The higher education IT community has long sought to anticipate the future. The digital world has developed so rapidly, especially since the advent of the web, that planning for today’s devices risks missing major opportunities down the road. Campuses can be blindsided by the emergence of new continents on the computational map. Campus leaders have relied on several futures approaches, including extrapolating from current trends and data, observing students’ use of technology, collaborating with peers, and relying on inter-institutional organizations for research. Scenarios, or stories of projected futures, have also proven useful—and are the subject of this article.
Each type of institution—blended or wholly online—has its own distinct practices, habits, expectations, and emergent traditions.

Scenarios allow campus planners to imagine themselves in a future environment, based on their narrative and discursive structure. Unlike, say, reports or tables of data, scenarios are stories, meaning that they will have a far greater likelihood of emotional connection. Understanding a scenario engages a reader's creativity, either in formal role-playing or in the imaginative act of envisioning one's campus under different conditions. Scenarios also elicit conversation within a group as different people offer their interpretations of new developments and their potential responses. As such, scenarios are fine pedagogical objects, well suited for use by those involved in educational institutions.

I offer here three scenarios for U.S. higher education in the year 2024. The date is chosen for the psychological appeal of a ten-year interval. It also lets us get beyond the four- or five-year horizon typically used in campus planning and allows enough time for the emergence of major cultural developments.

These three scenarios—Two Cultures, Renaissance, and Health Care Nation—are based on a selected group of current trends, most of which are technological in origin. The increase in online learning programs, along with the growing number of students taking online classes and technological but are based on economies and social forces; they do, however, depend on certain infrastructure. The growth of the medical sector, for example, requires a powerful technological support system. Another example is residential institution leaders' desire to blend their heritage with online resources—which is a reaction to technology but is not solely defined by the digital.

Still other trends are fairly independent of technology. The decline of tenure and the growing dominance of adjunct teaching positions—one of the most important education stories of our time—did not occur because of technology. Neither did the shrinkage in the U.S. population of children (future students).

To help readers compare these future scenarios, each one appears in the same format. Each starts with an overview of the present trends driving the creation of that future. Next comes a description of how campuses have changed over the ten-year interval. The final section of each scenario offers a sketch of the mindset of typical (hypothetical) eighteen-year-olds in that future world.

Before diving into the scenarios, let us establish some caveats. First, these three by no means exhaust the possibilities for higher education's future! There are many other scenarios, some of which I touched on in 2011 for my Future of Higher Education columns in EQ. I selected these three scenarios first for their provocative aspects, given the current education and technology issues. Second, these projections overlap in some aspects; for example, they assume a continuing and steady increase in online learning over the next decade. Third, elements of these scenarios can be combined: Two Cultures could well occur in the midst of Health Care Nation. Finally, it's possible that the key features of one or more may actually occur but may only partially describe the world of 2024.

Two Cultures

In 2024, higher education is split in two. This division is deeper than the Two Cultures divide that once yawned between the sciences and the humanities. The 2024 gap opens between two different types of institutions. On the one hand, many institutions are operating wholly online, conducting what was once called distance learning or online learning. On the other hand, brick-and-mortar institutions remain, but they are traditional only at first glance. This second group relies heavily on blended or hybrid approaches to learning and research. Each type of institution has its own distinct practices, habits, expectations, and emergent traditions. Each sector—online and blended—teaches roughly one-half of the U.S. population.

Online-only institutions have at last achieved pedagogical prowess on a par with what face-to-face campuses offer. Over the past generation, they developed pedagogies based on emergent and iterated technologies. They rely on multimedia, social, and affective tools to deliver frequently updated curricula. They appeal to learners because of their greater flexibility compared with brick-and-mortar schools; students can enroll any day of the year and can complete their studies.
EDUCAUSE Review, the flagship magazine of EDUCAUSE, takes a broad look at current developments and trends in information technology, how they may affect the college or university as an institution, and what they mean for higher education and society. In addition to EDUCAUSE members, the magazine’s audience consists of presidents and chancellors, senior academic and administrative leaders, non-IT staff, faculty in all disciplines, librarians, and corporate leaders. The magazine has a print circulation of 22,000.
on a schedule commensurate with their lifestyles and resources. These online-only institutions also compete well on cost, since their fees are less than those of their competitors (of which there are fewer than in 2014). A large number of adjunct faculty teach in the online-only world, interacting with classes that can be as small as a tutorial and as large as a half-million learners.

