Trends for Higher Education

Are You Prepared for Tomorrow's Students? | Spring 2016

From demographics and social change to politics and technology, many trends impact higher education. SCUP's *Trends for Higher Education* can help you and your institution make sense of the most significant issues, movements, and changes.

This edition focuses on trends that could influence how you plan for tomorrow's students, whether they attend your institution next year—or next century.

About *Trends*

Trends scans a wide range of sources and identifies the most important factors—those that may influence your work today, tomorrow, over the next decade, and beyond. We collate and curate the news so you don't have to, collecting and summarizing relevant trends and explaining what they might mean for your institution. Our goal? To help you make sense of a fast-changing world and drive a conversation that reaches beyond the boundaries of campus.

Trends can inform your environmental scanning or SWOT analysis, support strategic planning efforts, stimulate discussions about the future of higher education, provide evidence to support your budget requests, add insights to help you prioritize programs, and suggest directions for new programs and curricula.

Trends uses the STEEP taxonomy:

Social: how people work internally (psychology) and with each other (sociology).

Technological: how people use technology, including hardware and software; how society relies on technology; and how technology affects society.

Economic: macro- or microeconomics, including global factors, shifting directions in business and industry, and trends related to jobs and skills needed for the workplace.

Environmental: our external surroundings, including sustainability and our evolving workplaces, cities, and living spaces.

Political: public policy, governmental systems and the people within them, and the effects of governmental decisions on citizens and communities.

Each trend includes a brief summary, a footnoted source, and discussion questions to help you analyze and act.

Join the conversation

What trends would you like us to consider in future issues? What trends do you think we got wrong or missed in this issue? We would like to hear from you!

» E-mail **trends@scup.org**

» Tweet **@Plan4HigherEd** with the hashtag **#scuptrends**

Social Trends

From addressing alcohol abuse to cultivating innovative cultures, decisions that institutions make today will strongly affect the students of the future.

4 Workforce Challenges That Keep HR Up at Night

A recent study asked accountants what HR-focused workplace trends are on their clients' minds. Their top four concerns? Challenges related to more diversity in workplaces and the need "to adapt to less homogeneity," the rise of workforce performance management and related processes, the evaporation of certain workplace roles as more functions are automated, and the learning curve associated with learning and adapting to new technologies.[1]

For discussion

These results describe the world of work that college students will enter once they graduate. Does your institution need to retool programs to prepare students for the workplace of the future? Also, how will this affect your institution's operations? Does your institution need to update its administrative practices and job descriptions?

Student Drinking Takes a Turn

Student drinking has become a safety issue that affects all students—even those that don't drink. Studies have estimated that 1,800 college students die from alcohol-related incidents every year[2], another 600,000 are injured while inebriated, and nearly 100,000 reported sexual assaults involve alcohol (a figure thought to be low because such events are underreported).[3]

For discussion

Some experts suggest that banning alcohol on college campuses is the only answer to these problems. But such a ban could be politically unpopular and difficult to enforce. Beyond educating students about alcohol, how might your institution develop effective policies, practices, and strategies that bring alcohol use under control?

What Do Employers Want? (Expertise and Flexibility)

More employers want the "T-shaped professional"— an employee whose specific expertise combined with superior soft skills (like communications and critical thinking) allows him or her to work across disciplines and systems. Savvy universities—notably Michigan State University—are designing programs to develop the "T-shaped student."[4]

For discussion

The Michigan State model combines curricular learning with experiences outside the classroom, including internships, undergraduate research, and practice in entrepreneurship. How might your institution help students gain real-world experience and develop the skills to become T-shaped professionals?

Drop and Give Me HTML5!

Boot camps—intensive, short-term education courses—are becoming an acceptable alternative to traditional courses, bolstered by strong demand from both employers and students. Proliferating in private industry, they are also being piloted by a few universities. Policy makers are experimenting with financial aid for boot camp students. Certificates for completing boot camps may fuel rethinking of educational credentials.

For discussion

If employers can send employees to intensive 10-week courses leading to a certificate, will that erode demand for traditional three-credit, semester-long courses—and degrees built on that model? Can universities successfully adopt boot camp-style pedagogy or partner to offer this modality?

Helping Hispanic Students Succeed

The Pew Research Center recently reported that a record 7 in 10 (69 percent) US Hispanic high school graduates in the class of 2012 enrolled in college that fall, a slightly higher rate than their White counterparts (67 percent). Still, the survey found that Hispanic students were less likely than their White counterparts to attend college full time or enroll in a four-year or selective college and were less likely to complete a bachelor's degree.[5]

For discussion

How well does your institution recruit and serve the growing population of Hispanic students? Does it tailor its recruitment to reflect the unique interests and needs of the Hispanic community, perhaps including family education about the processes of selecting, applying to, and paying for college? How well does your institution support Hispanic students once they enroll? Does it help Hispanic students succeed academically and complete their degrees?

What Does It Take to Innovate?

A multiyear study by McKinsey & Company found that high-performing companies have similar innovation practices and principles. For example, they view innovation as critical and set goals that require innovation. Effective innovators also cherry-pick from many good ideas, funding the best with resources necessary for success.[6]

For discussion

To meet today's (and tomorrow's) challenges, institutions may need to embrace innovation as never before. That can be challenging for institutions steeped in tradition and accustomed to doing things in the same ways. How can your institution inculcate principles of innovation?

More Professors Delaying Retirement

A recent paper from TIAA-CREF suggested that while 35 percent of faculty expect to retire by their normal retirement age and 16 percent expect to work longer than that because they have to, a striking 49 percent "would like to and expect to" work past their normal retirement age.[7] Going forward, institutions will need to balance the benefits of seasoned faculty with the need to hire younger professors and bring in fresh talent.

For discussion

Does your institution have a strategic plan for hiring and nurturing next-generation talent among its professoriate (not to mention its administration and other key campus positions)? How well does your institution anticipate the skills tomorrow's faculty will need? And in the meantime, is it helping current faculty learn new pedagogical skills and educational technologies?

