How is the world outside your institution changing? While the COVID-19 pandemic continues to impact every aspect of our lives, other trends and forces are worth watching. This issue broadly explores trends outside higher education.

We’ve organized Trends using STEEP:

- **Social**: How people work internally (psychology) and with each other (sociology).
- **Technology**: How people use technology (including hardware and software), how society relies on technology, and how technology affects society.
- **Economic**: Macro- or microeconomics, including global trends, anything related to jobs and skills needed for jobs, and industry shifts.
- **Environmental**: Our external surroundings, including sustainability and our evolving workplaces, cities, and living spaces.
- **Political**: Public policy, governmental systems, the people within them, and the effects of government decisions on our citizens and communities.

Each trend includes a brief trend summary, a footnoted source, and discussion questions to help you and your team analyze and act on the trend.
No, We Have Not “Solved” Racism

Racial disparities in coronavirus severity and multiple high-profile instances of police brutalizing and murdering Black people bring up the question, “How far has the US come since the Civil Rights Movement in the ’60s?” The answer is concerning. While educational attainment has increased and infant mortality has decreased for Black Americans, other critical measures still lag. Princeton economist Ellora Derenoncourt found that “across a number of indicators, racial economic progress has actually slowed or reversed over the last half-century.” Black people are twice as likely to live in poverty. Black households have a tenth of the wealth of their white counterparts. Black workers continue to earn an average of 25 percent less than white workers. 1


Alt-Right Groups Are Not Just Joking

The Anti-Defamation League reports that white supremacists are increasing their efforts to recruit young people, including college students, and they’re getting savvy about how to introduce extremist views to a more educated audience. White-nationalist and alt-right groups post jokes and memes on social media platforms to "normalize bigotry while still maintaining plausible deniability." The nonprofit group Western States Center created a toolkit with ideas for how schools and parents can recognize and counter extremist-group recruiting tactics.2

For discussion

• How pervasive are alt-right ideologies on our campus? In our community? How do we know?
• Do we have adequate and tested strategies for counteracting extremist group recruitment efforts?
• What larger efforts can we take to weaken alt-right recruitment activities?


Good Business Chemistry

Deloitte asked 9,000 people how they tackle really tough challenges. The firm found that individual “business chemistry” drives different approaches to problem-solving. Some people analyze a problem in detail before trying to solve it. Some tend to look to past problems for answers, while others focus on finding and testing creative new solutions. Deloitte suggests that understanding how others approach change is essential for effective teamwork. The company provides 10 strategies to prompt breakthrough change, including “strip away everything,” “make a mess,” and “silence your cynic.”3

For discussion

• When we’re preparing for change, how do we prepare associated teams and committees? What type of training and tools do we provide to help them work together effectively?
• What methods do we tend to use for change management? Are there methods that we’re not using?
• How can we help stakeholders learn about different problem-solving methods?

A Reckoning for Racist and Offensive Mascots

As part of society's recent focus on social justice issues, a number of teams in professional, collegiate, and high school leagues face pressure to change their names, mascots, or imagery, particularly those related to Indigenous people or the Confederacy. After the National Football League team in Washington, DC, announced it would change its name, members of the Edmonton Eskimos, a team in the Canadian Football League, announced a similar decision. Scores of colleges have changed their mascots over the last 100 years, for numerous reasons, but recent publicity about this issue has focused renewed attention on institutions that continue to use offensive names.4

◆ For discussion
• In athletics or general branding, does our institution use offensive imagery and/or terms? Do we need to rethink team names and/or mascots?
• If we have changed such iconography in the past, do offensive vestiges persist (for example, costumes, chants, cheers, etc.)?
• What steps can we take to better inform our community about the negative impact that offensive imagery, names, and terms can have on racial and ethnic minorities?

From “Either/or” to “Both/and”

Human beings—and universities—may be hardwired with a predilection for stasis and absolutes, but today’s times are defined by competing demands and uncertainty. Research published by the French business school INSEAD suggests that in times like these, people need to consciously adopt a “paradox mindset”—start thinking about competing demands with a “both/and” approach, not “either/or.” How? Reframing questions, becoming comfortable with discomfort, and stepping back to consider new possibilities all nurture this paradox mindset.5

◆ For discussion
• How does our institution approach decision-making—either/or, or both/and?
• When setting priorities and making decisions, how do you make time to formulate third options and innovative solutions?
• How can our institution adopt more flexibility while remaining focused on what’s mission-critical?

Mental Health After the Pandemic

Mental health challenges that developed because of the pandemic may linger long after a vaccine is found. Researchers studying the SARS and MERS epidemics found that anxiety, depression, and substance abuse issues lasted for years after the epidemics ended. Post-pandemic, organizations may need to do more to support individual employee needs for mental health care.6

◆ For discussion
• How has COVID-19 impacted the mental well-being of our students, faculty, and staff? Are there particular populations that have encountered more stressors during the pandemic than others (for example, health care workers)?
• What can we do now to nurture mental well-being and mitigate the effects of the pandemic on mental health?
• How would we handle increased demand for mental health services 6 months, 1 year, and 2 years from now?

COVID-19’s Impacts on Higher Ed: Social

The current pandemic may have lasting effects long after COVID-19 is eradicated, in the period to come that some are calling the “Great Reset.” Among many social changes that may take place, we might expect the following:

» Adaptations of the traditional academic calendar will be more commonplace.

» Under scrutiny as part of the Black Lives Matter movement, colleges will be pushed to do more than just talk about diversity and inclusion: They will be pushed to take real actions to dismantle structural racism, which will likely require major change at historically white-serving institutions. Campus policing may be prodded to reform. Student activists are urging policy changes in policing at many campuses. As one specific example of change, the police department at Wayne State University created the National De-escalation Training Center to train police in strategies to reduce deadly encounters with citizens. For more on racial justice and higher education, see A Closer Look, p. 31.

