

THOUGHT LEADERS SERIES 2020

PREPARING FOR THE STUDENT OF 2024



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Preparing for the Student of 2024

- Section 1: Executive Summary** 1
 - Diverse, focused, and tech-savvy: The incoming class of 2024 1
 - Focus on the future 3
- Section 2: Traditional Students of 2024** 5
 - Understanding the incoming class of 2024 5
 - The K-12 educational experience today 7
 - Influences and characteristics of Generation Z 8
 - Technology and Generation Z 11
 - Expectations of the next generation of students 12
 - Preparing for Generation Z and beyond 15
- Section 3: Nontraditional Students of 2024** 19
 - Understanding the incoming class of nontraditional students in 2024 19
 - Characteristics of nontraditional students 20
 - Expectations of nontraditional students 22
 - Preparing for the nontraditional students of 2024 and beyond 27
- Section 4: Implications for Higher Education** 29
 - Increased collaboration 29
 - Expanded student life, mental health, and wellness services 30
 - Defined value proposition 31
 - Improved master planning 32
 - Strategic reinvestment in facilities 32
 - Integrated, continuously improving technology 33
- Section 5: Questions for Campus Discussion** 35
- Section 6: Conclusion** 41
- Appendix A: Bibliography/Resources** 42
- Appendix B: APPA 2020 Thought Leaders Future Student Survey** 47
- Appendix C: Participants at the 2020 Thought Leaders Symposium** 48

Section 1:

Executive Summary

If the spring of 2020 has taught us anything, it has taught us this: If you think you have a handle on the future, you're wrong.

In February, experts in both K-12 and higher education met to consider how colleges and universities need to prepare for the students of the future. It was a symposium about looking ahead, trying to glimpse the future. And yet participants never anticipated that within a few short weeks, campuses would be closed, students would be sent home, faculty would be struggling to teach remotely—and millions would be seriously ill with a terrifying virus.

By the time this report was in its first draft in summer 2020, deep concerns had begun to surface about the course of the coronavirus pandemic and the future of higher education. Now, as the fall semester comes ever closer, institutions are facing unprecedented decisions about how to respond and prepare for reopening. Students are wondering if they will be able to afford the college or university they agreed to attend before the economy collapsed. Institutions expect losses in tuition revenue of 20 to 60 percent and are implementing deep budget cuts.

When the coronavirus hit, it wasn't clear if the forecasts that Thought Leaders participants had made before the crisis would remain relevant. In fact, these forecasts now seem even more relevant than before. Higher education must make the same changes, but on a more rapid timeline and under more difficult economic circumstances.

Students entering higher education in the next decade will be the most diverse incoming class in higher education history—and the vanguard of an increasingly diverse generation. They will have been raised with technology from birth and will consider online interaction as natural as breathing. They

will be alert to the importance of mental health and wellness, both in themselves and in their peers. They will have low tolerance for slow administrative processes. They will expect their professors to teach in engaging, interactive ways and make smart use of technology. They will expect a lot of themselves. They will expect a lot of their institutions. They will know what they are paying for their education, and they will demand every penny's worth.

Is today's campus ready for these students? The answer: Yes—and no. Higher education is moving in the right direction, but it faces unprecedented demands and challenges. We are only now beginning to understand that the old normal is never coming back. We must find ways to adapt to a new normal and a new set of expectations from our future students.

Diverse, focused, and tech-savvy: The incoming class of 2024

Participants at the Thought Leaders symposium focused on two categories of students, traditional and nontraditional. The most important point about these two groups is that traditional students are no longer the majority on college and university campuses—73 percent of students are now classified as nontraditional.

These groups undoubtedly differ in important ways. Nontraditional students tend to be older, have children, and work full-time, for example. But they also share many characteristics with traditional students:

- **Diverse.** Incoming student cohorts will be the most racially and ethnically diverse in history. Nationwide, whites will no longer be the majority on campus, and the percentage of Hispanic students will rise dramatically.

- **Technical natives.** While the youngest members of future college and university classes will be the most sophisticated users of technology, older learners will also expect the institution to make smart use of IT to support learning.
 - **Impatient with administrative hurdles.** All incoming students will have low tolerance for routine tasks that are tedious and/or require face-to-face interaction and must be completed according to the institution's schedule. They will demand streamlined processes that can be handled on the student's time at the student's convenience.
 - **Focused on ROI.** Students will be sophisticated consumers of higher education, aware of costs down to the penny, and deeply conscious of what they are getting in return for the investment in a degree.
- Concerned about mental health.** Incoming students, especially traditional students aged 18 to 24, are more aware than previous generations of their own mental health issues and more willing to seek out professional help. Thought Leaders participants evaluated these and other expectations of future students, then considered how well higher education is prepared to meet them. Several issues emerged as priorities for colleges and universities going forward:
- **Increased collaboration** across the campus to streamline operations and remove barriers to student success.
 - **Expanded student life, mental health, and wellness services** to address an expected rise in demand and to promote the overall health of the campus community.
 - **A defined value proposition** that clearly explains the value of the institution to prospective students and their expected return on investment.
 - **Improved master planning** that incorporates flexibility in meeting the needs of future generations of students into the institution's long-term plans.

- **Strategic reinvestment in facilities** to prepare the campus-built environment for new demands, create learning spaces adapted for contemporary pedagogy, and optimize and modernize the institution's investment in its buildings and grounds and maximizing their flexibility to meet ever-changing needs.
- **Integrated, continuously improving technology** that both supports student success and improves efficiency within the entire campus.

Data Point:

Classrooms designed for learners

Learning space as creation space

"The next generation of learning spaces will take all the characteristics of an active learning environment—flexibility, collaboration, team-based, project-based—and add the capability of creating and making. Project teams will be both interdisciplinary and transdisciplinary and will likely need access to a broad array of technologies. High-speed networks, video-based collaboration, high-resolution visualization, and 3-D printing are but a few of the digital tools that will find their way into the learning space.

"The ability to rearrange furniture and technology quickly and easily will be highly desirable. Some project activities will need nothing more than comfortable furniture, food, and caffeine. Others will require sophisticated computational analysis and the ability to do rapid prototyping. . . .

"New pedagogical approaches are demanding new kinds of space. . . . Right now, that rethinking is manifesting itself as an active learning, collaboration kind of space. But as employers seek creative, collaborative, and productive employees, the student of the future is going to graduate with a different skill set. What might their learning space look like? It's going to be technology-rich, multimodal, and very flexible, enabling authentic learning experiences. The paradigm is shifting. Transformation of the learning space has begun."

— Mark Valenti, "Beyond Active Learning: Transformation of the Learning Space," *EDUCAUSE Review*, June 22, 2015.

Focus on the future

What key steps do institutions need to take to prepare for the students of 2024? In terms of teaching and learning, Thought Leaders participants urged institutions to prioritize the following:

- Creating spaces where learning is interactive and hands-on.
- Updating labs to support science, technology, engineering, and mathematics (STEM) programming.
- Supporting faculty as they adapt to new pedagogy and employ new technology.
- Increasing accessibility for a diverse student body.
- Improving safety in the classroom.
- Building for flexibility to allow the institution to adapt to a more rapid pace of change.

Regarding all other campus activities, Thought Leaders participants recommended the following:

- Creating an inclusive environment for all.
- Prioritizing services that help students achieve their long-term needs and goals.
- Increasing the availability of mental health services while expanding opportunities for intervention and support.
- Taking sustainability to the next level.
- Providing housing that meets both students' wants and needs.
- Improving the use of institutional data and analytics systems.
- Prioritizing services that help students address their long-term needs and achieve their goals.

Data Point:

APPA Thought Leaders Future Student Survey

The changing higher education learning environment

Before the 2020 Thought Leaders symposium, APPA surveyed its members about students of the future and facilities designs that will support their learning. (More information about survey respondents is available in Appendix B.) Following is a representative selection of their answers to the following question:

What is the biggest change you've seen in the learning environment/classroom over the last five years?

- Conflict between current student methodology expectations and needs and traditional classroom settings.
- The move by faculty from lecture-style instruction to a collaborative, problem-solving style of instruction.

- Students seem to have strong expectations from their higher education institution and have little hesitation in going elsewhere if those expectations are not met.
- Group workspaces and a higher level of distance-learning capabilities.
- The need for flexibility.
- Use of smartphones.
- Less structured seating.
- Movement away from large lecture halls to smaller, seminar-style classrooms. Movement away from lectures to discussions/group work.
- Higher expectations with regards to sustainability.

(Answers have been lightly edited for clarity.)

Specific implications for facilities and campus operations include addressing new expectations and meeting new needs. Thought Leaders participants recommended a focus on the following:

- Improved master planning.
- Increased collaboration between the facilities organization and other units and departments including enrollment management, student services, and IT. A more complete discussion of collaboration can be found in APPA's 2017 Thought Leaders report, *Transforming Facilities to Achieve Student Success*.
- Expanded student life, mental health, and wellness services.

- A clearly defined value proposition.
- Strategic reinvestment in facilities.
- Integrated, continuously improving technology.

It is a truism that higher education is resistant to change. And yet colleges and universities have adapted to the needs of every other generation. Right now, higher education is coping with a situation that most people never imagined. And colleges and universities are acting fast, making monumental decisions in the heat of the moment and with far less information than is ideal. Higher ed is responding with courage, creativity, and a commitment to its most dearly held values. APPA has faith that colleges and universities will continue to rise to the challenge.

Section 2:

Traditional Students of 2024

Understanding the incoming class of 2024

Consider the following about the next generation of students, those who will enter higher education in 2024:

- They've never known life without the Internet, and most have always had an Internet connection at home. Most cannot remember life before smartphones. (The first iPhone was introduced in 2007.)
- Social media became popular in their early childhood or before they were born. Some have documented their entire lives on Facebook, Twitter, Instagram, and Snapchat.
- They are the most diverse generation in modern history. They are predisposed with a heightened sensitivity to social issues surrounding race and ethnicity and are not afraid to speak out when they perceive injustice. They are also more likely than older generations to know and accept members of the LGBTQ community—as well as to identify as LGBTQ themselves.
- Discussions of income inequality, the high cost of healthcare, and the rising cost of college and university tuition are commonplace.
- Climate change and the importance of sustainability have always been a priority in their lives.
- The events of the September 11, 2001 attacks are either a dim childhood memory or something they've been taught at school.
- School shootings are a very real fear. This generation started practicing active shooter drills in kindergarten.

- A worldwide pandemic, catastrophic loss of life, complete disruption of normal life, and loss of stability will be fresh in their minds.

How have these events shaped rising generations, and how will they approach higher education as a result?

Generations and their demographic profiles.

First, let's clarify which generations we're discussing. The generations alive today are generally broken into the following cohorts:

- Greatest Generation – Born between 1901 and 1927
- Silent Generation – Born between 1928 and 1945
- Baby boomers – Born between 1946 and 1964
- Generation X – Born between 1965 and 1980
- Millennials – Born between 1981 and 1995
- **Generation Z – Born between 1996 and 2010**
- **Generation Alpha – Born after 2011**

Members of Generation Z will enter colleges and universities in fall 2024 and will be followed by the oldest members of Generation Alpha. (It is entirely possible that the term “Generation Alpha” will change in coming years as the characteristics of this generation become clearer.)

One of the most important facts about Generation Z and Generation Alpha is that when combined, they make up the largest percentage of the U.S. population. A June 2019 report by Statista based on U.S. Census data found that the number of Americans born after 1997 reached 90.55 million

people in 2017. Compare that to 72.56 million baby boomers, 65.45 million Generation Xers, and 72.06 million millennials.

Birth rates slowed dramatically after 2008, prompted by the Great Recession, and have not rebounded to previous levels. Several sources, among them the Western Interstate Commission for Higher Education, have predicted high school graduating classes will decline significantly after about 2025, resulting in a decrease of 15 percent in the typical higher education population by 2032. Colleges and universities should expect a corresponding drop in enrollment of 11 to 15 percent.

However, declines will vary by region, according to researcher Nathan D. Grawe, who wrote about the expected demographic shifts in his 2018 book *Demographics and the Demand for Higher Education*. The greatest decreases will be seen in the Middle Atlantic (18 percent), East South Central (20 percent) and New England (24 percent) regions. Mountain and West South Central regions are predicted to have slight increases of about 2 percent.