The Times They Are a-Changin' (Again)

Many campuses have recently seen student activism akin to that of the 1960s. Assessing concerns at 76 institutions, analysts found that students' top demands were for new policies or a change in institutional leadership, reallocation of resources, more diversity, better cultural competency training, curricular revisions, and better support for marginalized students.[8]

For discussion

Against the sometimes strident tones of student activism, it can be difficult to sustain an environment that encourages rational and civil discourse. What specific steps can your institution take to bring reason, open-mindedness, and respect to campus discussions of issues that can be flash points? Are all relevant campus stakeholders—including administrators, students, faculty, board members, and staff—doing all they can to promote tolerance, civil discourse, and productive dialogue informed by critical thinking and supportive of individual learning?

SOCIAL TREND SOURCES

1 **How the Future of Work Will Impact Accountants and Their Clients**
AccountingWeb
www.accountingweb.com/community/blogs/paul-harris-bright-hr/how-the-future-of-work-will-impact-accountants-and-their

2 **The often-repeated claim that 1,800 college students die from 'alcohol-related causes'**
The Washington Post
https://www.washingtonpost.com/news/fact-checker/wp/2015/01/15/the-often-repeated-claim-that-1800-college-students-die-from-alcohol-related-causes/

3 **Last Call**
Milbank Quarterly
www.milbank.org/the-milbank-quarterly/current-issue/article/4068/last-call

4 **Beyond Active Learning: Transformation of the Learning Space**
EDUCAUSE Review
http://er.educause.edu/articles/2015/6/beyond-active-learning-transformation-of-the-learning-space

5 **Hispanic High School Graduates Pass Whites in Rate of College Enrollment**
Pew Research Center
http://www.pewhispanic.org/2013/05/09/hispanic-high-school-graduates-pass-whites-in-rate-of-college-enrollment/

6 **The Eight Essentials of Innovation**
McKinsey Quarterly
www.mckinsey.com/insights/innovation/the_eight_essentials_of_innovation

7 **Understanding the Faculty Retirement (Non)Decision: Results from the Faculty Career and Retirement Survey**
Trends and Issues, TIAA-CREF Institute
www.tiaa-crefinstitute.org/public/pdf/understanding-the-faculty-retirement-nondecision.pdf

8 **What Are Students Demanding?**
Higher Education Today
http://higheredtoday.org/2016/01/13/what-are-students-demanding/

FORCES OF CHANGE

5 Game-Changing Practices in Pedagogy

An insightful list of pedagogies that have game-changing potential comes from a collaboration between the Institute of Educational Technology at the Open University and the Center for Technology in Learning at SRI International.[a] Leading the list were these five practices:

» **Crossover learning.** Learning in settings like museums that links to classroom lessons.

» **Learning through argumentation.** Using scientific methods of argument to advance student understanding.

» **Incidental learning.** Unplanned or unintentional learning.

» **Context-based learning.** Expanding students' understanding of context beyond the classroom to broaden learning.

» **Computational thinking.** Applying principles like pattern recognition and abstraction to enhance learning.

As researchers broaden our understanding of effective learning methodologies, is your institution broadening the palette of pedagogies that it draws from? How can instructors at your institution learn about and adopt different techniques?

a **Innovating Pedagogy 2015: Open University Innovation Report 4**
Open University
http://proxima.iet.open.ac.uk/public/innovating_pedagogy_2015.pdf

After the Millennials, Here Comes Generation Z

Members of Generation Z, those born between the mid-1990s and roughly 2012, have just started coming to college. Growing up with technology and in a highly diverse society, this cohort brings unique expectations that institutions will have to anticipate. A snapshot of findings from a recently published study (*Generation Z Goes to College* by Corey Seemiller and Meghan Grace; Jossey-Bass, 2016) suggests that Generation Z is:

» Loyal, responsible, not wanting to let others down

» Compassionate, wanting to make a difference for someone else

» Thoughtful, open-minded, accepting of others

» Craving predictability and order

» Determined, innovative, entrepreneurial

» Concerned about education, employment, and racial equality

» Skeptical about the cost and value of higher education

» In contrast to Millennials, not as motivated by money on the job

» Just 55 percent Caucasian—may be the last majority-White generation

How might the interests of Generation Z affect the curriculum or how courses are delivered? How might the characteristics this cohort embodies shape campus culture in the future?

Technology Trends

If today's students are technologically savvy, we can only imagine the expectations that tomorrow's students will have. Can your institution keep up with that kind of demand?

What's Next for Technology

Gartner's list of technology trends for 2016 includes "device mesh" (the seamless connection of mobile devices, wearables, smart home electronics, etc.), a focus on a "continuous and ambient user experience," and the rapid development of materials for 3-D printing. Gartner also predicts more attention to how digital information is developed, transmitted, and used as well as further advances in machine learning.[9]

For discussion

With the exception of 3-D printing, Gartner's trends may affect the student experience more in the long term than in the short term. Even as it works to meet campus IT needs in the short term, is your institution building the capacity, processes, and culture necessary to anticipate and plan for longer-term changes in educational technology and infrastructure—and their implications?

Securing Campus IT

From Berkeley to Harvard, many universities have been victims of cyber attacks. Sophisticated hackers sometimes leverage university IT systems to reach other targets.[10] It may be impossible to guarantee the absolute security of campus IT networks, however the ceaseless threat of cyber attacks makes robust IT security policies and practices imperative for every institution.

For discussion

Experts urge IT staff to do more than policing when it comes to IT security—campus IT experts can educate staff and students about the need to protect data, for example, and develop policies that meet the needs of users as well as those of the institution. How well does your institution's IT staff collaborate with colleagues to build strong IT defenses? How robust are your institution's policies for preventing cyber attacks and mitigating their impact should they occur?