» The sudden move to online learning increased awareness of how a student’s non-academic life—their financial situation, their familial duties, their jobs—impacts their academics. This may lead to more institutional work addressing socioeconomic disparities, “ungrading” and methods of evaluation, and more accommodations for students based on their circumstances.

» The pandemic will greatly affect student well-being, values, and life goals. Some students report high levels of stress and worry, both about their health and their financial future. At the same time, the experience of living through a crisis event often provokes more “prosocial motivation”—people show more gratitude for what they have and are more likely to help others.

♦ For discussion

• How might each of these trends affect our institution?
• What steps should we be taking now to prepare for such trends? What should we be doing differently?
• Should we be tracking any other related trends?

Bye-Bye, Biased Algorithms

Wider adoption of artificial intelligence and tools like facial and voice recognition are raising new ethical concerns about algorithms (or computational formulas). These tools apply algorithms to gain insights about individual identities, preferences, and behaviors. But researchers say bias baked into algorithms can lead to decisions that can adversely impact certain groups of people, “even without the programmer’s intention to discriminate.” One antidote: “algorithmic hygiene,” or processes that identify root causes of biases in computational formulas and identify ways to address such shortcomings.8

◆ For discussion

• From enrollment decisions to campus security to research, what technologies and processes use algorithms at our institution?
• How does our institution identify potential bias in the algorithms we use? What steps do we take to mitigate those biases?
• In our computer science curriculum, do we address algorithm and other data biases?

Get Yer Fake News Here!

Research on the recent growth of disinformation is still in its early days, but experts agree that fake news is spreading. Cases in point, one researcher says, are the “false narratives” about the coronavirus that “have spread like wildfire across social media and other communication platforms.” Often used for “political, financial, and reputational gain,” disinformation campaigns are likely to continue—and expand. One antidote: helping “researchers, journalists, communications platform designers, policymakers, and society at large” better understand how and why false information is distributed so strategies can be developed for mitigating the impacts of disinformation.9

◆ For discussion

• What strategies can our institution take to mitigate the impacts of disinformation on society?
• Does our institution adequately screen social media and other channels for evidence of disinformation about us? Do we have strategies for finding and countering any disinformation that might be found?
• How are we educating students and other stakeholders to recognize disinformation?

Fogging Up the Network

You know about the Cloud, but how well do you know Edge computing and Fog computing? According to EdTech, Fog computing is emerging as a desirable way to compute, store, and secure data. Fog computing operates “close to the device, application, or human that produces data,” in a network that exists beneath the Cloud. This can speed applications like artificial intelligence, mixed reality, and autonomous vehicles.10

**Deeper Dive:**
Some definitions use the terms “Edge computing” and “Fog computing” interchangeably. Others distinguish the two. One big difference: “Fog computing always uses Edge computing, but the opposite is not always true.” Fog computing includes the Cloud while Edge computing doesn’t. Some experts say Fog computing offers better data protection.11

**For discussion**
- Does our institution use Fog computing or Edge computing currently? In what applications?
- How could our institution benefit from applications of Fog computing and Edge computing?
- What are the hurdles to adopting Fog computing and Edge computing?

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Good News! We’re Still Smarter Than the Robots

Many folks tout the potential of artificial intelligence (AI) to revolutionize our lives. That revolution might happen, but experts caution that AI has a number of hurdles to clear first. For example, one expert says, “problems that involve reasoning or social intelligence, such as weighing a potential hire in the way a human would, are still out of reach.” Machine learning, or training computers to perform tasks based on previous examples, is powerful, says another expert, but today’s algorithms don’t yet do “so many things that [human] intelligences do.”12

**For discussion**
- How can AI change our business practices, student services, and other aspects of our operations?
- How well do we understand the limitations of AI and what tasks are better suited for humans versus machines?
- How does our institution evaluate AI as a resource during its planning process?

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11 Ibid.

Internet Down? Look Up and Wish Upon a Starlink

The COVID-19 pandemic has spotlighted the disadvantages faced by individuals who do not have fast, reliable internet access, particularly in rural areas. That’s a problem for students who need to study online and for patients who need access to telehealth. It can even impede official emergency communications. Eschewing possible solutions like cabling rural areas or erecting new cell towers, entrepreneur Elon Musk has another idea: low-orbit satellites. His company is currently launching Starlink, a network that promises “performance that far surpasses that of traditional satellite internet.” The goal is to provide service to much of North America this year—and near-global coverage next year.13

◆ For discussion

• How did lack of reliable internet access affect our institution in the early days of the COVID-19 pandemic? How is it affecting our institution now?
• Are there steps we can take to improve internet access for students, faculty, and staff?
• More broadly, what impact could better and more affordable global access to the internet have on pedagogy and research?

Hurdles for Telehealth

Just as the pandemic rapidly drove much of teaching and learning online, it had a similar effect on visits to the doctor. The use of telehealth spiked in the spring of 2020. The University of Virginia, for example, saw a 9,000 percent uptick in the use of telehealth between February and May. Will it replace in-person visits? It doesn’t look likely. Uncertainty about telehealth regulations and whether private insurance will continue to cover it make doctors wary about investing the time, money, and expertise to fully launch telehealth services.14

◆ For discussion

• How could telehealth help our institution deliver health care more efficiently to students and staff?
• What are the hurdles we would face in adopting telehealth more broadly?
• How will health science curricula need to change to accommodate the rise of telehealth?