Data Point:
Demographic trends and higher education
Predicted areas of largest increase and decrease of college enrollments

Areas of Largest Decrease	Areas of Largest Increase
New York City: -16 percent	Atlanta – 12 percent
Chicago: -18 percent	Utah – 13 percent
Boston: -23 percent	Colorado/Wyoming – 18 percent

— Nathan Grawe, Supplemental Materials for *Demographics and the Demand for Higher Education*, 2018.

The greatest demographic difference between previous generations and the generations that enter higher education in 2024 and beyond will be their diversity, according to census data and analysis by

the Western Interstate Commission for Higher Education. Nationwide, whites will no longer be the majority of this population. (The exact racial and ethnic makeup of the population will naturally

Data Point:
Demographic trends and higher education
Some winners—and some losers—expected with a declining population

“Nathan Grawe, an economist at Carleton College in Minnesota, predicts that the college-going population will drop by 15 percent between 2025 and 2029 and continue to decline by another percentage point or two thereafter. . . .

“But not all colleges will feel the pain equally. Demand for elite institutions—the top 50 colleges and 50 universities, as ranked by *U.S. News & World Report*—is projected to drop by much less during the 2025 to 2029 period (18 years following the birth dearth). And student demand for elite institutions may be 14 percent higher in 2029 than it was in 2012. Meanwhile, regional four-year institutions which serve local students are expected to lose more than 11 percent of their students, from 1.43 million in 2012 to 1.27 million in 2029. . . .

“Why do the forecasts sometimes move in opposite directions? Grawe explains that elite colleges are less affected by the birth dearth because they’re a small niche market of fewer than 200,000 students that has benefited from the explosion in college education since the 1980s.

“‘The people who went to college 20-30 years ago and got a degree, they’re now the parents of kids who are looking at going to college in the next 10 years or so,’ said Grawe. ‘If your parents went to college, your probability of going to college is much higher and your probability of going to a highly selective four-year college is a lot higher.’”

— Jill Barshay, “College Students Predicted to Fall by More than 15 Percent after the Year 2025,” *The Hechinger Report*, September 10, 2018.

vary by region; Hispanics already outnumber whites in some parts of the country. In California, for example, according to the California School Boards Association, 54 percent of students in the K-12 education system in 2017-18 were Hispanic and 23 percent white, with the remaining enrollment divided among other races.)

The number of white public school graduates is expected to fall by 14 percent between 2013 and 2030. At the same time, the number of Hispanic graduates is expected to grow by up to 50 percent, while the number of Asian and Pacific Islander graduates will increase by 30 percent. To complete the picture, the number of African American high school graduates is expected to decline, although not as dramatically as the white population; by the early 2030s, it will likely be about 6 percent fewer than in 2013.

For a short time, the increase in nonwhite students will essentially balance out the decline in white students, keeping higher education enrollment steady. But after about 2025, the decrease in the number of white students will start to take effect on the total, and the size of the cohort as a whole will decrease.

The K-12 educational experience today

Another major influence on the entering class of 2024 is their K-12 experience. Two main factors differentiate the elementary, middle, and high school experience of the past with the experience of current and rising students:

High-stakes testing. The average student in the United States spends 20-25 hours a year taking high-stakes tests, and many more hours preparing for such tests. One of the greatest challenges associated with these tests is that many students experience their K-12 education as a matter of test preparation—covering test material, memorizing key facts, and practicing the test-taking experience. Many teachers, administrators, and parents deplore lost opportunities for broader understanding and the cultivation of critical thinking skills, according to research reported by the Harvard Graduate School of Education. They worry about test anxiety and burnout. They also fear that tests are a better

measure of economic inequality and racial disparities than actual educational attainment, as has been claimed by researchers with the Civil Rights Project at Harvard. But when school funding and even teacher jobs are based on test scores, it's understandable that educators focus on tests.

Students raised on a steady progression of high-stakes testing must learn to adapt to a different model of teaching and learning within colleges and universities. Conversely, colleges and universities must expect that at least some of their entering students will be very good at taking tests and have little experience with much else.

Data Point:

COVID-19 and the K-12 school system

School closures reveal the depth of the digital divide

As school districts around North America closed in the spring of 2020, the only hope for teachers and parents was that students could continue learning at home.

Unfortunately, the pandemic revealed that for many students, online learning was completely out of reach. A recent study by Common Sense and the Boston Consulting Group found that 15 to 16 million students, about 30 percent of all U.S. K-12 public school students lack adequate Internet access or devices to sustain effective distance learning at home.

The problem exists in all states but is most severe in rural communities and households with African American, Latinx, and Native American students.

Teachers are currently trying to develop safe ways to bring students back to campus in the fall while supporting those who have fallen behind. The situation is unprecedented and deeply revealing about how economic disparities can impact learning.

High workload, high pressure. For many students seeking enrollment in highly competitive institutions, college might turn out to be *less* work and stress than high school. High school puts higher

demands on its students than ever before, and students who want to look the best for admissions counselors load down their schedules with advanced placement courses, SAT and ACT tutoring sessions, and extracurricular activities. The result is nonstop stress and anxiety, according to a survey published in *Frontiers in Psychology* and reported on in *The Atlantic*. Almost half of students surveyed reported feeling “a great deal of stress” on a daily basis. Half reported doing three or more hours of homework a night, and more than a quarter reported being diagnosed with depression. Parents are often blamed for this stress, according to one of the study’s authors; no doubt helicopter parents push their high expectations on their children, but schools also pressure students, and students pressure themselves.

One risk is that by the time they get to college, these students will be burned out and unmotivated. Colleges and universities need to anticipate that some of their students may need to learn new, healthier, more balanced ways of working toward their goals.

Flexible, technology-rich learning environments.

Today’s K-12 schools little resemble the regimented environments of 50 years ago. Students no longer sit in straight rows facing a teacher. Instead, the classroom encourages interaction and project-based learning; classrooms are divided into different zones to accommodate different types of work. In an elementary school, one corner of the room might be a quiet space for individual reading and another might be set up for team science experiments. In higher grades, schools designate areas for team projects, individual study, or group presentations. Newly constructed schools lean into this trend and feature large spaces that can be screened off with movable dividers. However, even older schools are striving to adapt to 21st-century learning practices with more flexible furnishings.

The K-12 built environment can vary widely, depending on the age of buildings and the financial resources of the district and/or school. Nevertheless, the trend across the country is toward schools that are more flexible, interactive, and secure. Top trends for new construction or renovation, according to a report by *Building Design & Construction* magazine, include the following:

- Buildings that expose as many classrooms as possible to natural light.
- A variety of spaces to support different learning styles and groups.
- Movable and portable furniture.
- Social interaction spaces.
- Integrated technology that promotes collaboration.

Another driving factor in the design and renovation of K-12 schools is security. Designers seek to create safe spaces that limit access to the campus, provide escape routes, and allow students to shelter in place in case of an active shooter situation, according to the American Institute of Architects. At the same time, designers don’t want students to feel like they are entering a bunker every morning—schools should feel welcoming and open. Design should also address security issues such as bullying and sexual harassment. Teachers and administrators report that most bullying happens in corridors or other places where teacher supervision is a challenge. New schools have wide open corridors with clear sightlines so that school staff can easily monitor student interactions.

Finally, K-12 schools are increasingly serving as hubs for social services for both students and their families. *Building Design & Construction* notes that many schools, especially those serving low-income communities, now incorporate health clinics, mental health services, food pantries, and shower and laundry facilities. New or renovated schools can be designed so that these services are provided in purpose-built spaces.

This is the environment that students arriving at a college or university for the first time have experienced: optimized for student-driven learning, designed for safety, and focused on all-around student needs.

Influences and characteristics of Generation Z

More likely to identify as LGBTQ and accept gender nonconformity. Generation Z is diverse in other ways, especially in their views of gender and

Data Point:**Adaptive learning environments**

Creative changes to K-12 classrooms increasingly linked to academic success

According to Google for Education, “With classrooms being seen as the ‘third teacher’ (following parents and educators), schools are looking to embrace classroom layouts that encourage creativity, collaboration and flexibility.” Google notes that even minor changes can result in positive outcomes, while research reported in *Edutopia* found that classroom design alters student academic progress over a school year by up to 25 percent.

— Google for Education, “Future of the Classroom,” Google, 2019.

sexual orientation. In their lifetimes, gay marriage was legalized and acceptance of LGBTQ rights expanded dramatically. According to Statista, members of the generation preceding them, millennials, are far more likely to identify as LGBTQ than members of previous generations; 8.2 percent of millennials identified as LGBTQ, compared to 3.5 percent of Gen Xers and 2.4 percent of baby boomers. The data on Generation Z is unclear, although one report by J. Walter Thompson’s Innovation Group, a trend-forecasting agency found that only 48 percent of Gen Zers identified as exclusively heterosexual. A survey by the Pew Research Center found that 35 percent of Gen Zers personally know someone who uses gender-neutral pronouns, compared to 25 percent of millennials and 16 percent of Gen Xers. There is a level of matter-of-fact acceptance surrounding LGBTQ issues among Generation Z that no previous generation has expressed.

Concerned about personal finance. Another critical influence on Generation Z is the general economic uncertainty of their parents and the country as a whole in their lifetimes. Many Gen Zers are the children of Gen X parents, and Gen X as a cohort was hit hard by the Great Recession. Many lost jobs and had to take lower-paying work; the legacy of the recession is lingering economic

anxiety and soaring income inequality. Gen Zers are coming of age in the era of the gig economy, having to take multiple jobs to make ends meet, and having no health insurance or bad health insurance. This generation has never known a time when healthcare costs weren’t a serious problem. They have never lived in a world where college costs weren’t constantly rising and student debt was not a major concern. According to research by the University Professional and Continuing Education Association (UPCEA), 56 percent of Gen Zers surveyed stated that college costs were a major factor in their decision on where and when to enroll in higher education. (The economic effects of the COVID-19 pandemic remain uncertain; another serious recession would dramatically impact Generation Z and likely reinforce their economic anxiety.)

UPCEA concludes that Gen Zers seek economic stability and want to avoid debt. This generation owns fewer credit cards than millennials and expresses more anxiety about their short-term financial futures, according to research by polling company Morning Consult. They are savvy about their purchases and rarely buy anything without researching it online first and carefully considering user reviews. However, another consequence of these economic times is that fewer Gen Zers have work experience going into their twenties compared with previous generations. Today’s teens are far less likely to be employed than previous cohorts; only 34 percent of teens were employed in 2015, compared to 60 percent in 1979, according to data from the Bureau of Labor Statistics. Fewer jobs are available to teenagers; the sort of fast-food and retail jobs that were once the foundation of teen employment are now taken by adults. Furthermore, many teenagers, especially those taking advanced courses, report being too busy with schoolwork to have a job.

Raised by involved—sometimes hyperinvolved—parents. Another critical influence on Gen Zers is the way they have been parented. The media is full of stories about helicopter and even “bulldozer” parents, but it can be hard to tell from anecdotes and editorials exactly how much parenting has changed. One group of economists studied data from the Bureau of Labor Statistics’ American Time Use Survey, a long-term study in which

Americans are asked to complete detailed diaries of how they spend their time. They found that in the United States, the amount of time mothers spent every week engaged with their children increased on average from about 11 hours in the mid-1970s to 16 hours in 2012. Fathers, on average, nearly doubled time with their children, from under 4 hours to nearly 8 hours. The effect is even greater than it might initially appear when the decline in the number of children per household is taken into account. Average birth rates in the United States have fallen from 3.7 children per family in 1960 to 1.7 in 2014, which means that a greater amount of time is devoted to a smaller number of children.

The reduced number of children per family has another side effect: Fewer children share rooms with their siblings. It's difficult to find reliable data on room sharing, and it seems that families who live in the suburbs, rural areas, or lower-density cities, as well as higher-income families with bigger homes, are more likely to give teens their own rooms than are families in crowded cities or with lower incomes. Nevertheless, anecdotal reports support the conclusion that far more freshmen arrive in college having never shared a room than in previous generations.

Parents have good reasons for investing more time in their children, according to economists Matthias Doepke and Fabrizio Zilibotti, authors of the 2019 book *Love, Money & Parents: How Economics Explains the Way We Raise Our Kids*. In fact, their logic is rooted in the same economic uncertainty that has driven Gen Zers to avoid credit cards. Rising economic inequality in the United States has made the issue even more fraught; parents want their children to be successful, and the key to success seems to be a good education. A good education is most likely for children who thrive at school, participate in numerous extracurricular activities, and constantly improve themselves.