Don't Dismiss MOOCs Yet

While the market for Massive Open Online Courses (MOOCs) may not have lived up to its original hype, a recent report says there is much more room for growth. The research firm MarketsandMarkets predicts that by 2020 MOOCs will grow to be an $8.5 billion industry, up from $1.83 billion today. While further expansion will require better technology, the firm believes that MOOCs are well positioned to meet the global demand for education that cannot be met by developing new physical campuses.[11]

For discussion

While much of traditional higher education seems skeptical of MOOCs, venture capitalists are pouring millions of dollars into this pedagogic approach. If investors seem to think that there is a market for MOOCs, should your institution rethink its current position about them? Could MOOCs one day be an academically productive—and profitable—channel for serving some of your students?

Will a Robot Do Their Job? Yours?

Research by McKinsey & Company suggests that 30 percent or more of worker activities could be automated in 60 percent of occupations. Even some work done by executives and professionals can now be automated. For example, McKinsey estimates that 20 percent of a CEO's functions—such as analyzing data—could be handled by technology available today.[12]

For discussion

In the push to help students prepare for careers, institutions can't just train future graduates for specific jobs in narrowly defined fields. Is your curricula preparing students for job functions that might soon be automated? How can universities teach students to complete higher-order tasks? A further consideration: How will task automation affect your institution's staffing needs?

The Future of Thinking

Predictions by renowned futurist Ray Kurzweil have come true an astonishing 86 percent of the time. Looking just 15 years ahead, Kurzweil predicts that soon after 2030 human brains will be able to directly access the intelligence collected by the computing power in the cloud via robots made from strands of DNA. Kurzweil predicts that not long after 2040 human thinking will become mostly nonbiological.[13]

For discussion

If Kurzweil proves to be right and our very thinking processes integrate biological thinking and artificial intelligence, what are the implications for educating tomorrow's students? How might Kurzweil's predictions affect teaching, learning, and the curriculum? If they come to pass, could his predictions have further implications? As just one example, will supercomputers—and the resources dedicated to them—become a thing of the past?

Wearables: Has Their Time Come?

Wearable technology—such as Google Glass, smart watches, and tools like Fitbit—is on the verge of significant growth according to the higher education edition of the 2015 *Horizon Report*. While there are pockets of research in higher education on wearables, the report cautions that overall the proliferation of such devices is "greatly outpacing the implementation of this technology in universities."[14]

For discussion

Among many other applications, wearable technologies could transform pedagogy, such as demonstrating surgical techniques or using augmented reality to bring a historic event to life. Is your institution prepared to integrate this emerging technology into your academic programs and support the use of wearables on campus?

Look Out, Expensive Textbooks

While examples are still isolated, we are seeing more evidence of the use of open educational resources (OER)—freely accessible, openly licensed educational materials—across higher education. The University of Georgia recently reported that its students had saved $2 million using OER.[15] Philanthropies are funding OER and legislators are taking note: California, for example, recently enacted a bill designed to speed faculty adoption and development of OER.

For discussion

For many students, the cost of textbooks is another economic hurdle in their pursuit of higher education. What is your institution doing to mitigate those costs? Could institutional policies and guidelines help more faculty adopt OER? Is your institution having the right conversations with the right stakeholders about OER?

E-Portfolios to Document Student Learning

With legislators, the public, and other stakeholders looking for more practical evidence of student learning outcomes and with employers looking for better ways to gauge what potential employees actually know, more institutions are helping students develop e-portfolios that document their educational journey and progress. One estimate suggests that more than half of higher education institutions now use e-portfolios.[16]

For discussion

While e-portfolios are old hat in some institutions, others still have to convince faculty and students about their use and value. How well is your institution addressing such concerns? Does your institution have a strategy and does it nurture more widespread adoption of student e-portfolios? How effective are those strategies and what more could your institution be doing?

TECHNOLOGY TREND SOURCES

9   Gartner Identifies the Top 10
    Strategic Technology Trends for
    2016
    Gartner
    www.gartner.com/newsroom/
    id/3143521

10 Can Campus Networks Ever Be
    Secure?
    The Atlantic
    www.theatlantic.com/technology/
    archive/2015/10/can-campus-
    networks-ever-be-secure/409813/

11 Massive Open Online Course
    Market Worth USD 8.50 Billion
    USD by 2020
    MarketsandMarkets
    www.marketsandmarkets.com/
    PressReleases/massive-open-online-
    course.asp

12 Four Fundamentals of Workplace
    Automation
    McKinsey Quarterly
    www.mckinsey.com/insights/
    business_technology/four_
    fundamentals_of_workplace_
    automation?cid=other-eml-nsl-mip-
    mck-oth-1512

13 Ray Kurzweil: Humans Will Be
    Hybrids by 2030
    CNN Money
    http://money.cnn.com/2015/06/03/
    technology/ray-kurzweil-predictions/

14 NMC Horizon Report: 2015
    Higher Education Edition
    New Media Consortium and
    EDUCAUSE Learning Initiative
    http://cdn.nmc.org/media/2015-nmc-
    horizon-report-HE-EN.pdf

15 Open Educational Resources
    (OERs)
    Center for Teaching and Learning
    at the University of Georgia
    http://ctl.uga.edu/oer

16 Global Digital Positioning
    Systems: E-Portfolios in a
    Digital Age
    Association of American Colleges
    and Universities
    https://www.aacu.org/meetings/
    annualmeeting/AM15/eportfolioforum

FORCES OF CHANGE

Devices Will Replace Faculty: The University in 2030

Writing recently in *Times Higher Education*, Stephen Joel Trachtenberg, president emeritus of George Washington University, suggested that "devices will replace faculty by 2030." Students, he wrote, will select from a variety of e-learning options, offered by many different providers, based on learning styles that best suit their needs. Rather than follow faculty-designed curricula, students will design personalized academic programs and faculty will teach from remote broadcast centers.

Predicting that year-round learning will replace "the traditional, highly inefficient two-semester pattern," Trachtenberg further suggests that the traditional college degree will lose some of its luster as a variety of different credentials gain traction among consumers. Along with badges, he says, "certificates from schools, workplaces and industry . . . will gain in respectability—especially once a new system of accreditation for them is developed."