A New Meeting Convention

In scientific fields particularly, academic conferences are an essential place to share ideas and network. For now, though, COVID-19 has made face-to-face meetings problematic (if not impossible). Some meeting planners believe that hybrid meetings (mixing face-to-face with online) will define conferences in the future. Some conferences are experimenting with virtual-reality versions, in which attendee avatars interact with each other much like in-person conference attendees might otherwise do. Switching to virtual conferences does have some benefits. Sending participants to virtual conferences may lower institutional costs and reduce carbon impacts. Another plus is that virtual meetings may be more accessible for individuals whose physical disabilities, financial constraints, or family obligations might otherwise preclude their attendance.15

◆ For discussion

• How might the evolving nature of academic conferences change how faculty and researchers at our institution do their work, including engaging in cross-institutional and international research collaborations?
• If our faculty, researchers, administrators, and learners have fewer opportunities to meet in person with colleagues from other institutions and countries, how can our institution support new ways to foster collaboration?
• What impact will the changing nature of conferences have on meetings, camps, and other gatherings that we might host on campus?

Looking Beyond COVID-19: Technology

The current pandemic may have lasting effects long after COVID-19 is eradicated, in the period to come that some are calling the “Great Reset.” Among many technological changes that may take place, we might expect the following:

» The pandemic will continue to drive institutions to become more fully versed in delivering education online. Experts writing in the Harvard Business Review argue that colleges and universities need a long-term strategy for virtual learning, appropriate to how well-versed they are today. “Digital newcomers” need to help faculty and staff engage online. “Emerging adopters” should accelerate both online course production and development of an online strategy. “Advanced institutions” should “accelerate pedagogical innovations to serve diverse online communities” and “explore immersive technologies like augmented and virtual reality.”16

» The many institutions that will continue to be more deeply engaged in online learning after the pandemic will need to develop robust long-term strategies and financial models for the expanded role that modality is playing. Similarly, broader use of online learning may require development of a more vigorous technology ecosystem and infrastructure. Staffing for online learning, including more extensive use of learning design teams and instructional designers and technologists, may also need our attention. There will be deeper and broader needs for faculty development around online learning. From pricing to access to tenure, expanded online learning may spark the need for new or revised university policies.


Food for Thought
As online learning becomes more widely accepted and employed, universities will need to learn how to fully integrate that modality into the university experience—in such manifestations as online research, virtual apprenticeships, and even eSports. More work will be needed to train faculty to excel in online teaching. Deeper investments may be needed in the development of online curricula. Efforts to help students succeed academically may need retooling to specifically help learners succeed online. Common acceptance of online learning may require more universities to address inequities in terms of student access to computers and the internet. Students with disabilities may need different accommodations.

Greater acceptance of online learning may accelerate à la carte learning, just-in-time learning, and personalized learning as well as the pursuit of credentials versus degrees and the stacking of credentials. Universities will have to adapt accordingly.

More student apprenticeship and internship opportunities may move online, or may be experienced in a hybrid version that mixes online and in-person instruction.

Experiences during the pandemic may lead more organizations to accelerate their use of technology, including automation for routine operations, to streamline their business practices and make them more efficient.

Travel to conferences, particularly by air and those requiring hotel stays, will likely be curtailed for some time to come. Research partnerships will need to rely more on online contacts versus face-to-face.

Institutional connections with key stakeholders, such as alumni and donors, that were disrupted during the pandemic may continue to take different forms—likely with more reliance on technology, requiring new strategies.

Technologies like artificial intelligence and online learning will help more individuals with disabilities access and complete their college education and transition to productive careers.

**For discussion**

- How might each of these trends affect our institution?
- What steps should we be taking now to prepare for such trends? What should we be doing differently?
- Should we be tracking any other related trends?

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The Rainbow (Dis)connection

Research from McKinsey shows that LGBTQ+ employees are just as likely as their straight counterparts to aspire to leadership positions. But 3 in 20 LGBTQ+ women and 6 in 20 LGBTQ+ men believe their sexual orientation will negatively affect their career advancement. Gender-diverse individuals face similar challenges. Respondents who identify as trans or non-binary were more likely to have entry-level positions than cisgender people and were less likely to have managerial roles or responsibilities for hiring or evaluating staff. Many LGBTQ+ employees feel isolated at work. LGBTQ+ women, in particular, endure higher rates of on-the-job harassment and discrimination than their straight peers.19

For discussion

• How well do we understand the perspectives of our LGBTQ+ employees and their experiences in our workplace?
• How effective are we in recognizing and addressing behaviors that might discriminate against LGBTQ+ employees?
• What proactive steps can we take to promote better inclusivity in the workplace?

Work from Home Sticking Around

After COVID-19, flextime and working remotely will likely be more accepted, even routine, practices. Surveys have found that employers expect as many as 40 percent of their staff are likely to continue to work at home once the pandemic ends. Another poll found that 40 percent of employees would telework every day if they could and 59 percent would apply for a job that included an opportunity to work remotely. An experiment at Stanford University found that working at home led to a 13 percent increase in individual performance. Another possible workplace effect from the pandemic: Behaviors, practices, and office designs based on social distancing may remain as practices after the pandemic.20

Deeper Dive:

Another way COVID-19 has impacted employment is the new types of jobs related to containing the coronavirus and ensuring personal safety. These include providing deep cleaning and sanitization services, monitoring staff health, and “reconfiguration specialists” who help companies modify their facilities for social distancing. Several universities have started programs to train individuals for another emerging job: virus contact tracers. One expert said there is likely to be demand for these kinds of services at least until COVID-19 is eradicated.21

For discussion

• What was our institution’s experience with telework during the pandemic? What went well? What could be improved?

