Transformed learning

In the classroom settings to come, technology will change two key elements: What students learn and how they learn.

In terms of what they learn, more classes will deal with the construction and programming of robots, and teaching students how to interact with robots. Students will also learn more about the creation and development of virtual and augmented reality, designing past, present, and future worlds for the burgeoning industry.

According to futurist scholars, robots may also be teaching classes, or working in conjunction with professors to explain, tutor, translate, or demonstrate. Virtual and augmented reality will take students away from looking at flat photos of the Roman

colosseum or the Russian Revolution, and put them in the middle of the action. Molecules will be examined in three dimensions; an astronomy student will be able to pilot a virtual spacecraft and land it on the surface of a virtual Mars. Learning will become more hands-on and experiential, says Alexandra Whittington, a futurist and lecturer at the University of Houston.

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But with such opportunity comes a big challenge: Colleges will need to develop strategies to narrow the widening wealth and technology gaps. The speed of technological change will make it difficult for all but the most tech-savvy students, and those who can afford the latest equipment, able to compete.

Climate adaptation

As temperatures rise, colleges along the coasts may be forced to move, says [Bryan Alexander](#), a futurist and senior scholar at Georgetown University. Classrooms that never needed cooling before will have to be air-conditioned. Athletic teams at desert universities may have to practice outdoors at night or under a climate-controlled dome.

Eckerd College, in St. Petersburg, Fla., is already preparing for future weather. With one to 2 meters of sea-level rise expected this century, plans for the coastal campus, according to the student newspaper, [The](#)

[Current](#), include buildings on stilts, canals throughout campus, and more mangroves to absorb flooding. An early idea involved raising the campus more than eight feet. Similar planning is going on at the U.S. Naval Academy, in Annapolis, Md., where the next library will be built higher off the ground than other campus buildings to ward off flooding from rising waters.

Climate change is also going to drive up college expenses by requiring the building of flood walls and more-resilient buildings. Improving sustainability costs money, money many colleges don't have. On top of that, environmental issues will most likely drive up insurance costs, specifically, for flood and fire coverage.

Alexander, author of [Academia Next](#) and the forthcoming [Universities on Fire: Higher Education in the Age of Climate Crisis](#), adds that some institutions may have to physically relocate, erect flood barriers, enclose more “outdoor” areas, and get even more involved with political issues to change anti-climate laws if they hope to transform their campuses.

In the classroom, climate change means more students will probably be drawn to studying climate science, climate law, and civil engineering, in order to design the barriers needed to keep the rising flood

waters out of the cafeteria. New problems that climate change brings, Alexander says, will force universities to partner with local governments and their communities to build these walls, open clinics to combat the new disease realities, create teams of student volunteers to help poorer members of their communities adapt, and more. He adds that the growing scholarship around “[solastalgia](#)”—the distress that is produced by climate change—may develop into a popular field of study, helping students put the ways the environment has changed, and is changing around them, into both scientific and emotional context. Just as the Covid pandemic has led to [greater anxiety and depression among students](#), so will the impact of climate change, as the wildfires in California [suggest](#).

The immediate expense of climate change, in terms of dollars, is already being felt. Campuses have taken the potential for fire into account in their design. For example, Pepperdine University, in California, has cleared 200 feet of brush around all buildings, according to an [article](#) in *The Chronicle*. Climate change is also going to drive up college expenses by requiring the building of flood walls and more-resilient buildings. Improving sustainability costs money, money many colleges don't have. On top of that, environmental issues will most likely drive up insurance costs, specifically, for flood and fire coverage.

Career-focused curriculum

For years now, rising tuition has raised concerns over the value of the college degree. Developing work-force partnerships to demonstrate return on investment will be key. In a report for Barnes & Noble College, [College 2030: Transforming the Student Experience](#),

researchers say that colleges will have to focus more on career development and planning. According to the report, “building out the educational experience around skills development and lifetime learning will deliver the highest value to students in the post-Covid world. That includes strategic partnerships with employers and measuring success within new frameworks. Creative credentialing and outcome-based models will become prevalent.”

Students surveyed for the report stress that the colleges of 2030 need to be more affordable. At the present rate of increases, a top-line private institution will cost around \$100,000 a year in a decade. Such a number will increase demands for a more obvious payoff.

Mike Huseby, the chief executive of Barnes & Noble Education, says that colleges will also try to expand funding sources. That might lead, Alexander believes, to more courses — and possibly degree programs — funded by corporations as the equivalent of college-based internships, where students will graduate with specific job skills. As foreign travel may continue to be more difficult, and U.S. technology firms face more pressure to hire graduates from American colleges, corporations may start to take a more active role in what students are being taught and who is teaching them, Alexander believes. If Nike can sponsor the football team, why can't ExxonMobil sponsor the geology department?

Demographic shifts are another factor that colleges leaders have been dealing with and will continue to prepare for. In his book, *Demographics and the Demand for Higher Education*, Nathan D. Grawe, an economics professor at Carleton College, writes that the numbers of college-age

students are [declining](#), and that more of them will be Hispanic and in the southwest. Colleges that draw from a regional area will find recruiting more difficult and competitive, and faculty members will have to alter their teaching methods to match a changing student body. The university of the future, and possibly by 2030, may also have to deal with an influx of immigrants from parts of the world that are no longer habitable, Alexander says.

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Colleges will need to foster more pipelines to and through college to better serve students who will be coming from a variety of backgrounds. For their part, students in the Barnes & Noble study say that, in addition to changing the classroom experience, higher education also needs to put more emphasis on faculty advisers, mental-health professionals, and peer mentors, and provide more life coaching. They are already looking for an educational experience that offers flexibility in learning modes and more academic and wraparound support.

Classroom redesign

In the brick-and-mortar sense, Alexander thinks that classrooms are going to get both bigger — to allow for more social distancing — and smaller — conceivably like a phone-booth-size individual classroom. In the teaching sense, however, the size of future classrooms is most likely limitless, with

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classes available to be taken 24/7, anywhere in the world, with built-in artificial intelligence available to answer questions.

With regard to physical classrooms, more attention will be paid to air filtration, and to safety from external violence. But it's not a far-fetched speculation that, by the next decade, attending college classes in a classroom, face to face with classmates will be a luxury. More classes will be taught online, and more students will receive degrees without ever setting foot on a campus. Fewer student families willing to pay for room and board will force some of the colleges with better brand names to invest heavily in online teaching — not just for adults looking for an advanced degree while they work or raise a family, but also for students who may not have the time or money to relocate and dedicate themselves full-time to study.

It may be too doomsaying to state that 50 percent of colleges will collapse by 2030, as the futurist Thomas Frey [predicted in 2013](#), but there is little doubt among those who look ahead that America's system of higher education will face more challenges in the next decade than it has in the past century.

*“The Faculty and Student Experience, Year 2030” was produced by Chronicle Intelligence.
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