While Trachtenberg believes that there will still be a role for the socialization experience of place-based education, he also envisions that the traditional construct of separate universities will evolve as "more and more students pursue their studies from home, workplaces, park benches or coffee shops." Research will also morph, he believes, with much of it moving off campus and with academics competing more than they currently do, "hungry for the credit, licenses and patents that will presumably accrue to them alone as institutional affiliations die out."[b]

b   Future Perfect: What Will Universities Look Like in 2030?
    Times Higher Education
    www.timeshighereducation.com/features/what-will-universities-look-like-in-2030-
    future-perfect

Demographics of Tomorrow's Students

Institutions must prepare to serve a different mix of students in the years to come. The National Center for Education Statistics (NCES) projects that while enrollments of students aged 18 to 24 will increase 10 percent between 2010 and 2021, enrollments of 25- to 34-year-olds will increase 20 percent, and enrollments of students 35 and older will increase 32 percent. And while the NCES anticipates a four percent increase in White students in that same time frame, it projects that ranks of Black and Hispanic college students will increase 25 percent and 42 percent respectively.[c]

More students—and university employees—will be Millennials born from roughly 1980 to the mid-1990s. Outnumbering Baby Boomers by some 11 million people, Millennials are 43 percent non-White.[d] These Generation Yers, as they are also known, are said to be tech savvy, close to their parents, and comfortable with diversity.[e] When they get to college, Millennials may expect robust access to the latest technology as well as more personalized transactions and may be less inclined to support their alma mater financially.[f]

c   Projections of Education Statistics to 2021
    National Center for Education Statistics
    http://nces.ed.gov/pubs2013/2013008.pdf

d   Amid the Stereotypes, Some Facts About Millennials
    National Public Radio
    www.npr.org/2014/11/18/354196302/amid-the-stereotypes-some-facts-about-
    millennials

e   The Next America
    Pew Research Center
    http://www.pewresearch.org/the-next-america-book/

f   Meaningful Experiences for Millennials in College Will Maintain
    Engagement Post Graduation
    Forbes
    www.forbes.com/sites/jefffromm/2015/07/27/meaningful-experiences-for-
    millennials-in-college-will-maintain-engagement-post-graduation/#522bc5362d731
    2ccbd7c2d73

Economic Trends

While economic trends like constricted state support will continue to challenge institutions, tomorrow's students may benefit from robust institutional partnerships and data from the Internet of Things.

Tapping the Power of the Internet of Things

It is becoming clear that the Internet of Things (IoT) will be much more than just a web of devices. Savvy institutions will tap data from the IoT to improve management of physical assets.[17] Beyond business efficiencies, the IoT will influence teaching, learning, and research—quickly synthesizing data from many sources, for example—in ways that are just starting to be imagined.

For discussion

To capitalize on the inherent power of the Internet of Things, institutions will need a robust and forward-thinking IoT policy and infrastructure that includes an investment strategy and staffing plan. Moreover, because it is implicitly about the sharing of data, the IoT raises significant issues about security and privacy that need to be addressed. Is your institution's IT security planning adequate?

The Shrinking Middle Class

Analysis by the Pew Research Center shows that the US middle class is contracting. The share of adults in middle-class households has lost ground to upper-income brackets, which grew by 7 percent between 1971 and 2015, and lower-income households, which grew from 25 percent in 1971 to about 29 percent in 2015. "The decline in the middle represents both economic progress and polarization," Pew observed.[18]

For discussion

Middle-income families are a key target of admissions officers at many institutions. But if that pool of potential applicants is shrinking, what are the implications? As family economic situations change, will families that once would have applied to one type of institution be inclined to apply to another type? And what are the implications for enrollment management, financial aid, and possibly developmental education if institutions must draw more deeply from lower-income families to meet their enrollment targets?

Who Will Be Hiring Tomorrow?

Projecting occupational employment through 2024, the U.S. Bureau of Labor Statistics predicts that the employment areas with the hottest prospects will be health care, computing, construction, and social services. At the opposite end of the spectrum, fields where employment will be the most challenged include farming, production, and office support.[19] Meanwhile, technology is quickly rendering many jobs obsolete.

For discussion

Because it takes considerable time to change the curriculum, program offerings and course content often lag societal trends and employer needs. At the same time, an institution's mission is often broader than to simply fall in lockstep with job trends. How does your institution achieve this delicate balance and find the right mix of educational programming?

"Soft" Skills Still in Demand

Studies show employers consistently seek the same "soft" skills. For example, in a 2015 survey of CEOs and business leaders by the Committee for Economic Development of The Conference Board, respondents identified three skill sets as "essential and hard to hire" for: writing, critical thinking, and problem solving.[20] Similarly, a study of job postings by Burning Glass Technologies found that writing, communication, and organizational skills were the top "baseline skills" employers have difficulty recruiting for.[21]

For discussion

Employers continue to seek employees who have a broad suite of skills, especially those mentioned above. The addition of art and design to traditional STEM fields—creating the acronym STEAM—reflects one response to these employer needs. The skills that liberal arts programming imbues in students are still highly valued. How can your institution effectively balance career preparation with employer demand for soft skills?

Microcredentials and Nanodegrees

Nipping at the hegemony of the traditional college degree, online education companies like Udacity and Coursera now offer "microcredentials" like "nanodegrees."[22] The American Council on Education is testing how to award college credit for low-cost and free general education courses offered by online providers.[23] The U.S. Department of Education is piloting ways to give financial aid to nontraditional providers of higher education for short-term certificate programs and competency-based education.[24] And the Lumina Foundation has funded an effort to establish standards for education credentialing.[25]

For discussion

Going forward, will more employers recognize different credentials that students have earned—and how might that change the value of a traditional college degree? Might institutions retool themselves to offer a range of credentials? For example, might institutions offer new kinds of microcredentials to students who are returning to campus for professional development or to learn new skills beyond their undergraduate degree?