• Does it make sense to adopt telework long-term? What different models of telework would best support our mission?

• What effect might long-term telework have on our institution?

When the Second Shift Happens Concurrently with the First

Both men and women who are now working from home because of COVID-19 struggle to balance all their responsibilities, but women, especially mothers, may suffer deeper effects on their careers. Such trends likely affect all parents, but they may have a deeper impact on women. One study of submissions of research papers in March and April of this year found the number of male authors grew faster than female authors; a similar study found lower rates of submissions from women compared to both January and February 2020 and March and April 2019. As one female researcher put it: “It’s hard to write a sophisticated grant application when every 30 seconds someone is coming in to ask, ‘Where are my socks?’” Another female scientist/academic noted that research is “the easiest thing to put off, because it doesn’t have an immediate deadline.” 22

For discussion

• How has the pandemic affected productivity of our faculty and researchers? Can our institution do more to help parents—and women especially—balance work/life responsibilities while COVID-19 forces them to work at home?

• How much do we know about the effects of working at home on individual researchers at our institution? What are the short- and long-term impacts on individuals and our institution’s research?

• Will our institution need to revise its assumptions and policies regarding research output, such as those factoring in tenure decisions, because of COVID-19?


Nothing but Blue Skies?

Scanning the economic horizon during the pandemic, Moody’s offers some reasons for optimism. In the housing market, for example, Moody’s believes that “whatever Americans are not spending on indoor dining or air travel may soon help to fund purchases of home-related goods and services.” Another positive harbinger: In the spring of 2020, consumer spending dropped by well over $1 trillion while personal savings soared by some $2.76 trillion—a phenomenon that has never been seen before. Moody’s predicts that “as business activity reopens, some of the recent extraordinary increases in personal savings will fund an increase in consumer spending that is likely to surpass expectations.”

For discussion

• What do overall economic indicators mean for our institution? What indicators do we need to watch?
• If the economy does indeed turn upward after the pandemic, what opportunities might that present?
• What impacts would an economic upturn have on our institution’s business operations, including purchasing?

Data Analytics Help for Non-Wonks

In a free playbook, experts from the Kellogg School of Management at Northwestern University argue that you don’t have to be a computer whiz to use data to manage. As one author in the collection argues, “The most important skills in analytics are not technical skills. They’re thinking skills.” Written with the non-technie in mind, the book seeks to show managers how to develop “a working knowledge” of data science. This means being able to separate good data from bad data and knowing where analytics and AI can add value.

For discussion

• How robust are data analytics skills among our staff, particularly those in management and leadership positions?
• How can we help staff and stakeholders use data to make decisions and assess progress on initiatives?
• How do we currently use data to inform our work and decisions? Where could we improve?

State and Local Budgets Through the COVID-19 Wringer

Even while finances in many states are still recovering from the Great Depression, COVID-19 is impacting state budgets. An economist at the Federal Reserve Bank of Cleveland estimates that in fiscal year 2020, state and local governments will lose $141 billion in revenue from all sources due to “the COVID-19 mitigation shutdowns.” Unemployment and store closings are depressing the two biggest pools of income, taxes on sales and personal income, while states wrestle with rising health costs related to the pandemic. Rainy day funds and Congressional aid have helped some, but states have already started slashing staffing and spending. Running three scenarios of the impact of that trend for fiscal year 2021, the economist estimates that state and local governments will need to cut spending by a total of $59 billion to $350 billion to offset the drop in income. The economist said that “jurisdictions that lack a fiscal buffer may face painfully deep service cuts.” This may include cuts to health care, infrastructure, and education.26

◆ For discussion
• How will the pandemic affect revenue for our local and state governments?
• How will lower government revenues impact our institution, both directly and indirectly (examples: infrastructure, transportation, and health services)?
• How can we mitigate lost public revenue and/or decreased public services?

Employees Look for Meaning

As reported by futurist Thomas Frey, the pandemic has led many employees to reassess their career paths and employers. A leading HR consulting firm recently found that 57 percent of employees have experienced a shift in feelings about their work situation as a result of the pandemic. A third of that group (33 percent) said they want to pursue a more meaningful or fulfilling position. “This has been a time of reflection and re prioritization for businesses and people,” one career consultant said. “Purpose is at the forefront of everyone’s mind right now, and professionals are assessing whether their company’s values align with their own.”27

◆ For discussion
• How can our institution help potential students who are looking to change to a more “meaningful” career?
• What academic programs might see growth due to post-pandemic career changes? What programs might see enrollments fall?
• What about our employees—are they engaged? Do they feel fulfilled? How can we support our staff?


Broken (Supply) Chains

Disasters like volcanic eruptions, tsunamis, hurricanes, and, yes, pandemics, can and do upset the supply chains that businesses rely on to procure mission-critical goods. Mapping supply networks in advance can be difficult and time-consuming, but knowing how supply chains work can provide a competitive advantage. Experts say companies that invest in supply chain mapping are better positioned to work around shortages and find supplies elsewhere when disasters affect the normal flow of goods.28

◆ For discussion
• How have the supply chains that we rely on for critical goods been disrupted? How has this impacted our ability to deliver on our mission?
• What steps could our institution take to improve our understanding of our supply chains, including adopting new technological tools to help with that task?
• What opportunities are there to re-examine our purchasing policies and ensure that they align with our values?