One way to understand helicopter parenting is to remember that this is the generation of parents who were pushed to play Mozart to their children while still in their mothers' wombs in order to increase their babies' intelligence. The effects of helicopter parenting seem to be mixed. The children of highly involved parents generally do well in school, receive higher degrees, and are less likely to engage

in risky behaviors than their peers, note Doepke and Zilibotti. However, too much involvement can lead to burnout, according to a study by researchers at Florida State University, as well as higher levels of depression and less overall satisfaction with life, according to researchers at the University of Mary Washington. Generalizations at this point may be risky, but it seems fair to say that Gen Zers have received far more intense parental involvement than previous generations and as a result enter college less self-reliant.

Data Point:

Parenting and Generation Z

New styles of parenting have shaped an entire generation

"Most of today's students' parents—regardless of social class and ethnicity—have embraced a set of values that the sociologist Annette Lareau terms 'concerted cultivation': an achievement-oriented form of childrearing that involves more hands-on involvement, increased spending on enrichment and other supervised activities, heightened sensitivity to children's safety and their interior, emotional, and psychological state, and a greater willingness to intervene with institutions and authorities on their offspring's behalf.

"To be sure, tiger, snowplow, and lawnmower parenting behavior is more prevalent among the more affluent. But the underlying values are widely shared."

— Steven Mintz, "Are Colleges Ready for Generation Z?" *Inside Higher Ed*, March 18, 2019.

Alert to their mental health. Generation Z is more aware of mental health concerns than previous generations. A full 70 percent of Gen Zers surveyed by the Pew Research Center thought anxiety and depression were a major issue among their peers. Perhaps not surprisingly, teens were far more concerned by mental health than pregnancy or drug and alcohol abuse, since 15-year-olds surveyed by the World Health Organization reported that fewer of them were drinking, using illegal drugs, and having sex. In any case, Gen Zers are more likely (at 27 percent) to report their mental health as fair or poor compared to millennials (15 percent)

and Gen Xers (13 percent), according to research by The Harris Poll on behalf of the American Psychological Association. More than 35 percent of Gen Zers have received treatment or therapy from a mental health professional, and 91 percent report experiencing at least one physical or emotional symptom of stress. It's not clear if Generation Z is actually experiencing more mental health issues or if they are simply more aware and more open about these issues. Undoubtedly, this generation is far more sophisticated about mental health and far more willing to seek out professional help than previous generations.

Technology and Generation Z

It is difficult to overstate the importance of technology in the lives of Gen Zers. A viral video circulated a few years ago of a toddler holding a picture book and trying to pinch it out to enlarge the image as one would on an iPad—that's Generation Z. The youngest members of the cohort grew up tapping on smartphones and cut their teeth on the rubberized cases of tablets.

The experience of consuming media is completely different in this generation. Gen Zers spend far less time watching traditional TV than previous generations, and the TV they do watch is usually streamed via Netflix or other similar services, according to a survey by the Trifacta Research Group. The TV ratings company Nielsen announced in 2018 that teenagers were watching 49 percent less traditional television than five years previously. At the same time, time spent watching videos, primarily on YouTube, has soared. YouTube is the most popular platform among teens today, with 85 percent of those surveyed claiming they use the service and 32 percent naming it their favorite, according to a survey by the Pew Research Center.

Close behind in the Pew survey was Snapchat, used by 69 percent of teens and which 35 percent named as their favorite. Another survey conducted by SCG Advertising & Public Relations reported even higher numbers, claiming that 78 percent of high school students surveyed reported using Snapchat daily, and 51 percent reported using it more than 11 times per day. Facebook and Twitter are still used by Generation Z, but they are less

popular. Facebook in particular has a reputation as being clogged with political posts and content from older family members, say respondents to a survey by *Business Insider*. Generation Z users also prefer the way Snapchat allows them to communicate privately with friends and doesn't retain a lasting record of posts.

Generation Z is far more likely to communicate via social media and texts than email or phone calls, according to research by polling company CivicScience. Email is used for communicating with teachers and other authority figures; texts and Snapchat are where conversations with friends take place. In addition, many Gen Zers communicate via video games and game discussion servers such as Discord. Video games remain slightly less popular with girls than boys, but only slightly; surveys by the Pew Research Center found that 83 percent of young women and 97 percent of young men report playing video games. Note that for young men, gaming is close to universal.

Values of the next generation. What does Generation Z value?

- **Individuality.** Generation Z lives in a diverse society, and members value that diversity. They embrace personal expression and explorations of identity.
- **Economic security.** This generation has grown up with uncertainty, and they want a more secure future. On the whole, this is a realistic, pragmatic generation that had to learn about debt and high costs for the basics while young.
- **Meaning and balance.** This craving for security doesn't mean that Gen Zers will do anything for a buck. They value work/life balance and want workplace flexibility, according to a study by The Workforce Institute.
- **Physical safety and mental wellness.** Gen Zers have a nagging sense of anxiety about the future, worry about their own mental health and that of their friends, and carry a heightened sense of the threats that surround them. Remember, this generation has been preparing for school shootings

since early childhood. Gen Zers value their own psychological well-being and have no problem seeking help from mental health professionals.

- **Environmental responsibility.** A 2019 survey by Amnesty International of 18- to 25-year-olds found that climate change topped the list of vital challenges for our time. Gen Zers feel as though the dire future that experts have warned about for decades will happen in their lifetimes, and they feel an urgency toward environmental issues not seen in most other cohorts. Concern for the environment shapes daily decisions by Gen Zers; a survey by retail consultant First Insight found that 62 percent of this generation prefer to buy from sustainable brands and 54 percent are willing to pay 10 percent more than the usual price for a similar unsustainable product.

- **Connection.** For all their constant interaction online, life for Generation Z can sometimes be lonely. Most live in relatively small families, and their free time has been strictly curtailed. While they value technology and social interaction, there's nothing quite like human connection—especially since so many interactions online are mediated, artificially generated, rote, or fake. Real person-to-person connection remains essential to Gen Zers, in part because it seems in short supply.

Expectations of the next generation of students

A job. Gen Zers and their parents often have a clear and overriding expectation of what they will get as a result of their college or university education: a good job. The focus is not on self-discovery, or better critical thinking skills, or a deeper appreciation of the breadth of human knowledge. Gen Z is far too pragmatic for that. They want a diploma that will qualify them for a good entry-level position. A Harris Poll found that the top priority of two-thirds of 14- to 23-year-olds was a degree that would provide financial security. One result of this laser focus on job security is the long-term decline in humanities majors and the rise in technical and scientific degrees, as reported by several sources including the American Academy of Arts and Sciences. Between 1987 and 2015, the natural sci-

Data Point:

Values of Generation Z

The significance of sustainability

"Climate change tops the list of vital challenges of our time, say young people interviewed by Amnesty International. The new Future of Humanity survey of over 10,000 18- to 25-year-olds across 22 countries reveals that 41% of respondents cited global warming as the most important issue facing the world.

"Amnesty International published the findings today at the UN Climate Change Conference to mark Human Rights Day.

"Considering that 2019 saw the youth mobilized to take climate action, the results weren't surprising. 'This is a wake-up call to world leaders that they must take far more decisive action to tackle the climate emergency or risk betraying younger generations further,' said Kumi Naidoo, secretary general of Amnesty International."

— Emanuela Barbiroglio, "Generation Z Fears Climate Change More than Anything Else," *Forbes*, December 9, 2019.

ences, health and medical sciences, and engineering have seen steady gains.

College and university students also have increased expectations surrounding career services. Thirty years ago, most career services organizations on campus consisted of little more than a small, sleepy office that saw few visitors. Now they have a high profile on most campuses and their direct link to recruitment and retention is widely recognized. The services they offer have become increasingly customized and based on strong connections between the institution and employers, according to a study cited in the journal *New Directions for Student Services*. At the same time, career services staff are facing increasing pressure to demonstrate outcomes and provide accountability.

Integrated technology. Technology plays an integral role in higher education, although not as great a role as incoming students expect, according to research by EDUCAUSE. In a survey of 40,000 students, the majority agreed that their instructors use technology to engage them in the learning

process (66 percent), use technology to provide additional materials (67 percent), and encourage the use of online systems to communicate and collaborate with faculty and staff (62 percent). However, only 40 percent of students reported that their instructors encouraged students to use their own devices during class to deepen learning. Only a quarter reported instructors had students use their smartphones. This is understandable—faculty fear that students browsing on their phones are not looking up material to deepen in-class learning but communicating with friends on Snapchat. But ignoring smartphones does not meet students where they are. Students want their instructors and their institution to better integrate the technology they use day in and day out.

The EDUCAUSE report also found that student success tools seeing widespread implementation do provide value. Particularly useful were degree audit tools that help students track degree requirements (80 percent rated them very or extremely useful), followed by degree planning and mapping tools (77 percent), and self-service tools for conducting student-related business (74 percent.) This makes sense—Gen Zers are accustomed to using technology to solve problems and meet needs; they are more likely to turn to an online tool than call a number or go to an office. They will expect more and more services to be available online 24/7.

Data Point:

Student services of the future

What Generation Z really values

“They [Generation Z students] don’t care about the rock-climbing walls built for millennials and boomer parents. Services are the new amenities.”

— *The New Generation of Students: How Colleges Can Recruit, Teach, and Serve Gen Z*; *The Chronicle of Higher Education*, February 2019.

Support for diversity. Generation Z is not only the most diverse generation in American history, it is also the generation most committed to diversity. Incoming students expect their colleges

and universities to commit to supportive diversity practices. An analysis of demands from student organizations, student groups, and demonstrators by researchers at the American Council on Education found that the number one demand was for review and revision of institutional policies affecting campus diversity practices. These demands might take the form of new protocols for hate speech, increased transparency in university processes, and calls for the institution to take steps beyond the campus. Student groups also sought increased resources and/or support services for diverse and marginalized students, increased diversity on campus, new or revised diversity training, and new or revised curricula.

Sustainability. Generation Z also looks for colleges and universities to increase steps to protect the environment and do their part to limit climate change. In a survey of 3,700 prospective students, the higher education consulting firm QS (Quacquarelli Symonds) found that 82 percent considered colleges and universities either very or somewhat environmentally friendly. However, 94 percent believed universities could do more, and 88 percent considered it either essential or very important that they take greater action to reduce their environmental impact. Students named several actions they considered important, including reducing waste and single-use plastic, increasing the use of renewable energy, and installing energy-efficient lighting. Finally, students indicated that they were either much more likely (43 percent) or somewhat more likely (36 percent) to choose a degree program that had integrated sustainability into its curriculum. Other surveys have found students consider sustainability when selecting an institution; a Princeton Review survey of 10,000 college applicants found that 54 percent of those surveyed said that having “a way to compare colleges based on their commitment to environmental issues” would either very much or somewhat contribute to their decision to apply or attend. Seven percent reported it would be one of the most important factors in making their choice.

Data Point:**Career goals of a value-driven generation***Salary is only one factor when choosing a job*

“Yes, money and salary matters the most to Gen Z. But because of the environment in which this generation came of age, other things matter too, such as work-life balance, flexible hours, perks and benefits. More importantly, Gen Z feels itself in a position to get those perks from employers, in addition to salary. And while salary is the most important factor in deciding on a job, Gen Z values salary less than every other generation: if given the choice of accepting a better-paying but boring job versus work that was more interesting but didn’t pay as well, Gen Z was fairly evenly split over the choice.

“The core values of the generation are reflected in their prioritizing social activism more than previous generations and in the importance they place on working at organizations whose values align with their own, with 77% of respondents saying that it’s important. Gen Z no longer forms opinions of a company solely based on the quality of their products/services but also now on their ethics, practices and social impact.”

— Karianne Gomez, Tiffany Mawhinney, and Kimberly Betts. *Welcome to Generation Z*, Network of Executive Women and Deloitte, 2019.

Options for living space. Students who have never had to share a bedroom, or even a bathroom, are reluctant to move into traditional residence halls with two or three students per room and shared bathrooms down the hall. Institutions have responded by creating a growing variety of residence halls, many with private bedrooms, baths, and even laundry facilities. Colleges and universities will likely continue to face demand for increased options and greater privacy in living spaces, but institutions must balance these expectations with growing research that shows many students do better in shared spaces.