The Spread of the Collaborative Economy

Noting that collaboration is increasingly defining both professional and personal lives today, the consulting firm Frost & Sullivan predicts the emergence of a collaborative economy marked by "greater asset sharing, increased inter-business partnerships to deliver end-to-end solutions to customers, and strengthened employer-employee relationships fostered through ongoing training and development."[26]

For discussion

Will a collaborative economy change how your institution conducts its business? Is your institution envisioning new types of collaborations with other entities? Is it actively exploring new kinds of partnerships? A related factor: In terms of pedagogy and curriculum, how well is your institution preparing students to work and thrive in a collaborative economy?

A New Type of Higher Ed Merger

While this is more a trickle than a wave, higher education is seeing more institutional mergers. The consulting firm Grant Thornton describes a particular type of union, the "synthetic merger," that allows institutions to share services but retain individual identities and missions. Each institution keeps its own faculty, student population, endowments, funding structures, and unique cultural elements but shares back-office and support operations, reducing costs and expanding academic offerings.[27]

For discussion

Continued fiscal pressures may lead more institutions to explore different kinds of partnerships, including mergers. Could a merger bring value to your institution (and possibly help keep its doors open)? How might students benefit if your institution took part in this ultimate form of collaboration? How might your institution as a whole be strengthened?

International Students: Where From? Where To?

The United States continues to be the most popular foreign destination for students worldwide. The inflow of international students to US colleges and universities increased by 10 percent in 2014–15 over the previous year. [28] But that may change. Given projections that the proportion of internationally mobile students from East Asia and the Pacific will increase significantly, countries like China, Russia, and Malaysia will challenge the US, England, and other leading education hubs for international students.[29]

For discussion

For many US universities, recruiting international students is increasingly important for meeting enrollment goals. But has your institution made international students an inherent part of its enrollment strategy— not just an auxiliary revenue stream? Does it integrate international students into campus life? Does it provide comprehensive, tailored suite of services to retain international enrollees? Is your institution planning for how the flow of global students might affect student services, teaching environments, and the overall campus culture in the future?

51% of US Workers Not Engaged

Gallup finds that employees' engagement in their work is inching up, however an astonishing 51 percent of US workers were not engaged in their work in 2014—and 17.5 percent were "actively disengaged." Just shy of a third of US workers (31.5 percent) were engaged in their work. Gallup finds that some employers have strategies that earn them engagement rates twice that of the national data.[30]

For discussion

Gallup says that its data suggest that Millennials are not finding ample opportunities to do what they do best in the workplace. Does that mean your institution needs to do more to train future workers—perhaps with better opportunities for experiential or active learning? There are similar implications for staff development: What steps can your institution take to help employees—now and in the future—get and stay more engaged?

ECONOMIC TREND SOURCES

17 Get Ready for 'The Economy of Things'
Forbes
http://www.forbes.com/sites/ibm/2015/09/08/get-ready-for-the-economy-of-things/#2715e4857a0b6467e66b4d8c

18 5 Takeaways About the American Middle Class
Pew Research Center
www.pewresearch.org/fact-tank/2015/12/10/5-takeaways-about-the-american-middle-class

19 Projections of Occupational Employment, 2014–24
Bureau of Labor Statistics
www.bls.gov/careeroutlook/2015/article/projections-occupation.htm

20 What Are Essential Competencies on the Job?
Committee for Economic Development of The Conference Board
www.insidehighered.com/sites/default/server_files/files/151007%20CED%20Survey%20Results%203.pdf

21 Communication Skills Lead 'Baseline' Skills Employers Demand
Burning Glass Technologies
http://burning-glass.com/communication-skills-lead-baseline-skills-employers-demand/

22 Udacity and Google Unveil Co-Developed Nanodegree
Campus Technology
https://campustechnology.com/articles/2015/11/17/udacity-and-google-unveil-codeveloped-nanodegree.aspx

23 Alternative Credit Project™
American Council on Education
www.acenet.edu/news-room/Pages/Alternative-Credit-Project.aspx

24 Fact Sheet: Department of Education Launches the Educational Quality through Innovative Partnerships (EQUIP) Experiment to Provide Low-Income Students with Access to New Models of Education and Training
U.S. Department of Education
www.ed.gov/news/press-releases/fact-sheet-department-education-launches-educational-quality-through-innovative-partnerships-equip-experiment-provide-low-income-students-access-new-models-education-and-training

25 How to Navigate the Credentialing Maze
Higher Education Today
http://higheredtoday.org/2015/08/18/how-to-navigate-the-credentialing-maze

26 Social and Technological Forces Will Reshape the United States by 2025
Frost & Sullivan, PR Newswire
www.prnewswire.com/news-releases/social-and-technological-forces-will-reshape-the-united-states-by-2025-300151425.html

27 Synthetic Merger Could Be the Right Elective for Higher Ed
Grant Thornton
www.grantthornton.com/issues/library/articles/nfp/2015/synthetic-mergers-in-higher-ed

28 IIE Releases Open Doors 2015 Data
Institute of International Education
www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2015/2015-11-16-Open-Doors-Data

29 What Will Higher Education Be Like in 2040?
University World News
www.universityworldnews.com/article.php?story=20150908145912643

30 Majority of U.S. Employees Not Engaged Despite Gains in 2014
Gallup
www.gallup.com/poll/181289/majority-employees-not-engaged-despite-gains-2014.aspx

Environmental Trends

What built environments will best serve tomorrow's students? Will institutions need to build more physical spaces that encourage active learning? Will the race to compete based on campus amenities continue? What will tomorrow's students think about threats to the natural environment?

Move Over, Open Office

Workplace futurist Dan Schawbel predicts that companies will continue the trend of designing offices to nurture employee collaboration and recruit top talent. Schawbel predicts a move away from open offices toward designs that offer different styles of office spaces to accommodate a range of employee preferences.[31]

For discussion

Recent research in the *Harvard Business Review* found that face-to-face employee interactions "are by far the most important activity in an office" and that chance interactions between workers improve performance.[32] How can your institution better prepare current and future students to collaborate in open workplace environments? Can your institution spark innovation by building spaces that guide employees to cross traditional boundaries of divisions and units?