New Ways of Working

How might COVID-19 impact the staffing overall? Organizations that cut staff in the pandemic may decide not to re-hire to previous staffing levels, or they may rely more on contract workers. Organizations that discovered that they could be agile and pivot quickly to adapt to new challenges may find that way of working essential to continued success. Leaner staffs and the need for organizations to adapt more quickly to change may shift employer focus from how many hours an employee works to how productive they are. Workers may need to learn how to work more effectively across organizational silos and as part of organizational workflows versus departmental workflows.29

◆ For discussion
• How has the pandemic changed the nature of work at our institution?
• Are some of those changes likely to become permanent after the pandemic ends?
• How did we respond to the pandemic? How effectively did we pivot? How can we apply these agile workflows post-pandemic?


COVID-19’s Impacts on Higher Ed: Economic

The current pandemic may have lasting effects long after COVID-19 is eradicated, in the period to come that some are calling the “Great Reset.” Among many economic changes that may take place, we might expect the following:

» The recession brought on by the pandemic will continue to have deep effects. At institutions, staff furloughs, layoffs, and pay cuts may continue until colleges and universities regain sound financial footing. Institutions may offer more retirement incentives to help pare their staffs. Colleges and universities that have learned to run more efficiently during the pandemic may springboard on those efforts to offer quality education at lower prices with leaner operations.

» The pivot to greater reliance on online learning means that institutions will need to develop different financial models based on that modality, in terms of both income and expenses. Studies show that students taking online courses expect to pay less than if they were learning face-to-face; colleges and universities can expect that continued downward pressure on tuition.

» In the short term, at least, restricted access to university campuses will constrict revenues reaped from athletics and from auxiliary enterprises like special events and summer camps.

» While many students may not have the money for college, unemployment may prompt more students to seek additional training. There may be more interest in skills training and certificate programs. To save money, students may elect to study closer to home. Increased numbers of students may need more financial aid. Recruiting international students—and reaping the benefits of the higher tuition they usually pay—will be a challenge.
The rise of online learning may fuel faster inroads into the higher education market from the private sector, potentially undercutting any competitive edge that colleges and universities have enjoyed. Some experts speculate that prominent universities will capitalize on online learning to become mega-institutions, perhaps at the expense of regional and lesser known colleges and universities.

Overall, competition to enroll students will become more intense. As the pool of traditional-aged students shrinks, institutions will more aggressively seek to serve the needs of adult and working students. Fewer students may seek a residential learning experience.

The pandemic, social unrest, and the recession may drive more colleges and universities to merge, partner, or at least to consider deeper collaborations—what one university leader calls “strategic optioning.”

Driven by employer needs for workplace skills, pathways to skills development other than degree programs will become more commonplace. Employer needs will increasingly drive the curriculum in universities.

University towns and their economies may be impacted by staff and financial cutbacks at institutions and from campuses with fewer people in attendance or in residence.

Summarizing the stark effects that COVID-19 has had on student finances, one administrator recently said that the pandemic had propelled many students “from chronic precarity to immediate emergency.” Without work study and with layoffs from jobs in the private sector, many students saw their already meager incomes shrivel. Post-COVID-19, institutions may need to pay more attention to basic student needs like food and housing. 31

The pandemic has made tuition more fluid. Some institutions have had to freeze or discount tuition. Income from international students is uncertain. “In the last few months, most colleges have lost much of their pricing power,” one expert said. 32 Meanwhile, authorities in Australia announced a bold restructuring of tuition rates. Reflecting demand for jobs, tuition in fields such as STEM and health care will go down, while students pursuing degrees in the humanities and the law can expect to pay more. 33

For discussion

• How might each of these trends affect our institution?
• What steps should we be taking now to prepare for such trends?
  What should we be doing differently?
• Should we be tracking any other related trends?

Cloning Around

“As more physical assets become software-enabled, a new model is needed to operate them,” asserts a paper from IBM. One solution? Virtual clones. The paper says that by using predictive analytics and a “digital twin” version of a physical asset, organizations can “anticipate how an asset is operating today, when it might fail in the future, and under what conditions.” The paper says that by helping to drive “a new level of reliability by performing data analysis on physical assets,” a digital twin model supports predictive planning, proactive management, and better decisions about equipment.  

For discussion

• As our institution invests in more technology, including devices related to the internet of things, do we over rely on time-based cycles and manufacturer recommendations for maintenance?
• Could we adopt a “digital twin” model and use the power of data analytics and artificial intelligence to monitor devices virtually—as a means to optimize their efficiency and gain insights about how best to purchase and maintain equipment?
• If we were to rely more extensively on a “digital twin” model, what would be the implications for staffing and staff training?

Advances in Sustainable Energy

“Clean” technologies like solar panels, wind turbines, and batteries continue to become incrementally better. At the same time, new, next-generation technologies are starting to emerge. “Marine solar” is based on offshore floating solar farms. “Molten salt reactors” could offer a lower-radiation alternative to nuclear reactors based on solid fuel. “Dynamic export cables” could significantly improve the amount of energy collected from wind turbines floating in the ocean.35 “Pumped thermal electricity storage” could work well for large-scale storage of renewable energy.36

Deeper Dive:

Not enough hydrogen—another potential alternative energy source—exists naturally, so it has to be produced. Scientists are now looking beyond so-called “gray hydrogen,” produced from fossil fuels, to “blue hydrogen,” made using non-renewable energy sources such as nuclear. But the ultimate holy grail is “green hydrogen,” generated from renewable sources such as solar or wind without producing carbon emissions. The European Union has prioritized renewable hydrogen as one cornerstone of its plan to transition Europe to green energy.37

◆ For discussion

• How is our institution currently using alternative energy sources such as wind and solar?
• Which alternative energy sources would be good candidates to fulfill our institution’s energy needs?
• How might green hydrogen help our institution advance its goals to further reduce its carbon footprint?