For example, a study published in the *Journal of Student Affairs Research and Practice* tracked the impact of residence hall design on academic achievement. It found that what was described as “socializing architecture”—which in this study mostly referred to traditional residence halls with shared rooms—was linked to higher grade point averages (GPAs) in the first semester of college or university. Students in apartment-style residence halls with private bedrooms and living rooms had lower first-semester GPAs on average. The difference was especially marked among African American students but applied to white students as well. Colleges and universities will need to make smart choices about how to design their residence halls so that students can socialize, engage, and form bonds on campus yet still have quiet time and privacy.

Mental health services. With Generation Z more aware of their mental health needs than previous generations and more willing to seek out professional help, colleges and universities face demands to expand existing mental health services. In an interview with Harvard’s EdCast podcast, Stephanie Pinder-Amaker, founding director of McLean Hospital’s College Mental Health Program and an expert on higher education mental health services, noted that many schools are already struggling to keep up with the demand for services.

Pinder-Amaker said research has found that mental health problems are most effectively treated as soon as possible after they are recognized, yet at many institutions, students have a long wait to see a counselor. “We want to think about how do we connect with students early, get students more aware at the earlier stages of what some warning signs may be to look for, and then how do we direct resources that maybe aren’t as expensive or as intensive as direct-services psychotherapy,” said Pinder-Amaker. “How do we get resources and skills to those students earlier in the process so that maybe they won’t need to come in and seek mental health treatment a year from now?”

A safe campus. Incoming students have been raised with the threat of school shootings; they have watched the #MeToo movement unfold and

are well aware of threats of sexual harassment and assault. Students expect colleges and universities to take meaningful steps to ensure their safety. Their parents also demand safety; in a survey by the College Board and Art & Science Group, 86 percent of students reported that safety was very important to their parents, while 72 percent said it was very important to them. Institutions should expect increased scrutiny of their response to sexual assaults and the actions of their Title IX offices. Colleges and universities must remain alert to new threats and constantly seek new ways to improve campus safety.

A strong return on investment. Students and their families expect higher education to be expensive; many expect to incur debt to receive a degree. Most perceive a degree as an investment that will pay off in the long run, and they are generally right—on average, workers with a bachelor's degree make 80 percent more than workers with no more than a high school diploma, according to the Georgetown University Center on Education and the Workforce. However, as with most investments, there is risk involved. It might take students decades to pay off their debt. What students want from higher education institutions is a good return on investment (ROI). They want to enroll with a sense of confidence that the hard work and current and/or future earnings they are dedicating to their degree will be worthwhile. They expect institutions to constantly seek new ways to improve their ROI. That might mean better aligning degree programs with the expectations of employers; it might mean limiting tuition increases, increasing operating efficiency, and making the best use of campus resources; or it might mean helping students better understand the long-term risks and rewards of their choices. In general, economists at Georgetown found that a college or university degree is a worthwhile investment, but the decision on where to pursue it must be made after considering as much information as possible.

Data Point:

Changing attitudes toward college costs

Careful questions from a prudent generation

"I routinely get detailed questions that I never heard five years ago," said [Dayna] Bradstreet [assistant director of admission at Simmons College in Boston]. "(Students) want to know facts like a school's average starting salary, average indebtedness at graduation, and student loan default rates."

"College graduates of the class of 2015 had the largest student loan debt in history. These borrowers owed an average of \$30,100, up 4 percent from the 2014 average of \$28,950. Average debt at graduation ranged from \$3,000 to \$53,000.

"Bob Bardwell, a school counselor in Monson, Massachusetts, and NACAC board director, said parents are being more 'cautious' when it comes to considering the costs of college. 'More students, at least in my area, are going to community colleges because there is a conscious decision to look at costs as a factor,' he said."

— Elaina Loveland, "Instant Generation," *Journal of College Admission*, Winter 2017.

Preparing for Generation Z and beyond

Participants at the 2020 Thought Leaders symposium considered how well institutions are and are not prepared for the students of 2024. In some areas, they felt colleges and universities had a good sense of what was expected and were doing a good job meeting those needs. Among the areas in which they felt well prepared were the following:

- Recognition of the importance of mental health issues and services to support students.
- Continuously updated safety and security measures.

- Continuous advancements in technology available to students, including new and improved online student services, degree planning and tracking software, and online instruction.
- The introduction of new types of technology and spaces to use them, including maker spaces, 3D printing facilities, and robotics labs.
- Greater variety of residence halls and living options.
- Support for social justice and diversity.
- Focus on environmental awareness and effective sustainability policies and processes.
- Intense focus on cost-cutting, efficiency, and effectiveness.

In addition, campus leaders who participated in the symposium emphasized aspects of the campus and instruction that students might not be demanding but that nevertheless are improving their learning experience. In other words, students may not be asking for these improvements, but they are essential for educating Generation Z. These include:

- Classrooms and other spaces that reflect current pedagogy.
- The availability of recreation and wellness spaces that encourage students to get out of their rooms, become active, and engage with nature.
- Small group environments that promote student interaction and facilitate team projects.
- Increased use of predictive analytics to make better use of resources, plan and execute administrative actions, and support student progress.

Nevertheless, Thought Leaders participants believed they needed to make progress in several areas to meet the demands of Generation Z. In particular, they felt their campuses were behind in the following areas:

- Providing career services that will connect students to employers.
- Moving faster and responding with more agility to changing technology.
- Making even better use of data and analytics in all aspects of the institution, including student learning and administration.
- Communicating with students in ways that make sense to them using the tools that they prefer.
- Expanding mental health services to meet increased demand.
- Adapting the campus to better serve those with disabilities.
- Creating spaces that are welcoming to a diverse student body.
- Continuing to adapt to changing pedagogy while coping with the existing campus environment of aging labs and auditorium-style lecture halls.
- Making clear the value of the institution and improving the ROI for students.

Critical actions going forward. What key steps do institutions need to take to prepare for the students of 2024?

In terms of teaching and learning, Thought Leaders participants urged institutions to prioritize the following:

- **Creating spaces where learning is interactive and hands-on, when possible.** The COVID-19 pandemic has already forced higher education to move away from large lecture halls, reduce class size, and create safer distances between faculty and student, and between students. Planners and designers will need to find creative ways to balance the need for smaller group and multiuse spaces with the safe and appropriate distancing protocols that we'll be practicing for the time being.

- **Updating all labs to support STEM programming.** The campus of the future may need more labs than lecture halls, and those labs need to be ready to teach cutting-edge concepts and skills. This applies to STEM learning as well as for psychology and disciplines such as art (digital media and design) and theater (oral communication and video production).
 - **Supporting faculty.** Faculty need to be comfortable with the technology provided, and they will need help getting there. Some will also need increased support in converting their teaching to a more interactive style.
 - **Increasing accessibility for a diverse student body.** Institutions need to think beyond Americans with Disabilities Act (ADA) standards and consider how a whole range of students can be supported and made comfortable on campus.
 - **Improving safety in the classroom.** Academic buildings of previous generations were constructed with little to no concern about safety. Today, these considerations must be the top priority.
 - **Building for flexibility.** Teaching has changed dramatically in the last quarter-century; no one knows how it might change in the next. Institutions need to avoid locking themselves in to certain modes and styles that could require costly renovation to modify.
- Regarding all other campus activities, Thought Leaders participants recommended the following:
- **Creating an inclusive environment for all.** The key words here are “for all”—including low-income students, first-generation students, LGBTQ students, disabled students, etc.
 - **Prioritizing services that help students achieve their long-term needs and goals.** A robust career services office is the first step, but institutions should also consider helping students manage their finances and plan their futures outside of career and education concerns.
 - **Increasing the availability of mental health services while expanding opportunities for intervention and support.** Campuses will need to be thoughtful and creative to meet the growing demand for these services and train a wide range of faculty and staff on how to recognize mental health crises and where to get help.
 - **Taking sustainability to the next level.** Most campuses have adopted sustainability initiatives, but it’s time to go beyond what’s been done before. Changes might be more difficult now, require more investment or hard work upfront, but they are the next step and students expect institutions not to hesitate.
 - **Providing housing that meets students’ needs and wants.** Institutions need to make thoughtful decisions about residence halls and balance student desires for privacy with the need for engagement and connection.
 - **Improving the use of institutional data and analytics systems.** Making the most of data is a long-term process that will require continual investment.
 - **Evaluating campus resources and repurposing those that have outlived their use.** This process is the most visible when it comes to campus buildings; for example, consider a building that is no longer useful, that costs more to operate than it is worth, and that will likely cost less to tear down than to renovate—it’s time for that building to be demolished and replaced. The same questions should also be applied to various offices, departments, and functions, to ensure the institution is making the most of every resource.

Data Point:**APPA Thought Leaders Future Student Survey***Classroom design essentials*

Before the 2020 Thought Leaders symposium, APPA surveyed its members about students of the future and facilities designs that will support their learning. (More information about survey respondents is available in Appendix B.) Following is a representative selection of their answers to the following question:

If you could design a classroom for a first-year student in higher education, based on what you know about how your current students learn, what would it include?

- Lots of power outlets for personal devices, excellent Wi-Fi, writable surfaces, movable furniture, four walls with projection capabilities, virtual reality capabilities, excellent acoustics, durable surfaces, natural lighting and a view of outdoors, webcasting capabilities for global/distance learning, a unique aesthetic design feature to enhance memory, and doors that lock from the interior for safety.
- All things flexible—furniture, writing boards, and technology.
- Flexible furniture; accessible technology; and access control that shows room counts, attendance, and utilization.
- Mobile furniture on casters for collaborative work, abundant power available, windows to view the outdoors, fully upholstered chairs with arms, and technology that will allow students and instructors to interact between the projector and student devices.
- The classroom would foster collaboration and could easily be rearranged to fit various activities (individual, class discussion, teamwork). It would contain interactive boards and flexible furniture. Proper light and temperature would also play a crucial part as well as the ability for students to easily move around. It would also have to be connected to most up-to-date technology, with high-speed Wi-Fi.

(Answers have been lightly edited for clarity.)

Section 3:

Nontraditional Students of 2024

Understanding the incoming class of nontraditional students in 2024

Colleges and universities have generally viewed traditional students—those high school graduates between 18 and 24 attending college or university full time—as their primary audience. Nontraditional students—those who fall outside of this definition—were considered a minority; they were important, certainly, but not a group that needed significant attention.

And yet nontraditional students now account for 73 percent of the students enrolled in higher education, according to the National Center for Education Statistics (NCES). These students are generally defined as 25 years old or older. In addition, many of these students share one or more of the following characteristics:

- Have dependents.
- Employed full time.
- Financially independent of their parents.
- Members of a minority population.
- Served in the military.
- First members of their family to attend college.
- Do not speak English as a first language, and/or were not born in the United States.

Clearly, this is a wide-ranging list—a point to keep in mind throughout this discussion. There is no single nontraditional student. Generalizations will be made within this report, but institutions should keep in mind that the defining characteristic of nontraditional students is their diversity.

That said, certain facts should be highlighted. First, the number of nontraditional students expected to enter college or university is predicted to grow. In 2013, 12 million nontraditional students were enrolled; by 2024 this number is expected to grow by 14 percent to 14 million students, according to the NCES. However, the number of nontraditional students who enrolled in college or university in the fall of 2019 actually declined from the previous year by 2.7 percent, according to the National Student Clearinghouse Research Center (NSCRC). Two factors account for the decline, according to sources interviewed by the online education magazine *Education Dive*. First, adult learners often take breaks in their education, removing them from enrollment counts. Second, the economy was thriving in fall 2019 and demand for workers was high; higher education enrollment generally drops when jobs are plentiful and rises again when the economy slows.

The majority (about 60 percent) of first-time students over age 24 enrolled in two-year institutions in fall 2019. Just over 19 percent enrolled in public four-year institutions, 12 percent in private four-year institutions, and about 8 percent in for-profit institutions, according to data from the NSCRC. (The number of first-time students enrolling in for-profit institutions has dropped significantly from previous years and is down 47 percent from fall 2016 figures.) This places significant pressure on community colleges to help nontraditional students adapt to higher education and learn (or relearn) classroom skills. Total enrollment of students over age 24 (both first-time and returning students) is more widely dispersed among institution types, with about 31.5 percent in public four-year colleges and universities, 29 percent in two-year institutions, 24 percent in private four-year institutions, and 10 percent in for-profits. (The percentages do not add up to 100 percent because some types

of institutions with small enrollments, such as for-profit two-year institutions, were not included in the data.) This shift likely reflects transfers of students from two-year to four-year institutions as their educations advance. It makes clear the point that all types of colleges and universities should be prepared to meet the needs of nontraditional students.