In contrast, the brick-and-mortar institution now synthesizes the best of face-to-face teaching with what the digital world has to offer. Blended learning is normal, with online resources playing a major role in classrooms. Each class offers a social media extension. Residential education remains, though aimed primarily at the small 18-to-22-year-old education segment—a specialized niche within the larger scene of colleges and universities.

Some tenured faculty teach at these blended campuses in 2024, but they have an additional role as guides to the campus community and environment. After all, the physical components of the institutions are vital differentiators for the schools and need to be taken advantage of fully. These professors and their adjunct colleagues teach in classrooms designed like scientific labs or art studios, mixing stations for presentation and discussion with stations for hands-on work. Flipped learning is no longer designated as such, because nonflipped classes are so rare; the flipped classroom is just a classroom in this 2024 scenario.

The entire brick-and-mortar campus is, in fact, a blended learning environment. Its physical library matters less than the deep access that this campus space offers to library content resources, both owned and licensed. Library personnel, as well as other campus support staff, meet with students either online or offline. Hands-on learning occurs everywhere, in and out of classrooms. Old-fashioned maker culture and the digital world play off of each other, dialectically. Media classes (e.g., art, computer science, media, literature) combine media production with studies. 3D and 4D printing across the curriculum is well established, especially given the prevalence of personal printers. Each campus site, from buildings to quads, carries associated augmented-reality layers, so that visitors can access information specific to each location.

There are overlaps between the online and the blended sectors, as one might expect. Both have unbundled some academic functions—such as grading, assessment, and advising—partly for economic reasons, partly for perceived pedagogical benefit. Both cultures claim to be learner-centered and indeed have structured their services to meet the demands of personalized learning far more than their early-21st-century ancestors. Both sectors feature some staff positions that would be unrecognizable to most of those ancestors; these include academic mentors (to aid personalized learning) and data managers (to wrangle the huge amount of data generated in the course of learning).

Most blended institutions outsource some curricular needs entirely to distance learning, since the majority cannot afford to maintain a full complement of research university instructors and courses. At the same time, many online classes include on-site lessons, so that learners can experience some topics face to face. Indeed, most students have taken classes in both academic cultures.

To better understand this version of 2024, let us consider the mental world of the eighteen-year-old students. They were born in 2006, five years after the September 11 attacks, and they entered first grade around the time when Mitt Romney ran for president against Barack Obama. For these students, most learning content has always been online. There are physical items, of course, but they are rare. The students have taken between one and six wholly online courses before starting college. They are accustomed to learning in a collaborative mode, but more of their collaborators were met online than in person. Blended learning is the norm for them—indeed, so is blended life.

In this future scenario, people focus on achievements within three technological platforms: digital storytelling, social media, and computer gaming.

**Renaissance**

Educators in the year 2024 look back on the previous generation of the digital world and recognize it as a time of renaissance. During these thirty or so years, human creativity was reawakened, imagination set loose, and storytelling redemocratized.

What led to such a view? In this future scenario, people focus on achievements within three technological platforms: digital storytelling, social media (aka Web 2.0), and computer gaming. The consensus is that each of these platforms and approaches to content creation allowed everyday people to seize the creative moment and reach a massive audience. The early 21st century saw the upending of the 20th century’s major
broadcast media empires, and the people of 2024 see this as a very good thing. Key moments in this transformation are well-known, such as the invention of the World Wide Web in 1989, the launch of a Tumblr-based “huge collaborative storytelling effort” by the Obama campaign in 2012, and the first Oscar awarded for Best Digital Game in 2016.

Campus IT needs have grown as well in order to support the significant and increasing needs of technology-dependent medical fields.

Computer hardware and software are ubiquitous in daily life. Digital stories appear throughout public and private spaces, from public transportation to bedrooms, from airport departure lounges to bathrooms. Social media appears everywhere as well, having established an environment of always-on interpersonal connectivity. Much of daily life is recorded and experienced through this media atmosphere.