Coming Full Circle

In contrast to the “take-make-dispose” model, a circular economy reuses and recycles materials, water, and energy. The benefits are both environmental and financial, and more organizations are taking notice. The European Commission’s “Circular Economy Action Plan” is a building block of the European Green Deal, Europe’s agenda for sustainable growth. Stateside, the US Chamber of Commerce Foundation is also an advocate of a circular economy. While some universities have curricula and research focused on it, higher education has yet to fully apply circular economy thinking to campus management.38

» What components of a circular economy model does our institution already have?
» How might our institution introduce more circular thinking into its business practices?
» How can we do more to educate learners about the circular economy and get our institution’s communities more engaged in circular practices?

This Is Kinda Out There

We usually ground items for Trends solidly on Planet Earth, but a recent study of a more extraterrestrial nature gave us reason to pause. Based on “galactic star formation histories, metallicity distributions, and the likelihood of stars hosting Earth-like planets in their habitable zones,” scientists recently published a paper suggesting that there could be “at least a few dozen active civilizations” in our galaxy. Likely more than 17,000 light-years from Earth, such civilizations are impossible for humans to communicate with—at least with current technology.39

**For discussion**
- Does our institution focus too narrowly on our immediate environment, perhaps overlooking broader, more far-reaching perspectives that could inform bolder approaches to problem-solving?
- How well do we prepare our learners to think beyond their own individual universes?
- Could our institution one day serve learners beyond the confines of Planet Earth? What might that entail? In the meantime, for now, how can we best connect with new pools of terrestrial learners beyond our immediate region and expose our learners to perspectives other than their own?

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Water, Water (Not) Everywhere

When we turn on the tap, we likely don’t think of water as a finite resource. But the World Economic Forum says the global water crisis is the fourth major threat to civilization. By 2025, two-thirds of the population world-wide could be water-stressed. In the US, water shortages already challenge states such as New Mexico, California, Arizona, and Colorado. In other areas, water quality is a concern—as evidenced by events in Flint, Michigan—due to aging water infrastructure and pollution of water sources. Yet another concern is the rising cost of water, with high water bills disproportionately affecting income-challenged populations.40

**For discussion**
- In what ways could our institution face a water shortage? How would it impact us?
- What is our institution doing to conserve water? How can we improve our wastewater management?
- What steps should our institution be taking today to prepare for future water shortages?

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Sometimes You Need a Good Vent

Among the myriad ramifications of COVID-19, building managers have their eyes on ventilation systems. While it is not yet clear exactly how the coronavirus spreads in the air, building managers are examining how they can bring as much outdoor air into a building as possible, and perhaps filter or treat that air more than they do now. (That’s contrary to earlier design philosophy that sought to make buildings as airtight as possible—and led to “sick building syndrome.”) Apart from considerations around the virus, there is evidence that more outdoor air in a building reduces health challenges and boosts individual productivity.41

For discussion
- Has our institution reviewed its HVAC systems comprehensively in the context of COVID-19?
- Are our HVAC systems adequate to handle more incoming outside air as well as increased air flow from stronger air filters? Should we invest in new technology like ultraviolet purification systems?
- In addition to mechanical changes, do we need new policies regarding use of HVAC systems, such as those that govern how many people should be in a given room at a given time?

Give Me Wide Open Spaces

Take public health concerns about COVID-19 and add more acceptance of teleworking and one effect might be an exodus from urban areas. Law enforcement actions against protests in cities may also prompt some city dwellers to move. “Megacities” may lose population to smaller communities. Simultaneously, we may see changes in city planning. Outdoor spaces might be more popular than ever. Public transportation might see less use, and more individual cars might clog city streets. Roads may be converted to pedestrian walkways, and individuals may continue to rethink their use of public spaces such as restaurants and theaters.42

For discussion
- How would a large population shift from urban to suburban, small town, or rural areas impact our institution?
- Could our institution adapt its enrollment strategies to position itself to capitalize on shifting population centers?
- How will changes in urban planning affect our institution? Will students, faculty, and staff expect more outdoor spaces?

Going the Social Distance

From offices to arenas to public transportation, new safety protocols for areas where people congregate will likely be the norm for some time to come. Even after there is a vaccine for COVID-19, the habits of social distancing may be hard to break. Office staff may eschew shared desks and open areas where many people congregate. Plexiglass barriers and signs directing people to maintain social distance might remain the norm. Employers may want to stagger work shifts to leave fewer people on-site at any given time.43

For discussion
- What COVID-19-era physical precautions—like social distance signage—might our institution want to keep in place after the pandemic for the sake of student and staff safety?
- What did we learn from adapting learning environments, social spaces, residence halls, and offices for social distancing? How can that inform how we design spaces in the future?
- What will students, faculty, and staff expect from spaces post-COVID-19?


COVID-19’s Impacts on Higher Ed: Environment

The current pandemic may have lasting effects long after COVID-19 is eradicated, in the period to come that some are calling the “Great Reset.” Among many environmental changes that may take place, we might expect the following:

» Organizations with leaner staffs and more employees working off-site may consolidate and shrink the space they devote to offices. Institutions may have smaller physical presences. Fewer offices will be built, and existing office buildings may be underpopulated. Supply chains and staffing availability for new construction may continue to be disrupted. Building design will change to accommodate factors like better ventilation and the diminished need for individual offices.

» On campuses, designs for learning and social spaces may evolve. Expect technology to replace what today are common personal interactions in spaces like lobbies. Buildings will have more automatic doors, touchless elevator buttons, and similar elements. For individuals who learned new behaviors in the pandemic, residence halls and group spaces may need to continue to accommodate some form of social distancing.

» The financial impact of COVID-19 might make more students homeless. Even before the pandemic, a 2018 study found that 9 percent of university students and 12 percent of community college students are homeless. Even more students were housing insecure (36 and 46 percent, respectively). Some universities are building housing just for their homeless learners.