This will be particularly important in the next 25 years, as the number of traditional students declines. Section 2 of this report included a discussion

of the decline of whites aged 18 to 24 as a share of the total population. Minority students are expected to make up the difference, at least for several years, but minority students are more likely to meet the definition of nontraditional than their white peers. College and universities will need to compete for these students if they don't want to see a precipitous decline in enrollment. Savvy institutions will begin now to better understand and adapt to their needs.

Characteristics of nontraditional students

Employed either part- or full-time. Nontraditional students are far more likely to work while enrolled in college or university than traditional students, and far more likely to work full time. About 40 percent of undergraduates work at least 30 hours a week, according to research by the Georgetown University Center on Education and the Workforce; about 25 percent are simultaneously employed full time and enrolled full time. This puts a significant time crunch on students and makes scheduling a challenge, not only for classwork, tutoring, and studying but also for administrative tasks like getting a student ID or meeting with an advisor. Working students are also unable to participate in unpaid or low-paid internships, which are often key to employment after graduation.

Raising children. A recent report by the U.S. Government Accountability Office found that 4.3 million undergraduate students are parents. About 55 percent are single parents, and 44 percent also work full time. Student parents are among the greatest population at risk for leaving higher education without a degree, according to the Institute for Women's Policy Research. Yet this population of students is growing; the number of undergraduates who are single mothers more than doubled between 1999 and 2012. Women of color attending a college or university are especially likely to be single mothers; 37 percent of women undergraduate single mothers are African American, 27 percent are American Indian/Alaska Native, and 19 percent are Hispanic. In contrast, 14 percent are white. The majority work 20 or more hours a week, and more than 60 percent live at or below the poverty line. Those single mothers who do graduate are more

Data Point:

Characteristics of nontraditional students

Conflicting Roles of Adult Learners

"A key characteristic distinguishing reentry adults from other college students is the high likelihood that they are juggling other life roles while attending school, including those of worker, spouse or partner, parent, caregiver, and community member. These roles may be assets, both through the social supports they provide and through the rich life experiences that may help adult learners make meaning of theoretical constructs that may be purely abstract to younger learners. Yet more often, these multiple roles present challenges in students' allocation of time for both academic study and participation in campus-based organizations and activities. A 2003 NCES report titled *Work First, Study Second* indicated that at least 56 percent of students over age twenty-four who were included in the 1999–2000 National Postsecondary Student Aid Study saw themselves as workers first and students second, while 26 percent identified themselves as students who work. Only 18 percent did not work while enrolled. This report also noted that those students who considered themselves employees first were also more likely to be married, leaving them with at least three life roles to manage while attending school; this group was also less likely to complete a degree in six years."

— Jovita M. Ross-Gordon, "Research on Adult Learners: Supporting the Needs of a Student Population that is No Longer Nontraditional," *Association of American Colleges & Universities*, Winter 2011.

likely to leave with higher levels of debt than their nonparent peers.

Dealing with economic insecurity. The number of Pell Grant recipients—which is a general indicator of the income level of incoming students—has risen over the past decade from 25 percent to 32 percent. At the same time, tuition continues to rise, along with the cost of fees and books, while prices for housing and food have grown. Campuses are more aware of issues such as food insecurity among their students, although it remains difficult to calculate the scale of the problem. One study conducted by the Hope Center for College, Community, and Justice estimated that 48 percent of two-year institution students and 41 percent of four-year institution students were food insecure. However, other studies, such as one by the Urban Institute, found rates around 11 percent. Rates of homelessness or housing insecurity among students are also difficult to nail down; the same study by the Hope Center reported that 18 percent of students in two-year institutions and 14 percent in four-year institutions had experienced homelessness, while those with housing insecurity, such as difficulty paying rent, reached as high as 60 percent at two-year institutions and 48 percent at four-year institutions. In time, it is hoped that the scale of the problem will be clarified. In the meanwhile, institutions need to recognize that the need is real and take concrete steps to ameliorate it. For example, can institutions create programs or partner with

social service agencies and nonprofits to ensure that students have safe and affordable housing and adequate meals during holiday breaks and over the summer?

The first in their family to attend college or university. Most nontraditional students are the first in their families to enroll in higher education. This has been shown to create significant challenges for students who cannot draw on their parents for advice on seeking help from faculty, navigating the financial aid system, or finding a job after college. First-generation students are also likely to demonstrate lower rates of college readiness in key academic areas and take more remedial courses, according to the Postsecondary National Policy Institute. They are less likely to complete their college degree in six years compared with peers whose parents had at least some college experience. In fact, only 11 percent of low-income, first-generation college and university students will have a degree within six years of enrollment, according to a Pell Institute study.

Struggling to transition back to the classroom.

Taking notes, conducting research, writing papers, doing homework—all are skills like any other, and they require practice to do well. Nontraditional students, especially those with a sizable gap between high school and higher education, can struggle to adapt to classroom work, according to research summarized by a report in the *Strategic Enrollment Management Quarterly*. Nontraditional students might also have gaps in their knowledge—math or writing skills they’ve forgotten or never learned—and need effective remedial instruction that can get them up to speed quickly and without becoming discouraged.

Anxious and overwhelmed. A survey by Higher Ed Insight found that fear of failure was a major concern of adults considering returning to college—and this is only one source of anxiety for nontraditional students. Older students can find it difficult to connect to younger students, especially 18- to 24-year-olds just beginning to form social connections; nontraditional students are more likely to have established social networks as well as families. Nontraditional students have also reported feeling guilty and selfish for spending time and

Data Point:

Economic insecurity among nontraditional students

Addressing the hidden crisis

“Higher education neglects Abraham Maslow’s lessons at its peril. Without their basic needs secured, large numbers of today’s undergraduates are struggling to learn. Sleepless nights and empty stomachs distract them from going to class and passing their courses, prolonging or even preventing degree completion.”

— Sara Goldrick-Rab, “What’s the Biggest Challenge for Colleges and Universities?”
New York Times, June 5, 2018.

money on their education. They express self-consciousness and low self-esteem in the company of young students. Furthermore, the life experiences of nontraditional students may seem to be little valued on campus.

Focused and determined. At the same time, nontraditional students have a sense of purpose that traditional students might envy, according to research by NASPA, Student Affairs Administrators in Higher Education. Most are making a clear and deliberate choice to enroll in higher education; they have defined goals to improve their lives and secure their economic futures. They don't attend college or university because their parents expected it of them; they want to be there, and they often make significant sacrifices to be there. Research published

in the *Journal of College Student Development* and reported on by the American Psychological Association found that nontraditional students have better coping mechanisms for dealing with stress as well as higher levels of motivation driven by a clear view of their goals. Furthermore, nontraditional students have a laser focus on the value of their degree; they are relentless in achieving a return on their investment of time and money.

Expectations of nontraditional students

Flexibility. Nontraditional students ask colleges and universities for increased options in when and how they take courses. Night classes are just a start; nontraditional students look to online classes, accelerated classes, and classes that can be paused and then resumed. Motivated nontraditional students will squeeze their education into any spare time they can find, but they probably won't find that time at 10:00 a.m. Mondays, Wednesday, and Fridays. Colleges and universities need to provide courses in ways that meet the needs of students rather than those of the faculty or the institution.

High ROI. Institutions should never forget that for nontraditional students in particular, higher education is a choice. Money spent on tuition could be used on a nicer place to live; time spent on lectures could go to more work hours or time with family. Colleges and universities need to be creative about ways to demonstrate their value at every step along the way. For example, EdX, the nonprofit online-education group founded by MIT and Harvard, is developing a "MicroBachelors" degree that breaks the undergraduate degree into modular credentials. The initial microcredentials would provide key prerequisites for degree programs while also offering low-cost, low-risk entry points into higher education and definite milestones that could be used to demonstrate proficiency to an employer or institutions. The value of the program isn't deferred to a far-off future; some of that value is realized immediately by the student.

Data Point:

Challenges faced by nontraditional students

The greatest barrier: Anxiety

"Adult learners' anxieties can be their biggest battle. More than half of students surveyed in a study by the Lumina Foundation said fear kept them from even trying to return to school. Once classes have started, many experience various anxieties related to the classroom like attending classes with younger students, guilt over missing events in their family's lives, selfishness, and low self-esteem. For FGSs [first-generation students], who are the first in their family to attend college, many feel misunderstood at home because relatives do not understand what they are going through, they do not know how to balance everything, and they feel unsupported. Not addressing these issues leads nearly 70% of nontraditional students to drop out of school, some within four short months."

— Kris MacDonald, "A Review of the Literature: The Needs of Nontraditional Students in Post-secondary Education," *Strategic Enrollment Management Quarterly*, January 3, 2018.

Data Point:**Nontraditional students and higher education ROI***The value equation for adult students*

Q: Why are non-traditional students more focused on ROI than their traditional-age counterparts?

Merodie Hancock: They're both interested in ROI, but the non-traditional student has the more specific focus on ROI; they need to see immediate impact. For traditional-aged students, it's a more qualitative ROI. The non-traditional student is really looking to have that return on investment available right after they walk out of class.

This has a lot of impact on relevance. This is one of the things I struggle with quite a bit. If they are interested in an immediate ROI, which is almost always employment-defined, do they then miss out on studying the theory and understanding how the theory might impact or inform their practice? We might lose the theory if we're only focusing on the on-the-job ROI.

Q: Given this focus on employment outcomes, should institutions looking to better serve non-traditional students focus on offering more non-credit programming or short course/certificate programming?

Merodie Hancock: Institutions should offer non-credit programming, short courses and certificate programming to serve the non-traditional audience. We need to be very careful that we don't disadvantage the non-traditional student, which is now our majority population. Our traditional students have a plethora of options and schools with different cultures, systems and resources and focus on different areas. Some have a far larger student life component or a far larger research component. You want to build that same array for non-traditional students. We should have opportunities that they can grab onto immediately, not only to update their skills but that can also be reflected on a CV.

— Interview with Merodie Hancock, "Outcomes and Experience Central to Nontraditional Students' Value Equation," *The Evolllution*, March 9, 2015.

Easier processes and administrative tasks. Many experts on nontraditional students note the burden of "microfrustrations"—the endless hassle of interacting with the institution. Students working full time with young children don't have time to spend hours on campus lining up for a student ID and signing up for a parking permit. To meet with an academic advisor during regular business hours means taking off work and getting a babysitter. Institutions should assess their processes to understand where the college or university is making life complicated and seek out ways to simplify and streamline these interactions. Administrative tasks should be moved online whenever possible. When face-to-face interaction is necessary, the college or university should find ways to extend hours or offer meetings by video chat. Be creative—could the campus offer drop-in childcare during advising or orientation?

Accessible childcare. The high cost of childcare hits nontraditional students particularly hard. One

month in a daycare center averages just under \$1,000 for infants and about \$850 for preschoolers, according to the research and advocacy group Child Care Aware of America. (A year's worth of care costs more, on average, than a year's tuition and fees at an in-state public four-year college or university.) Quality childcare is in high demand at centers near college or university campuses and will therefore cost more and may require months on a waiting list. As for on-campus childcare, availability has declined, especially at two-year institutions, where the majority of student parents attend, according to reporting by MarketWatch. However, observers are hopeful this could change with new funding; in 2018, Congress expanded funding for the Child Care Access Means Parents in Schools (CCAMPIS) program that provides funds for campus-based childcare programs to parents who qualify for Pell Grants. Those institutions with childcare programs receive high marks from parents; a couple living in Albuquerque who both attend the University of New Mexico (UNM)

Data Point:**Support for student parents***Comprehensive services from UC Berkeley*

"The University of California (UC), Berkeley, is among several public land-grant universities making early efforts to develop adult learner-focused initiatives. . . . The center now provides a university-funded \$8,000 annual scholarship to financial aid-qualifying student parents in addition to an array of services for a variety of adult learners. UC Berkeley offers family housing, drop-in crisis intervention, counseling, and three credit-bearing courses to assist student parents:

- Once Upon a University—A survival skills course that introduces student parents to the university and the resources available to them
- It Takes a Village—A course designed to build community and teach students how to successfully combine school, work, and family
- Beyond the Village—A course that

addresses career and graduate school preparation and planning, offered in partnership with career services

"UC Berkeley also offers several services tailored to student parents:

- Baby Bears @ Cal Project offers information, assistance, and peer support to student parents.
- Bear Necessities provides donated food and clothing to student parents.
- UC Berkeley offers service-learning internships specifically designed for student parents.
- SPARR (the Student Parent Association for Recruitment and Retention) is a registered student group that provides a place for student parents to connect with one another and identify and advocate for their needs."