Makerspaces: Not Just for Engineers Anymore

Not yet as ubiquitous as biology labs, makerspaces are gaining a toehold in higher education. Campus makerspaces offer physical locations with specialized tools and supplies that foster student invention and ingenuity. Noting that "maker fluency" combines opportunities to create, collaborate, and solve problems, Pennsylvania State University technology and learning expert Kyle D. Bowen says that makerspaces help students develop 21st-century skills.[33]

For discussion

Once the province of engineers, makerspaces have become broadly adopted as a creative environment—not just by technologists, but increasingly more broadly across the arts and sciences. They encourage student collaboration and the self-direction of learning. How can your institution create more opportunities for students to engage in makerspaces? How can existing physical spaces be repurposed into makerspaces?

Assessing Space for Active Learning

Research shows that active learning across the student experience has value that eclipses the traditional lecture model. One implication, of course, is that universities need to design new types of physical spaces to support active learning. To help planners with this challenging goal, the Learning Space Rating System scores classroom design to see how well it supports active learning.[34]

For discussion

What are the tangible outcomes of developing a campus culture of active learning? In what ways does such a culture benefit students, faculty, staff—and employers? How can you nudge more faculty to adopt active learning modalities? How can existing classroom space be redesigned to support active learning? Might a tool like the Learning Space Rating System assess how well your campus spaces support active learning?

Do Millennials Believe in Climate Change?

When it comes to believing—or not—in climate warming and its causes, one recent study showed that American Millennials' viewpoints were fairly aligned with those of the general public. That poll found that 55 percent of Millennials accept "human-caused climate change" as a "proven fact," roughly comparable to a different study that showed that 52 percent of Americans as a whole believe that. Analysts suggested the data show that Millennials are not necessarily more liberal on climate change than the general population. [35]

For discussion

As anchors of rational discourse in our society, institutions can help students separate facts from politics on contentious issues such as global warming. As these data show, however, students bring different perspectives on this issue to campus. A challenge for institutions may be to nurture a space where differences of opinion can be discussed rationally and productively. More broadly, how can your institution better serve society by helping the public understand the facts about issues like climate change?

More Pollution, More Severe Weather, Less Water

On a list of 10 pressing global issues, the World Economic Forum's *Outlook on the Global Agenda 2015* cites three environmental concerns: rising pollution, more severe weather events, and increasing stress on access to water. The report cites a prediction, for example, that by 2030, 3.9 billion people—or slightly less than half the world's population—will be impacted by water scarcity.[36]

For discussion

Most institutions are concerned about their environmental impact. What further steps can your institution take to reduce the resources it consumes and pollution it produces? What more can your institution do to motivate staff and students to adhere to sustainable practices in all their activities on campus? How can your institution participate more fully in efforts to conserve water resources?

Sustainability Concerns in the C-Suite

For the first time in its history, The Conference Board CEO Challenge® 2015—an annual survey of global business leaders—ranked sustainability as one of the top five challenges identified by CEOs. In part, the survey found that CEOs seek to ensure that sustainability is perceived as part of their corporation's brand identity.[37]

For discussion

Tomorrow's students will likely be as avid as today's students that the institution they elect to attend is committed to sustainability. Are administrators on your campus fully cognizant about the relationship between sustainable practices and perceptions of institutional reputation? Does your institution do all it can to publicize research it produces that might advance sustainable practices?

The Long Shadow of Deferred Maintenance

A recent study by Sightlines and the Association of Public and Land-grant Universities (APLU) found that there is $8.4 billion in deferred maintenance in the physical plants of US schools of agriculture alone.[38] Multiply that by the deferred maintenance that has accrued across all institutions of higher education and the result is a problematic abundance of leaky roofs, cracked foundations, outdated HVAC systems, and countless other threats to building integrity, user health and safety, and the ability of institutions to fulfill their missions with optimal efficiency.

For discussion

Having $100 per gross square foot in deferred maintenance is considered a major operational concern. APLU members had an average of $95 per gross square foot in deferred maintenance. Where does your institution stand vis-à-vis that benchmark? Is your institution doing all it can to address deferred maintenance? Are there plans and policies in place to address this problem honestly and proactively?

Getting Hot in Here?

Whether they are on campus or studying online, tomorrow's students may find temperatures rising. The Environmental Protection Agency predicts that if global emissions of greenhouse gases continue to grow, average US temperatures will rise by 3°F to 12°F by the end of this century. Climate models predict that temperatures that ranked in the hottest five percent between 1950 and 1979 will occur at least 70 percent of the time after 2035.[39]

For discussion

This forecast suggests that institutions need to include global climate change as part of long-term planning. On campus, climate change could have many direct effects. Water may be scarcer even though the chance for flooding might increase. Air quality may worsen. HVAC systems will be further taxed, and cooling buildings may become more expensive—that may particularly be a factor for institutions that are trying to better use their physical plant during summer months. Warmer temperatures might cause an uptick in heat-related illness among students and staff. How might such trends affect your institution over the next decade and beyond?

ENVIRONMENTAL TREND SOURCES

31 **10 Workplace Trends You'll See in 2016**
Forbes
http://www.forbes.com/sites/danschawbel/2015/11/01/10-workplace-trends-for-2016/2/

32 **Workspaces That Move People**
Harvard Business Review
https://hbr.org/2014/10/workspaces-that-move-people

33 **Rethinking the Makerspace: A Q&A with Kyle D. Bowen**
Campus Technology
https://campustechnology.com/articles/2015/12/01/rethinking-the-makerspace.aspx

34 **Seven Principles for Classroom Design: The Learning Space Rating System**
EDUCAUSE Review
http://er.educause.edu/articles/2015/2/seven-principles-for-classroom-design-the-learning-space-rating-system

35 **Poll: Millennials Are No More Convinced About Global Warming Than Their Parents**
Washington Post
www.washingtonpost.com/news/energy-environment/wp/2015/04/30/poll-millennials-are-no-more-convinced-about-global-warming-than-their-parents/