» While COVID-19 might have curbed campus building construction, there is evidence that capital projects at colleges and universities were slowing even before the pandemic. A survey of architectural, engineering, and construction firms conducted in March 2020, found that nearly a third (31.1 percent) saw a decrease in education-related proposals in the first quarter of 2020. University Business postulated that “if activity after the last recession is any indication, the education market may be slower to bounce back compared to other industries.”

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Food for Thought

For discussion
• How might each of these trends affect our institution?
• What steps should we be taking now to prepare for such trends? What should we be doing differently?
• Should we be tracking any other related trends?
The New World Order?

“Managing geopolitical risk begins with understanding the source of geopolitical disruption,” say experts at the firm EY. In particular, they say, three geopolitical undercurrents particularly bear watching. One is “global re-balancing,” in which US dominance is eroding and, as a result, we may be moving to a “multipolar world” where different world powers maintain their own “spheres of influence.” A second trend: Western democracy is being challenged by “alternative political systems” that are proving effective in addressing global challenges. Another key factor: the Fourth Industrial Revolution (4IR), in which big data, analytics, and technology may “disrupt industry structures, wealth distribution, and labor markets” while also “reshuffling” the existing geopolitical order.47

◆ For discussion

• In disparate areas such as research opportunities and international student enrollment, how do current trends in geopolitical disruption affect our institution? How might they affect our institution in the near future?
• How could the Fourth Industrial Revolution disrupt higher education and our institution’s business models? What steps should our institution be taking in response?
• How well are we contributing to societal knowledge and understanding of current geopolitical trends, including how they affect our region and state?

Are We the Baddies?

Is America under threat of fascism? Yes, according to Yale philosophy professor Jason Stanley, author of *How Fascism Works: The Politics of Us and Them*. He points out multiple examples of how President Trump practices fascist politics, and discusses how America became vulnerable to fascism—the “erosion and deterioration of democratic institutions” under the influence of money, a partisan judiciary, “catastrophic failures by elites” like the Iraq War and the Great Recession, and a media environment that “leaned into scandal and entertainment.”

For discussion

- To what extent are fascist politics evident in our institution’s environment and community?
- What more can our institution do to counter fascist politics and ideology?
- In our curricula and extra-curricular activities, does our institution do enough to educate learners and the broader community about the dangers of fascism?

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But At Least We Don’t Have Hanging Chads, Right? Right?

Election experts are sounding the alarm about the November 2020 election, and it’s not just because of COVID-19. The coronavirus has “laid bare the cracks in [the US electoral] system,” one voting expert has said. Even before COVID-19 disrupted voting-as-usual, elections have been plagued by delays, errors, and issues thanks to malfunctioning equipment, foreign interference (including disinformation and hacking), and suppression of Black and Latinx voters.

For discussion

- What election issues does our region face? Are there particular populations or areas targeted by voter suppression?
- What specific actions can our institution take to help shore up or assure voting integrity in our region?
- How well does our institution educate our learners and our regional communities about the importance of electoral integrity?
State Workforce Initiatives

Arguing that “the future of work is here,” a report from the National Governors Association observes that as of 2020, “more than one-third of job skills required for most jobs in 2016 have already been replaced by new technologies, particularly by automation.” To meet current and future workforce needs, the report suggests, states should build statewide ecosystems that support lifelong learning and “innovate teaching and learning models to close the digital skills gap.” Another strategy: increase investments to help workers succeed with a focus on tools like financial aid, career advice and information, portable credentials, and “flexibility to succeed in the gig economy.”50

For discussion

• What workforce initiatives is our state or region undertaking?
• How well are our academic programs aligned with employer needs for skillsets?
• Could and should we be doing more to offer credential programs, retraining for displaced workers, and lifelong workplace-focused learning?

Infrastructure Spending Be ‘Dammed’

By one estimate, the backlog of needed spending on public infrastructure in the US now totals some $2 trillion. In 2009, the federal American Recovery and Reinvestment Act included spending for infrastructure as part of a strategy for national recovery from the Great Recession. Congressional legislation to address the economic fallout from the COVID-19 pandemic, however, has so far focused mostly on job recovery rather than capital projects. Stimulus programs in China, the European Union, and Japan, by contrast, have all included infrastructure investment. Funding national infrastructure improvements will continue to be a challenge for national leaders no matter which candidate wins the White House in November 2020.51

For discussion

• If Congress allocates funding for infrastructure, how might that impact our institution?
• What infrastructure projects in our region are most pressing to be addressed? Do any pose a risk to the safety of our students, faculty, and staff?
• How would a major infrastructure spending bill affect our enrollments? Can we expect an increased need for civil engineers, construction workers, etc.?

The Geography of Accreditation

In July of this year, the Middle States Commission on Higher Education announced plans to open its membership beyond its traditional geographic region, which has focused largely on universities from New York to the District of Columbia. Earlier this year, another accrediting body, the Western Association of Schools and Colleges, also announced plans to open accreditation to institutions outside its traditional region. These seismic shifts in accreditation practices were made possible through new regulations issued as part of Secretary of Education Betsy DeVos’s “Rethink Higher Education” agenda that were designed in part to “reduce regulatory burden” for colleges and universities.52

◆ For discussion

• How will our institution be affected by new regulations around accreditation?
• Could the new regulations change and perhaps streamline the way our institution manages its side of the accreditation process?
• Could the new regulations give our institution added flexibility for starting new programs, perhaps under the aegis of an accrediting body other than our traditional accreditor?

Can Any Good Come From COVID-19?