— Alexa Wesley, "Five Things Student Affairs Professionals Can Do to Support Adult Learners," NASPA – Student Affairs Administrators in Higher Education, June 2018.

said in an interview with MarketWatch that they wouldn't be in school without it. The UNM program offers drop-in services as well as traditional daily childcare, stays open until 10 p.m., and provides programming for student parents. The center serves about 300 students—but there's a waitlist for 1,200 more. More institutions should find ways to provide affordable childcare for students, who otherwise will struggle to pay for care and might join the ranks of student parents who leave higher education without a degree.

Services targeted to support low-income

students. The challenges of attending college or university as a nontraditional student are high, but they can become insurmountable when the student's basic economic needs are unmet. Many institutions have implemented programs to help homeless or food-insecure students. Many campuses today run food banks, while all community college campuses in California are now required to provide a safe parking lot where homeless students

can sleep in their cars overnight. These are laudable efforts, but they are a stopgap and unsustainable—how well is a student going to learn in their car in the school parking lot? Broader, more systemic strategies are necessary to make earning a degree while meeting basic needs affordable.

In addition, low-income students also need targeted academic support. Researchers Jennifer Engle and Mary G. Lynch, writing in the book *Recognizing and Serving Low-Income Students in Higher Education* (edited by Adrianna Kezar), analyzed findings from a Pell Institute study that identified institutions doing an above-average job serving low-income students and graduating them at higher-than-average rates. They identified five best practices at these institutions:

1. **Focus on the first year.** Students provided with comprehensive orientation, mentoring, and support services during their first year are more likely to form connections within the college or

university community and remain engaged on campus.

2. **Monitor student progress.** A combination of online course tracking systems and in-person advising and mentoring can help the institution recognize problems early and intervene quickly with tutoring, mental health services, or other supports.
3. **Improve instruction in “gatekeeping” courses.** At times, low-income students will need some remedial instruction to cover gaps in their education. The quality of these courses is critical to the long-term success of students, and institutions that have focused on individual instruction, interaction with faculty, and supplemental tutoring have improved learning outcomes and increased retention rates.
4. **Special programs for underserved populations.** Programs that provide structured, targeted, intensive support for low-income students have demonstrated their worth by improving academic performance and persistence among participants. The most successful programs combine orientation and intrusive advising with early warning systems, mentoring and tutoring, and, often, grant aid.
5. **Creating a culture of success.** The greatest factor in successfully meeting the needs of low-income students, according to Engle and Lynch, is an organizational culture that promotes student success. Leaders on these campuses prioritize improving retention as an institutional goal and consistently demonstrate that commitment. These institutions take concrete steps toward this goal—they assess the problem on their campus, create action plans, allocate resources, and so forth. But they also take ownership of the goal of retaining low-income students and share that goal across departments and units. “There was a pervasive belief on these campuses that all students have the potential to succeed and should be held to high expectations; the campuses reinforced this belief by recruiting and hiring faculty and staff who were also committed to student learning and success,” noted Engle and Lynch.

Data Point:

Orientation for nontraditional students

Meeting the unique needs of unique learners

“Dan Nimlos was 25 when he started his undergraduate studies in 2009 at Bethel University, an evangelical institution in Minnesota. He’d taken a few years off after high school to explore being a musician and didn’t want to rack up debt.

“He met with an enrollment counselor before classes officially began and was given a list of his courses, but not much more. So he wandered around campus, confused about where to go or to whom to ask questions in the first few days after classes started. He points to his cursory introduction to the campus as one of the reasons he took the job as Bethel’s student experience manager in charge of running the orientation program for nontraditional students.

“Bethel’s orientation involves an online class that provides useful information such as how to submit assignments and fill out financial aid forms online, how to connect to the campus Wi-Fi and complete various other tasks, on or off campus. The class is a subtle acknowledgment of, and accommodation for, the needs of students who’ve not been in college for many years and who may be overwhelmed by the new technology on campus, Nimlos said.

“‘There is a lot of self-doubt ... questions about, “How do I find my footing here?” And a good part of this is how we assuage those fears,’ he said.”

— Jeremy Bauer-Wolf, “Orientation for the Adult Learner,” *Inside Higher Ed*, September 3, 2019.

Programs to integrate students into the campus community.

Nontraditional students often feel out of place on college and university campuses, points out NASPA. This sense of disconnect can begin with the campus tour, where the prospective student might be significantly older and have very different questions than the student giving the tour knows how to answer, and extend through orientation, which is usually targeted at 18-year-olds

leaving home for the first time. (Not to mention that students with full-time jobs or raising children don't have time for multiday orientation sessions.) They feel disconnected from the life of the institution—a 28-year-old veteran is unlikely to rush a fraternity or sorority, while a single working parent with two kids is unlikely to have time for the film society or intramural softball. But all experts on student retention agree that feeling engaged with the campus community is a major factor in retention. NASPA encourages institutions to find creative ways to embrace nontraditional students, such as designated on-campus spaces for students to gather, socialize, and study, and an organization or affinity group for nontraditional students in general or specific groups in particular—parents, veterans, first-generation students, etc.

Data Point:

Support services for nontraditional students

Creating connections with nontraditional students

"Higher education strives to create a holistic experience for students, thus nontraditional student services must also extend beyond the classroom. It is unacceptable that nontraditional students often do not feel welcome or incorporated into the colleges and universities they attend, though institutions have the power to change this. Creating a designated on-campus space for nontraditional students to gather, socialize, and study could begin to address the sense of belonging needed by these students."

— Courtney Hittepole, "Nontraditional Students: Supporting Changing Student Populations," NASPA – Student Affairs Administrators in Higher Education, n.d.

Mental health services for nontraditional students. Counseling and other mental health services are as important for nontraditional students as for their younger peers. However, these students have different life experiences and different needs. While research on this population is limited, one study cited in *Higher Education Today* (a blog from the American Council on Education) showed that nontraditional students experienced

Data Point:

More Support services for nontraditional students

Tips for providing mental health services to adult learners

- Do not assume that because post-traditional learners are adults that they have the agency to seek help for mental health or recognize when they need it.
- Listen carefully to post-traditional learners' needs and struggles and validate their concerns as they juggle multiple roles and responsibilities outside of being a student.
- Consider modifying hours of services and programs to cater to the evening and weekend times that post-traditional learners are on campus.
- Use your on-campus counseling centers, CARE team, or behavioral intervention teams to follow up with students in need of services.
- Invite counseling center staff to provide consultative meetings or trainings for faculty and staff who interact with post-traditional students on identifying and intervening in high-risk cases or dealing with a student resistant to services.
- If you have a counseling center, consider providing support groups for post-traditional students, which can help them develop a better sense of belonging and reduce their stress levels.
- Offer a variety of workshops at varying times on topics related to adult learners, such as managing stress, parenting, sharpening study skills, and succeeding in college while balancing multiple responsibilities.
- Be prepared with professional mental health resources to make referrals as needed, including to mental health crisis lines.
- Try to avoid problem-solving for students who do not ask for it. Discuss options and allow them to make their own decisions.

— Gail Bruce-Sanford and Louis Soares, "Mental Health and Post-Traditional Learners," *Higher Education Today*, American Council on Education, April 22, 2019.

significantly higher rates of anxiety and depression than traditional students. Another study noted that nontraditional students were more prone to anxiety and depression fueled by a sense of hopelessness and lack of control. Despite their need for mental health services, many of these students find it difficult to access their institutions' counseling services, either because the schedule of the campus mental health center conflicts with their jobs or because they simply lack the time. Institutions need to be aware of the mental health needs of nontraditional students and seek to find ways to help these students by expanding their hours and/or offering counseling by phone or video chat. In addition, campuses should consider creating support groups for nontraditional students; offering workshops on managing stress, succeeding in college, and parenting while in school; and training mental health providers on the unique challenges facing nontraditional students.

Preparing for the nontraditional students of 2024 and beyond

Participants at the 2020 Thought Leaders symposium considered ways in which colleges and universities needed to change to better meet the needs of nontraditional students. They prioritized the following steps:

- **Increase the flexibility of course offerings**, including night classes, accelerated classes, and online classes.
- **Create new types of programs and credentials to increase options and build success.** Expand options beyond traditional degree programs with à la carte offerings, competency learning, and microcredentialing.
- **Provide or increase childcare on campus** to support student parents.
- **Develop orientation programs targeted to nontraditional students.** Narrow the focus to the most essential need-to-know information, provide options for when and where orientation takes place, and, if possible, offer childcare.
- **Streamline processes to remove barriers and microfrustrations.** Increase online access to basic services, automate whenever possible, and expand hours for services where human interaction is necessary. (Generation Z will welcome this change just as much as nontraditional students.)
- **Implement targeted, structured programs** to support nontraditional learners with advising, tutoring, and mentoring.
- **Customize programs for key groups of nontraditional students** such as student parents, veterans, first-generation students, etc.
- **Engage nontraditional students with the campus** through social activities targeted to their lifestyle, age group, and interests.
- **Improve the availability of mental health services for nontraditional students** and train staff to understand and appreciate the unique challenges of this population.
- **Make the campus environment as friendly as possible.** Cluster essential and related services in one building; consider the wayfinding needs of those who don't speak English as their first language; and remember that not everyone knows what a "quad" is.

Data Point:**APPA Thought Leaders Future Student Survey***Outmoded classroom design*

Before the 2020 Thought Leaders Symposium, APPA surveyed its members about students of the future and facilities designs that will support their learning. (More information about survey respondents is available in Appendix B.) Following is a representative selection of their answers to the following question:

If you could design a classroom for a first-year student in higher education based on what you know about how your current students learn, what would it NOT include?

- Fixed seating, “institutional” look, single-sized chairs, small surface space.
- Auditorium style seating, chalk boards, overhead projector, Wi-Fi desert, no windows and on/off electric lighting.

(Answers have been lightly edited for clarity.)

- Fixed seating, long narrow rooms, no exterior light, limited technology, and limited choices for students with accessibility issues.
- Furniture, fixtures, and equipment must be in alignment with students’ changing needs.
- Front (forward) rigid orientation, fixed seating/desks, single wall marker/projection boards.
- Inflexible technology solutions. The classroom needs to be adaptable to future needs in order to keep total cost of ownership down.

Section 4:

Implications for Higher Education

After considering what is known about the incoming students of 2024 and beyond and evaluating their needs and expectations, participants at the Thought Leaders symposium looked at the implications of these new expectations for the campus built environment and higher education facilities operations. Participants agreed that several key changes need to be adopted by institutions to prepare facilities for future students.

Increased collaboration

Integration across campus departments and operations will only become more critical as new generations enter higher education. For example, both incoming traditional students and non-traditional students demand more ease in basic administrative tasks, with expanded hours and more online options. Providing streamlined services, by creating new online processes and adding hours and staff, will require the cooperation of various administrative offices, such as finance and student affairs as well as information technology (IT) and facilities.

Participants at the Thought Leaders symposium believed facilities had a good foundation of relationships to build upon across the campus. Facilities and IT have worked closely together for several decades as technology has become ubiquitous across their institutions. Student affairs and academic affairs already communicate with facilities regularly, as do campus safety and security services.

However, senior facilities officers need to reach out to other groups on campus to better prepare for the students of tomorrow:

- **Enrollment management.** Facilities needs to better understand the needs and expectations of incoming students as well as the priorities of the institution when selecting students.

- **Communications.** Few college or university public relations operations fully understand the scale of what facilities does or can explain how the facilities organization supports student success.
- **Student support services, including health and wellness.** The campus built environment plays a larger role than most people realize in the well-being of those who work, learn, teach, and live there. Furthermore, planning for more efficient, student-focused services needs to involve facilities so that these spaces meet student needs.
- **Sustainability.** The students of 2024 and beyond care deeply about sustainability but often do not appreciate the enormous role of facilities in, for example, improving energy efficiency and reducing waste. Facilities operations should reach out to student sustainability organizations to partner with them on key sustainability goals.
- **Students and parents.** This is probably the most challenging type of relationship to establish, as there are few established lines of communication between students and parents and the facilities organization. However, senior facilities officers should consider ways to engage students and parents directly. This can be as straightforward as sending facilities staff on campus tours once or twice a semester; it could be formalized with direct interaction with student government. The key point is that facilities should neither guess nor assume what students and their parents expect from higher education. Facilities should find out directly, from the source.