36 **Outlook on the Global Agenda 2015**
World Economic Forum
http://reports.weforum.org/outlook-global-agenda-2015/

37 **CEOs Are on Offensive against Slowing Growth**
The Conference Board, PR Newswire
http://www.prnewswire.com/news-releases/ceos-are-on-offensive-against-slowing-growth-300017114.html

38 **Sightlines/APLU Study Finds $8.4 Billion in Deferred Maintenance at Schools of Agriculture in U.S.**
Association of Public and Land-grant Universities
www.aplu.org/news-and-media/News/sightlinesaplu-study-finds-84-billion-in-deferred-maintenance-at-schools-of-agriculture-in-us

39 **Future Climate Change**
Environmental Protection Agency
www3.epa.gov/climatechange/science/future.html

A CLOSER LOOK

Workplace Design and Worker Well-being

Noting that the majority of Americans are unhappy and unhealthy in their workplace, workplace designer and manufacturer Teknion argues that design can have a significant impact on employee happiness. In the paper *Ethonomics: Designing for the Principles of the Modern Workplace*, the firm suggests that workforce well-being and productivity could best be supported through a holistic approach to office design that promotes worker physical activity, incorporates nature, reduces noise, and uses materials that help create a safe, comfortable, and inspiring environment.[g]

Citing research that employees should stand for a minimum of two hours in an eight-hour workday, for example, the firm says that building architecture should "promote movement across the office landscape." Tools for accomplishing that goal might include a variety of large and small, open and enclosed spaces that "encourage people to move around to collaborate, socialize or focus on a task" as well as adjustable furniture that enables workers to sit, stand, and change postures frequently.

g **The Rise of Ethonomics—Ethonomics: Designing for the Principles of the Modern Workplace**
Teknion
http://www.teknion.com/ca/inspiration/ethonomics/the-rise-of-ethonomics

Political Trends

As institutions and US policy makers wrestle with such issues as how best to keep college safe, affordable, and accessible to those with different abilities, decisions they make today may have direct and potentially significant effects on the students of tomorrow.

Guns on Campus

The recent spate of shootings at US universities has drawn attention to the question of whether students and staff should have the right to bear arms on campus. That question is being debated by legislators with increasing frequency. Eight states currently permit the carrying of concealed weapons on college campuses, while 19 states ban "concealed carry." Twenty-three states leave it to individual campuses to decide.[40]

For discussion

Proponents say allowing guns on campus can prevent violence, while opponents say concealed carry is more likely to have the opposite effect. If your institution is located in a state where this question is open for debate, how can it develop policies that address both sets of concerns—while ensuring student safety? Is campus discussion of this debate sufficiently open and balanced?

Addressing Sexual Assault

With recent surveys suggesting that as many as one in four women and one in 20 men are victims of sexual violence in college, this problem has attracted considerable attention on and off campus—including in US state legislatures. A recent report from the Education Commission of the States and NASPA—Student Affairs Administrators in Higher Education found that in 2015 at least 28 states introduced or enacted legislation on campus sexual violence.[41]

For discussion

Apart from the moral responsibility to ensure student safety, institutions must be cognizant of the related legal and political ramifications. It is likely that this topic will continue to receive more scrutiny from lawmakers. What steps does your institution take to curb sexual assault, and how well have those efforts been communicated to the public and to policy makers? What more could and should your institution do?

Accessibility 25 Years After the ADA

The landmark Americans with Disabilities Act (ADA) saw its 25th birthday in 2015. Using that milestone to assess the legislation's impact, the American Institutes for Research found that, while there has been great progress for the roughly 56.7 million Americans who live with disabilities, those individuals still have relatively low graduation rates and high unemployment.[42]

For discussion

Is it time for your institution to assess how well it serves the needs of students, staff, and visitors with different abilities—and fine-tune its strategies for serving such individuals in the future? How does emerging technology factor into your institution's plans for serving individuals with disabilities in the future?

Free or Debt-Free College?

In 2015, lawmakers in 10 states introduced legislation that would enable students to attend public colleges debt-free.[43] Tennessee, meanwhile, is pioneering free tuition for college students in their first two years—a program that some believe may be a model for future policy at both the state and federal level. And some advocates are pushing for free community college for adult students.[44]

For discussion

Amid considerable attention to higher education financing in recent years—and a general decline in state support—proposals for free or debt-free college have caught hold. How might such initiatives affect public funding for colleges and universities in your state? If legislation for either free or debt-free college were adopted in your state, how might that affect your institution?

Serving Undocumented Students

While national debate about future immigration policy persists, how to best serve undocumented students is a pressing concern for institutions today, and one that is likely to continue. Currently, 18 states permit in-state tuition for undocumented students, and six states allow undocumented students to receive state financial aid. Three states ban in-state tuition for undocumented students, while two states completely bar them from public colleges and universities.[45]

For discussion

How well do your institution's policies about undocumented students work? If there is room for improvement, how might new policies create better options for serving this student segment? If your state legislators are considering different policies for undocumented students, could your institution educate them about the nuances of this complicated issue?

Continued Push for Completion

While two-thirds of jobs require college-level training, only 40 percent of Americans have postsecondary degrees or credentials. Moreover, the United States lags 10 developed countries in postsecondary attainment rates.[46] Philanthropies such as the Lumina Foundation actively advocate for better college completion rates. As the Higher Education Act comes up for reauthorization, expect lawmakers to focus on tools that help more students complete college, including educational models that offer high quality at lower cost.

For discussion

What steps can your institution take to improve access to higher education, especially among nontraditional students, and to help enrolled students achieve academic success and complete their credentials? How can your institution better align academic programs with workforce needs? How can your institution expand experiential learning opportunities, such as apprenticeships, to help students develop skills they will need in the workplace?

New Directions in Federal Financial Aid?