Even while COVID-19 casts its dark cloud, some experts predict that there may be a few positive trends in our reaction to the pandemic. Society may look with renewed favor on the power of “big government” to play a major role in solving large-scale problems. We may see renewed trust in institutions—like universities—and in science. A psychologist from Columbia University suggests that our experience with the coronavirus “has the potential to break America out of the 50-plus year pattern of escalating political and cultural polarization we have been trapped in.” A sociologist from New York University predicts that our experience in the pandemic will lead society to make substantial new investments in public goods—for health, especially—and public services. Another observer predicts that COVID-19 will spark a “return to faith in serious experts.”53

◆ For discussion

• Looking ahead to a post-COVID era, what positive changes might the pandemic bring to our university?
• How can our institution nurture public trust in experts and institutions?
• If society changes for the better after the pandemic, how can we support that change and nurture better future citizens through our teaching and learning?


COVID-19’s Impacts on Higher Ed: Political

The current pandemic may have lasting effects long after COVID-19 is eradicated, in the period to come that some are calling the “Great Reset.” Among many political changes that may take place, we might expect the following:

» Regulations pertaining to higher education, including rules guiding online education, credentials, and accreditation, may ease as lawmakers seek to spark more innovation, support cost efficiencies, and advance access in higher education. Through policies for financial aid and other supports, lawmakers may do more to sustain competency-based education, credentials other than degrees, adult education, and lifelong learning.

» Universities should expect to feel continued pressure—from lawmakers, businesses, parents, and learners—to align their programs and curricula more closely with the skills needed in the workplace.

» Lawmakers and businesses will look more favorably on new technologies that capture and share records of student learning, particularly tools that track outcomes rather than just inputs like credit hours earned.54

» The pandemic may continue to bring more lawsuits from students seeking refunds of tuition and fees after their university switched from teaching in classrooms to online learning. As of May 2020, no fewer than 100 class action lawsuits had been initiated. Federal leaders may pass legislation barring such suits.54

A “solutions brief” from the College Board advocates for future legislation that supports “the most promising and effective approaches” as well as for increased accountability and transparency from education providers. Other goals are encouraging private-public collaboration “to ensure postsecondary education and training providers are aligning their education and training offerings with marketable, in-demand job skills” and policies and practices that help more learners complete college.55

Lawmakers have recently been interested in the economic impact that COVID-19 had on colleges and universities, as well as whether institutions can operate safely during the pandemic. Going forward, they will likely ask how institutions spent funds they received through the CARES act. Also on legislators’ minds: the efficacy of online learning and the future of international students at US colleges and universities.56

Depending on the results of the November 2020 elections, restrictions on international students in the United States—to say nothing of COVID-19-affected travel—may continue to have an impact on the many institutions that rely on international students for revenues. Conversely, changes in federal policies could ease such restrictions.57

◆ For discussion
- How might each of these trends affect our institution?
- What steps should we be taking now to prepare for such trends? What should we be doing differently?
- Should we be tracking any other related trends?

Advancing Racial Justice

In the wake of George Floyd’s death, universities are taking new steps to advance racial justice through curricula, policies, name changes, and research.

G. Gabrielle Starr, president of Pomona College, says upholding “the light of knowledge” is “one of the best hopes for humanity.” One of many institutional leaders who is speaking out, Starr says “each of our disciplines offers something central to that hope.”

» Prairie View A&M University created a Center for Race and Justice and will require all incoming students to take a course on the history of race.

» Boston University started a Center on Antiracist Research.

» Yale University and many other institutions have changed names of buildings and schools to remove their association with individuals whose beliefs or behaviors do not align with or reflect contemporary values. Many other institutions are considering similar changes. Such renaming extends also to government buildings, street names, and even commercial products. Industries have changed commonly used terminology that could be construed as sexist or racist.

But many students, faculty, and activists say that universities aren’t taking actions that will make a meaningful change. Rather than addressing brutality and racism in campus policing or funding cuts to ethnic-studies programs, it’s more “focus groups, town halls, anti-racism reading lists, testimonials of hurt, confessions of guilt”—“busywork.” Higher education has committed itself to diversity for years, but measurable progress toward racial justice—both within and without higher education—has not been made.

When the journal Nature asked Black scientists what they want from colleagues and their institutions, one respondent said that given that white colleagues “have the most power” and “benefit the most from racism and lack of diversity, it is therefore [their] job to fix the system.” Specific suggestions: “create a welcoming environment,” make opportunities for difficult conversations, commit to diverse hiring, and be more transparent when hiring for leadership posts.

◆ For discussion

• What actions are we taking to achieve racial justice? How are we addressing the specific issues raised by the Black Lives Matter movement?

• What is our institution’s history of anti-Black racism? How has our institution contributed and upheld structural, institutional, and systemic racism, both in the past and today? How can we right these wrongs?

• What does it take to graduate a white student who is an anti-racist? What changes do we need to make to our curriculum, activities, support services, etc.?
About SCUP

At SCUP, we believe that by uniting higher education leaders, we can meet the rapid pace of change and competition, advancing each institution as it shapes and defines its future. Through connection, learning, and expanded conversation, we help create integrated planning solutions that will unleash the promise and potential of higher education.

About Trends

Demographic shifts. Political changes. Social movements. The evolution of technology. These all affect your institution. SCUP’s Trends for Higher Education helps you and your institution stay on top of the major changes in the world around you. How? We scan a wide range of sources and identify significant trends and movements outside of higher education. We help you anticipate how these trends might affect your institution.

How can you use Trends?

Inform your environmental scanning or SWOT analysis • Support strategic planning efforts
Discuss the future of higher education • Serve as evidence to support your budget requests
Assist in program prioritization • Help develop new curricula

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