Data Point:**Increasing collaboration***Collaborating in the name of student success*

"Institutions that are truly moving the needle have added clear student success-related responsibilities to job descriptions. In many cases, that means leaders assembling cross-campus committees and task forces, or even rethinking departmental descriptions.

"At Central Arizona College, implementing Guided Pathways—the American Association of Community Colleges' project focused on helping institutions design and implement structured academic and career pathways at scale—required broadening responsibility for student success.

"The college's administrators have systematically studied and redesigned processes to better focus on student success, says Jenni Cardenas, vice president of student services.

"For instance, the financial aid and student success offices had separate policies for assessing academic progress. While this worked well for the departmental staff, having to follow two policies confused and was burdensome to students. The offices collaborated to create a single student-friendly process.

"'Rarely do I step into a meeting that just includes staff from student services,' Cardenas says."

— Nancy Mann Jackson, "2 Big Ways Campus Offices Are Collaborating in The Name of Student Success," *University Business*, August 13, 2019.

Expanded student life, mental health, and wellness services

Colleges and universities have long prioritized student engagement and health. Participants at the Thought Leaders symposium agreed that institutions currently do a good job supporting student organizations that represent and support diverse groups on campus. Most campuses provide mental health services and have expanded training to faculty and staff in recent years to better identify and intervene in crisis situations. And institutions

do a good job promoting wellness in general with healthy foods and recreation opportunities.

Where institutions need to focus their attention going forward is on expanding these services to meet an ever-diverse student population. This diversity encompasses both racial and ethnic groups as well as gender identities and the multiplicity of life experiences of nontraditional students. This will likely require increased funding—always a challenge on cash-strapped campuses—to hire additional staff, expand the availability of services, and increase training for faculty and staff. Mental health services in particular will need to be increased on many campuses to meet the needs of Generation Z, a cohort more likely to report anxiety, depression, and other challenges and to seek professional help as well.

Facilities policies need to be evaluated to prepare for emerging issues and demands, such as bringing emotional support animals with them to live in their residence halls. Institutions need to be aware of trends in mental health and consider the expectations that may need to be accommodated.

Facilities can play an important role in the life and health of the campus. Facilities staff are often the eyes and the ears of the institution; custodial staff, for example, are often among the first to notice a student in crisis when they don't leave their room, go to class, take care of themselves, and so forth. These staff should receive training to recognize warning signs and provide mechanisms to identify potential problems. Facilities should also partner with the dean of students, mental health services, and other key departments on processes and protocols in the case of a mental health crisis on campus. Tabletop exercises, for example, could help teams rehearse necessary steps and identify gaps in services.

Finally, senior facilities officers need to educate campus leadership on the role that buildings and grounds play in wellness. Architects, landscape architects, and planners understand, for example, the importance of sunlight for learning and the need for green space to promote mental health.

Data Point:**Addressing mental health concerns***Four steps to take action to prioritize student mental health*

1. Assess student needs. This can be done systematically by conducting a student survey and through listening to students more informally. Healthy Minds data show that students of color, first-generation students, LGBTQ students, international students, and low-income students face unique mental health burdens and barriers to care. Diverse student perspectives are essential to inform mental health practice and policy on campus. Assess the campus's existing mental health services and identify gaps.
2. Enhance the accessibility of clinical services. Consider addressing costs, service locations, and the range and volume of available services. College and university leaders have been able to reduce fees for mental health services and embed counselors within units across campus to make clinical expertise more "local." Additionally, leaders have considered mental health services that address poverty and food insecurity. To address volume, leaders have hired more clinical staff to serve their students.
3. Consider opportunities to integrate mental health promotion and prevention throughout the campus system. In addition to expanding counseling or mental health services, other investments in student mental health include suicide prevention, education and awareness programs, peer support programs, screening and linkage initiatives, technology-based services, faculty/staff training, and curriculum-based programs (e.g., coping skills courses). Several campuses have been successful through creative partnerships with stakeholders on and off campus.
4. Finally, campus leaders can set the tone regarding mental health on campus through proactive messaging, communication, and norm setting.

— Healthy Minds Network Research Team, *Investing in Student Mental Health: Opportunities & Benefits for College Leadership*, American Council on Education, 2019.

Defined value proposition

The high cost of a college or university education has focused increased attention on the ROI of money and time in a degree. At the same time, education and expertise of all sorts have been called into question, doubts have been raised about suspected political agendas on campus, and pointed questions asked about the high cost of an education. Colleges and universities must respond with solid information about the value of a diploma in general and the unique value proposition of individual institutions in particular.

Fortunately, good data is available about the value of higher education—data that institutions should work harder to spread. Studies have demonstrated higher education enables graduates to earn higher incomes and live happier, healthier lives. The Georgetown Center on Education and the Workforce, for example, found that median lifetime

earnings rise steadily for workers with increasing educational attainment; some level of college or university education, even without a degree, adds nearly one-quarter of a million dollars to lifetime earnings, while individuals with bachelor's degrees earn 74 percent more than those with just a high school diploma. Meanwhile, the Lumina Foundation found that higher education has strong correlation with improved health, successful marriages, and measures of happiness, life satisfaction and/or mental well-being.

Individual institutions, meanwhile, vary in how well they understand and demonstrate their value to prospective students. Students and parents need clear reasons why they should choose one institution over another, and cost usually isn't the only factor. Campuses should look for ways to define and differentiate themselves and make the point that a degree is not an interchangeable widget

that can be obtained from one place as well as any other. What does each campus have to offer that is unique? Students will ask, and institutions need a clear answer.

Many colleges and universities have focused on cost to students when considering ROI for their campus—understandably so—and institutions have worked hard to cut costs and improve the stewardship of their resources. Facilities plays an enormous role here, since so many campus costs relate to buildings, grounds, and infrastructures. On the other hand, not all institutions have told the story of their stewardship and made clear to the campus community their ongoing efforts at responsible management. More opportunities remain to facilities for improved ROI. Space utilization remains a challenge—how does the institution make the most of the built environment? At the same time, facilities should look for ways to contribute to the broader institutional value proposition as well. The campus environment and overall atmosphere is to a large degree a creation of facilities, and facilities can find ways to craft that environment to reflect the message the institution wants to send.

Improved master planning

Thought Leaders participants believed that the master planning process will be a critical tool in preparing for the next generation of students. Institutions generally have some important aspects of master planning well in hand, said participants; for example, most colleges and universities maintain condition assessments of their buildings and infrastructure. This is important baseline data, but the next step is more difficult for institutions and their facilities departments: assessing how well their campus is utilized. Not every college or university knows how often classrooms, offices, or labs are used, or in fact *how* they are utilized, and that information is important to planning how they are used for the future. One of the first steps in improving master planning will be improving the data available to planners about the utilization of campus space.

A second important step is a better determination of programming requirements going forward. Institutions need to bring together leaders from a variety of disciplines to forecast how programs

expect to grow and change and assess the requirements to fulfill those needs. The academic side of the institution needs to chart a path forward for individual programs and departments: Which ones are likely to grow? Decline? Remain static? Then, in partnership with planning, facilities, IT, and other key staff, the institution must prioritize new or updated classrooms, labs, offices, and other types of learning and workspaces. The strategic and academic plans of the college or university need to be aligned so that everyone understands the path forward.

The next step is creating a plan that is a living document with enough flexibility to adapt to changing situations. Prioritization is critical—it's easy to get off track when an opportunity pops up or a donor walks in. The institution needs to be able to take advantage of a situation when unexpected doors open but not lose sight of the big picture. Plans need to be holistic and include considerations such as utilities. As one participant noted, "Batting order is important." Facilities experts know the right order in which projects need to be completed, and they need to be at the table when these decisions are made.

Strategic reinvestment in facilities

One of the most important ways facilities organizations can help institutions prepare for the students of 2024 is to prioritize strategic reinvestment in the built environment. Strategic reinvestment is a method of evaluating maintenance and renewal needs on campus and investing in programs to maximize the potential of aging buildings and infrastructure. It is also a way to reframe the old bugbear deferred maintenance with focus on student success, institutional needs, and ROI.

Strategic reinvestment allows institutions to remake existing facilities to meet the needs and expectations of a new generation of students. Outdated labs can be replaced with modern ones; auditorium-style lecture halls can be replaced with flexible classrooms; underutilized offices can be replaced with spaces for student interaction and group study. Other needs can be met by transforming buildings to address new priorities. Administrative offices can be clustered together. Expanded mental health services can be moved to a central location.

Generally, senior facilities officers have a good sense of where the needs are; they have quantitative data on facilities, their conditions, and their needs. Facilities organizations also have a good grasp of the lifecycle costs of buildings and infrastructure.

Where facilities can improve is in making the case for strategic reinvestment to campus leadership. This can be accomplished in multiple ways. Data analytics, for example, can be used to forecast costs going forward and support the argument that reinvestment will save money in the long run. Facilities can also use data to promote total cost of ownership. The longer a building can be efficiently operated and fully utilized by the institution, the greater the return on the institution's investment in that building.

Facilities can also do a better job integrating its planning with other planning efforts across the institution. This report has already discussed master planning, but this point bears emphasis. In particular, the facilities plan needs to be tightly aligned with the institution's strategic plan. Strategic reinvestment should follow the same priorities

as the institution as a whole in order to maximize value. This can be a challenge when donors step in with their own ideas or when the institution faces internal or external pressures to reshuffle priorities. Facilities needs to give campus leaders the data they need to make cost-effective decisions despite that pressure.

Integrated, continuously improving technology

Advanced, integrated technology is essential to the lives and learning experience of Generation Z. At the same time, technology has the potential to help ease barriers for nontraditional students and provide opportunities they would otherwise miss. Facilities organizations must focus on supporting their college or university in continuously improving the technology available to students and faculty while at the same time using technology to improve operations within the organization.

Facilities organizations generally do a good job providing technology within classrooms. Security technology such as card-reader access and cameras

Data Point:

Supporting nontraditional students

Employing technology to promote student success

"Delaware State University, a Historically Black University based in Dover, adds a layer of technology to help keep its students, many of them first-generation college goers, on track. Campus administrators use analytics software to get early warnings on undergraduates who are falling behind or are otherwise at risk. 'If they get off the pathway we can put them back on track; we can catch it in time,' said Teresa Hardee, chief operating officer at Delaware State. . . .

"Technology plays an enhancing role throughout the university and provides students with an opportunity to learn in-demand skills. For example, Delaware State runs a developer boot camp for students

in the summer, where they learn to build apps for Android smartphones and tablets. Program leaders explain to students that six weeks at the camp could help them get a job that pays \$60,000 per year or more.

"Yet the fact that technology-enabled courses can be a tough sell shows the pressures that students from low-income backgrounds face. Many must return home for the summer to work to provide additional income for their families. At times, their economic circumstances compel them to sacrifice long-term goals for short-term obligations. 'When people try to live, study and give money back to families, it's really difficult,' Hardee said."

— Bill and Melinda Gates Foundation, "Today's College Students Have Diverse Needs. These Two Schools Get It," *The Washington Post*, September 21, 2019.

are kept up-to-date and in use on most campuses, and many colleges and universities have deployed video information screens for wayfinding and general information. Within the facilities organization, most employ work order systems that track tasks and allow technicians to communicate and manage their work. Building control systems are widely used and help improve the efficiency of energy and air-handling systems.

However, even technology that is current today will require upgrades tomorrow. The students of 2024 will expect high-speed Wi-Fi on every corner of campus. New technology will need to be implemented in classrooms, and faculty taught how to make the most of it. Security systems will require regular investment, with cybersecurity becoming an increasingly high priority as ransomware and other hacking attacks become more pernicious. New

types of cameras that provide facial recognition will need to be evaluated and potential increases in security weighed against privacy concerns.

Within the facilities organization, work order systems will grow increasingly sophisticated, incorporating global positioning systems (GPS) and integrating directly with building management systems. Facilities organizations should look into opportunities to automate wherever possible with smart systems that, for example, identify when parts are wearing out and order them automatically. Data analytics holds enormous potential for facilities, potentially helping organizations assess building utilization with a new level of detail and determining opportunities for increased efficiency in energy use, water conservation, and temperature control.

Data Point:

APPA Thought Leaders Future Student Survey

Learning experiences that support success

Before the 2020 Thought Leaders symposium, APPA surveyed its members about students of the future and facilities designs that will support their learning. (More information about survey respondents is available in Appendix B.) Following is a representative selection of their answers to the following question:

Describe the teacher-student learning experience at your institution that breeds success for the student.