What did this popular-media revolution mean for higher education? Classrooms are “smart” in the old 2014 sense and are often multimedia-rich spaces. Faculty, staff, and students carry mobile devices to access, produce, and share content. Many courses rely on multimedia in multiple ways: students create rich content, and some class structures are gamified. Games and social media are delivery mechanisms for curricular content. Much of the curriculum involves creation: storytelling, game making, collaborative media work. Game studies is a mature academic field, complete with endowed chairs, multiple academic conferences, journals, and an established monograph corpus. Colleges and universities support various career paths along digital lines, including undergraduate degrees in game design and digital storytelling.

In other words, the three-legged stool of Renaissance media (digital storytelling, social media, computer gaming) constitutes a large part of undergraduate life. It makes up learning content, both informal and formal. And higher education institutions have changed in response. Student assessment is largely project-based, and pedagogy is based on studio-style class experiences (see “Two Cultures” above). Libraries offer assistance in gaming production and archiving. Faculty often produce multimedia content, most notably in 3D video. And professional development most often occurs remotely, including through social media, for reasons of cost (using the Internet is cheaper than traveling) and efficiency (people respond well to rich media in this 2024).

Who are the Renaissance eighteen-year-olds? Most of them identified with game characters during their K–12 years, and leading game developers are as well-known as movie directors once were. Most of their schoolwork has been gamified, as have some of their summer jobs.

**Health Care Nation**

In this 2024 scenario, the medical sector is the leading U.S. industry, eclipsing all others. Health care generates 40 percent of gross domestic product, employing huge numbers of workers. Medicine occupies a greater presence in society than historically, with towns and cities having more clinics, hospitals, drugstores, medical supply stores, and labs than in the past.

How did this occur? First, the proportion of the population over 65 years old is the largest ever. Statistically, this age group consumes more health care than others. Second, the complex, even Byzantine funding structure of health care involved ever-increasing amounts of bureaucracy, staffing, and financing (both public and private). As explained by Baumol’s Cost Disease economic model, the efficiency of automation is limited in some professions; much of health care requires the extensive time of sometimes expensive professionals. Third, medical treatment improvements have extended lifespans, leading to a still larger senior population, along with the appearance of new ailments requiring more care.

Campuses in Health Care Nation have many academic programs and many people devoted to medicine. There are more medical schools than in 2014. Degrees in fields like nursing, surgery, radiology, gerontology, and hospital administration have been initiated or expanded. Students take more medically-related classes than ever. In 2024 more of those students are women, given the historical prevalence of female students in many health care fields, contributing to an overall feminization of higher education. Campus IT needs have grown as well in order to support the significant and increasing needs of technology-dependent medical fields. Campuses have space-sharing agreements with regional clinics and hospitals in order to better place students and graduates while also partaking of the medical sector’s financial and political clout.

What do eighteen-year-olds think as they enter Health Care Nation as
first-year college students? A significant number of them have taken pre-med and related classes in high school. For them, medical heroes (researchers, inventors, star practitioners) loom as large as sports figures. And many of the students are already familiar with elder-care practices from their childhood and teenage years.

exercise, surfacing participants’ concerns, information habits, and interests.

Readers can also use these scenarios in a contrary fashion. One could read against the grain of each narrative to see which aspects of higher education would remain largely unchanged from our current world of 2014. Alternatively, and imaginations in a challenging time for higher education. Such a conversation about possible futures and multiple present trends could help those of us involved in education and technology to think more clearly about how what comes next emerges from what is now. The result? Perhaps a glimpse of the future.

What’s Next?
What do these scenarios mean for higher education IT organizations? These short accounts can be used as imaginative aids for planning. For example, readers might imagine how their campus would be different from the way it is currently. How will jobs change? How will the IT organization operate in new ways?

In a more constructivist fashion, readers can create scenarios based on trends determined to be the most salient for an individual institution. As a group exercise, staff within a common department can identify key trends—a useful way to build shared intelligence. This can also work as a basic knowledge-management exercise, surfacing participants’ concerns, information habits, and interests.

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Notes
1. My EDUCAUSE profile links to these four EQ columns: http://www.educause.edu/members/bryan-alexander.
2. As described by the 20th-century British scientist and novelist C. P. Snow throughout his career: http://en.wikipedia.org/wiki/The_Two_Cultures.

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