Federal student financial aid, the core of federal higher education policy, will also be a focus of debate during the next reauthorization of the Higher Education Act. Look for lawmakers to seek ways to ameliorate public concern about the level of student debt; deliver more aid in more flexible ways, including to more nontraditional students; and provide aid for students in nontraditional institutions and nontraditional educational models such as competency-based education.[47]

For discussion

We can expect legislators to leverage the national conversation about federal financial aid to maintain pressure on institutions to keep education accessible, affordable, and efficient. Institutions have to be prepared to show how they are contributing to those goals. Could your institution be doing more to reduce the cost of education while increasing quality? Is it communicating its progress in ways that lawmakers and other stakeholders can appreciate?

Accreditation Under the Microscope

Scrutiny of the accreditation system for US higher education is heating up. As a coalition of business, policy, and education organizations recently framed the challenge, "our quality assurance system is fragmented, duplicative, secretive, and overly focused on institutional inputs and processes rather than program quality and student outcomes."[48] Expect accreditation to be a focus in the reauthorization of the Higher Education Act.

For discussion

The debate about accreditation links to broader concerns about the quality of higher education in terms of what students learn. In the days ahead, institutions can expect more interest from national and state legislators—as well as from business and other stakeholders—in how institutions measure the quality of learning and how well that learning prepares students for careers. (Interestingly, too, accreditation and quality assurance are increasingly a focus where higher education is emerging internationally—new medical schools abroad, for example, are keenly interested in tools that demonstrate that they are of high quality.) How might changes in accreditation affect the students of tomorrow?

POLITICAL TREND SOURCES

40 **Guns on Campus: Overview**
National Conference of State Legislatures
www.ncsl.org/research/education/guns-on-campus-overview.aspx

41 **State Legislative Developments on Campus—Sexual Violence: Issues in the Context of Safety**
NASPA–Student Affairs Administrators in Higher Education and Education Commission of the States
www.naspa.org/images/uploads/main/ECS_NASPA_BRIEF_DOWNLOAD3.pdf

42 **Moving Forward, Looking Back: Landmark Legislation for Americans with Disabilities**
American Institutes for Research
www.air.org/resource/moving-forward-looking-back-landmark-legislation-americans-disabilities

43 **2016 News: Lawmakers in 10 States Introduce Debt-Free College Legislation, As Presidential Candidates Lead on This Issue Nationally**
Progressive Change Campaign Committee
http://boldprogressives.org/2015/12/2016-news-lawmakers-in-10-states-introduce-debt-free-college-legislation-as-presidential-candidates-lead-on-this-issue-nationally/

44 **As Plans for Free Community College Spread, Educators Seek to Include Adult Learners**
Chronicle of Higher Education
http://chronicle.com/article/As-Plans-for-Free-Community/234669

45 **Undocumented Student Tuition: Overview**
National Conference of State Legislatures
www.ncsl.org/research/education/undocumented-student-tuition-overview.aspx

46 **Why Rebooting Higher Education Policy Could Strengthen Our Nation's Economic Future**
Huffington Post
www.huffingtonpost.com/jamie-merisotis/why-rebooting-higher-educ_b_7849690.html

47 **Higher Education Policy: What 2015 Means for 2016**
EDUCAUSE Review
http://er.educause.edu/blogs/2015/12/higher-education-policy-what-2015-means-for-2016

48 **Renewing the Promise of the Higher Education Act: Seven Principles for Reform**
New America
www.edcentral.org/renewing-the-promise/

FOOD FOR THOUGHT

How to Look Into the Future: Insights From a Master

In just 200 pages, *Zero to One: Notes on Startups, or How to Build the Future* by Peter Thiel (Crown Business, 2014) packs an abundance of insights about building start-up companies. Thiel, the founder of PayPal and an investor in many other start-ups, says there is no formula for success, but there are patterns.

Zero to One starts with a contrarian question that Thiel likes to ask in job interviews: What important truth do very few people agree with you on? In asking that, Thiel suggests an approach to planning. "Most answers to the contrarian question are different ways of seeing the present," he argues, "good answers are as close as we can come to looking into the future." Toward the end of the book, Thiel makes another observation that speaks to the imperative of planning: "We cannot take for granted that the future will be better, and that means we need to work to create it today." No one can predict the future exactly, he says, but we do know that it's going to be different and that it must be rooted in today's world.

Privatizing Public Higher Education

As vice president for university advancement at the College of William & Mary in Virginia, Matthew T. Lambert has a vested interest in the amount of state support legislators approve each year for his school. In the 1980s, state appropriations provided more than 42 percent of the college's operating budget, but today contribute just 12 percent. Exploring these questions on a broader scale, Lambert interviewed nearly 150 policy makers about public support for public higher education. Reporting his findings in *Privatization and the Public Good: Public Universities in the Balance* (Harvard Education Press, 2014), he finds that public universities generally want greater autonomy over enrollment and tuition and seek more freedom to compete in the marketplace. Legislators want universities to pursue alternative sources of revenue, to be more efficient, and to innovate. Observing that to some extent leaders from policy and higher education speak different languages, Lambert believes that the time is right for a new conversation to clarify public policy objectives and expectations about higher education as a public good.[h]

Given ongoing fiscal constraints in the states and increased competition for public expenditures, the debate about appropriate public support for higher education will likely continue in the years ahead. Apart from affecting the amount of tuition that institutions must charge, state appropriations with continue to affect student's educational experience. This discussion applies not just to public colleges but also to private institutions that rely on public funding for financial aid and research support. Institutions may want to do more to improve the conversation with lawmakers about education funding and balance state priorities with higher education's goals.

[h]   **What Makes a University Public? Lambert on Privatization**
College of William & Mary
www.wm.edu/news/stories/2015/what-makes-a-university-public-lambert-on-privatization123.php

Trends for Higher Education Spring 2016

About the Society for College and University Planning (SCUP)

The Society for College and University Planning is a community of higher education planning professionals that provides its members with the knowledge and resources to establish and achieve institutional planning goals within the context of best practices and emerging trends. For more information, visit **www.scup.org**.

What is Integrated Planning?

Integrated planning is the linking of vision, priorities, people, and the physical institution in a flexible system of evaluation, decision-making and action. It shapes and guides the entire organization as it evolves over time and within its community.