- Teacher-student learning experiences should both comfort and challenge everyone in the class. Spaces need to facilitate observation and conversation.
- Reversal of roles—students, within the bounds of the syllabus, participate in creating challenges for their peers and the instructor.
- Interactive, project-based learning with movable furniture, transparent classrooms. Nondidactic. More prep work is done by the student at home so classroom time is interactive.
- Hands-on engagement and interaction through group projects and peer engagement.
- Collaborative and interactive.
- The teacher-student experience fosters engagement and discussion. The learning environment is no longer static.
- Multi-interactional—lecture, small group, and one-on-one. Engage the students so they teach themselves as opposed to teaching the students and hoping they retain key points.

(Answers have been lightly edited for clarity.)

Section 5:

Questions for Campus Discussion

Every year, participants at the Thought Leaders symposium develop a list of questions to promote discussion on campus. Our hope is that these questions become a jumping-off point for planning and implementation of strategies.

1. What does your campus know about the students it expects to enroll in 2024? Who on campus best understands incoming students and can share this information more broadly? What can you anticipate about the needs and

expectations of students 5 years, 10 years, and 15 years from now?

It's easy for information to get trapped in siloes on a college or university campus, even with the best intentions. Various individuals within your institution have regular contact with incoming students and a clear sense of who they are and what they want. The key is to find out who those individuals are and to ensure that their information is widely distributed and discussed.

Data Point:

Planning and change in higher education

The imperative for change

"Change in higher education is imperative for many reasons.

"Because students have changed.

"The new student majority consists of non- or post-traditional students. These are students who juggle their studies with work or caregiving responsibilities, who commute, who received an uneven high school education, who are among the first in their family to attend college, and who, in growing numbers, speak English as a second language.

"Because students and parents' priorities have shifted.

"The overwhelming majority of students expect a pay-off from their education. Very few students say that the reason to go to college is to develop a philosophy of life or to become a more well-rounded, cultured individual. Students and parents alike want a return on their investment—and, unfortunately, the return on investment in many majors has actually fallen.

"Because expectations about graduation rates, the quality of teaching and facilities, and the range of student services have risen sharply.

"Accreditors, legislators, and parents agree

that graduation rates need to rise, time to degree to accelerate, achievement gaps need to be closed, and greater emphasis needs to be placed on high quality teaching and on students' learning outcomes.

"Expectations about standards of care have also climbed. College choice increasingly hinges on the quality of campus facilities, student support services, and the vibrancy of student life.

"Because the higher education ecosystem has changed.

"The higher education landscape has, in recent years, grown much more competitive. Even local and regional 4-year institutions face financial threats from dual degree/early college programs, community colleges, other regional campuses, and online providers. . . .

"It is not enough to try to protect and preserve the status quo.

"Trends that are unsustainable inevitably come to an end. But that need not mean that brick-and-mortar institutions need to be replaced by universities in the cloud. It means that these schools must adapt."

— Steven Mintz, "Why Higher Education Will Change," *Inside Higher Ed*, October 3, 2019.

Senior facilities officers in particular should make a point of building relationships with staff in enrollment management. Can you plan quarterly working lunches? Can you schedule periodic formal or informal sessions to better understand the characteristics of those entering the institution? Facilities should also take advantage of existing interactions between incoming students and the college or university. Some Thought Leaders participants suggested that facilities staff observe campus tours several times a year and sit in on information sessions. The goal is to narrow in on the students seeking out your individual campus to better understand how your institution can best differentiate itself from competitors. The general information presented on Generation Z in reports such as this is valuable, but even more valuable is a profile of *your* students.

2. What are the anticipated needs of future students coming to your campus that will require changes to campus operations? Teaching strategies? The campus built environment?

Once the college or university has a solid sense of what incoming students expect, campus leaders must begin assessing where the institution is prepared and where it falls short. This is where specific information about the profile of incoming students will be critical—it will help the institution prioritize its responses.

For example, a two-year institution focused on meeting the needs of working students, many of them parents, and many the first in their family to attend higher education, should prioritize flexibility in when and how it offers classes, along with options for credentialing and ease in transferring credits. This campus should aggressively seek to streamline operations and offer flexible hours for tasks such as advising. Can the institution find a way to offer childcare to its students? Can materials be prepared in a variety of languages, especially for the parents of incoming students?

On the other hand, a four-year college or university that targets 18- to 24-year-olds and has a strong reputation for its STEM programs should build on existing investments in technology, expand high-

speed Wi-Fi to every corner of the campus, create 3D printing labs and maker spaces, and prioritize converting auditorium-style lecture halls into flexible learning spaces that facilitate team projects. Different students and different institutions will require different investments to meet student expectations.

Data Point:

Data Point: Understanding Generation Z

Welcome to a new generation

“Gen Z is the most diverse generation in modern American history, and its members are attentive to inclusion across race, ethnicity, sexual orientation, and gender identity. The Great Recession and its aftermath focused Gen Zers on the value and relevance of a degree. The purpose of college for them is to help launch a career. Gen Zers also see technology as an extension of themselves with respect to how they communicate, consume information, and learn.

“No generation is a monolith, and research on Gen Z is just emerging. But campus leaders must pay attention, as this new generation coincides with a shrinking pool of high-school graduates and increased expectations for student success.”

— *The New Generation of Students: How Colleges Can Recruit, Teach, and Serve Gen Z*,
The Chronicle of Higher Education,
February 2019.

3. How well does the campus master plan incorporate forecasting of future student needs and expectations? Who is on the campus master planning committee? Does it include enrollment, student affairs, institutional research, and others who know what students care about and need? What changes need to be made to the planning process and the plan itself to better adapt going forward?

Higher education plans generally incorporate a needs assessment to evaluate where the institution is going and how the college or university needs

to adapt. However, many colleges and universities would be well served by focusing more attention on this aspect of planning and by developing a more comprehensive, robust system of forecasting future student expectations. Student demands are changing so quickly and, in some cases, so significantly that to ignore them could be a serious misjudgment.

Colleges and universities should evaluate their process, both for writing and updating their master plan and for other planning efforts as well, including strategic planning, academic planning, and facilities planning. Consider ways to seek more information about the students of the future. Evaluate who within the organization could best contribute—should enrollment management have a greater role? Should the organization reach out to local high schools or K-12 education associations? What needs arise in discussions of future expectations, and how should they be prioritized among other institutional goals?

4. What existing relationships does facilities need to foster to serve students of the future? What new collaborations does facilities need to create?

The campus of the future will need to be a tightly integrated machine to meet the needs of future students. Students expect a seamless, frustration-free experience in which basic tasks are automated and those tasks that require face-to-face interaction are conducted on the students' tasks, not the institution's.

Facilities will play an important role in streamlining campus operations, but only if existing relationships are strengthened and new ones created. Facilities organizations should consider their interactions with enrollment management, student services, finance, IT, and other departments; determine where communication is weak and collaboration poor; and deliberately work to improve those relationships. They should make the case to other senior management about the importance of collaboration and consider partnering on manageable trial projects at first. Over time, bonds will be forged that will support the success of the students of the future.

Data Point:

Support services for nontraditional students

Streamlining processes to ease barriers

"Institutions should prevent the accumulation of microfrustrations by improving the system in such a way that the hardest things about college are those that are relevant and meaningful to learning—everything else should be easy."

— Alexa Wesley, "Five Things Student Affairs Professionals Can Do to Support Adult Learners," NASPA – Student Affairs Administrators in Higher Education, June 2018.

5. What is the unique value proposition of your institution? If you cannot quickly and easily express the value proposition, what steps can the college or university take to begin to define itself and demonstrate its ROI to future students?

Students, and often their parents, are more aware of their choices in higher education than ever before, and they are increasingly sophisticated in their decision-making. Most have a clear sense of what attendance at one institution will cost them compared to another, and finances are a major part of their decisions. Institutions can't neglect this aspect of value. Facilities organizations in particular must continue to seek ways to demonstrate their good stewardship of the college or university's resources.

However, most colleges and universities would prefer students not decide on a college or university based on cost alone—they point to less tangible factors such as student-faculty relationships, research strengths, and ties to the community. These are essential to the character of a campus, but do incoming students understand them? More specifically, do incoming students understand their value?

It can be difficult, even impossible, to quantify some of these factors and place them on a balance sheet. But they can be defined and highlighted. Campuses need to determine what makes them unique, what students respond to, and what draws

Data Point:**The value proposition of higher education***Making the case to Generation Z*

"One area of specific concern for this generation is finances. In survey after survey, today's teenagers say they worry about how to pay for college. . . . According to one poll, one in four members of Gen Z describe themselves as 'always stressed' about finances, and another study found that for nearly one in five, the cost of higher education is the No. 1 societal concern.

"Here are four approaches institutions should consider in appealing to money-conscious Gen Z students.

"**Emphasize the value of the degree.** Highlight programs that differentiate your institution from others and that are either covered by tuition or help defray the cost of a degree.

"Publish better graduate-outcomes data.

Vague tallies like 90 percent of graduates are employed or enrolled in graduate school six months out are no longer enough, especially if the response rate is low.

"**Offer price transparency.** Dozens of colleges give incoming students tuition guarantees, locking in for four years the initial rate.

"**Develop new pricing models.** Provide discounts for students who take classes at less popular times, say in the late afternoon or on Fridays or weekends, which could also help campuses better utilize classroom space. Or base price not on seat time but on progress toward a degree, which might provide an incentive for students to complete their degrees on or ahead of time."

— "The New Generation of Students: How Colleges Can Recruit, Teach, and Serve Gen Z," *The Chronicle of Higher Education*, February 2019.

them to commit to the institution. Every department within the institution should work together to reinforce those unique characteristics that make their campus different.

6. How can facilities better support student health and wellness?

The increased focus on general health and well-being of incoming students places new demands on facilities to consider these factors in everything they do. Facilities organizations understand that the design and maintenance of buildings and grounds contribute greatly to the health of those who use them.

Involving facilities in student wellness can be as humble as selecting cleaning products, and as complicated as renovating buildings to remove asbestos and other harmful products. Simply increasing the amount of light in classrooms promotes learning. The upkeep of grounds, the design of pathways, and the creation of outdoor gathering spaces can encourage physical activity and encourage stu-

dents to be out in nature. With smart design and thoughtful management, the entire campus can be a place of wholeness and health.

At the same time, campuses can take steps to educate their staff on mental health and wellness and train them on how to respond. Housekeeping staff, for example, can be taught to recognize the warning signs of an emotional crisis and a way to contact mental health staff who can intervene.

7. How can the facilities organization better make the case for strategic reinvestment based on the needs and expectations of the students of the future? What buildings and/or infrastructure would most benefit from revitalization targeted to addressing new teaching and learning styles and/or changing demands?

The majority of colleges and universities have buildings on their campus that are overdue for revitalization; depending on their age and their financial resources, some have a large backlog of such spaces and systems. One of the greatest challenges

of out-of-date buildings is that they do not meet the needs of students—they were designed to support outmoded pedagogy, they lack the technology necessary today, and they hamper rather than help students.

Higher education facilities experts need to learn how to make an effective argument that reinvestment is an opportunity to prepare the campus for the incoming students of 2024. Once an institution has a clear sense of what the students of 5, 10, and 15 years from now expect as well as a strong sense of the value proposition the institution offers those students, facilities leaders can begin to evaluate classrooms, labs, administrative offices, and residence halls in the light of that information. The exact priorities of individual campuses will vary based on their needs and the needs of their students. Some colleges and universities will need to concentrate on upgrading teaching and learning spaces; others will need to prioritize cost savings possible with investment in modern utilities systems; still others should concentrate on streamlining operations and administration. The goal should be for senior facilities officers to focus on

practical ways that the built environment can further the institution's mission and support student success.

8. What are the technology needs of the students of the future? How does the institution track changing needs and plan strategies to adapt? How can facilities better engage with this process and support this goal going forward? What new technology can help facilities better meet the needs of students and serve the campus as a whole?

Technology evolves so rapidly that no institution will ever entirely catch up; even the most advanced system will become obsolete in an incredibly short time. Most institutions are well aware that technology requires constant investment, reinvention, and a close eye on trends and developments. The questions for senior facilities officers are these: First, who within the institution is monitoring evolving technology needs? Is this a defined role within IT or a more informal process? Second, how can facilities operations better connect with this process and stay on top of new expectations? Facilities leaders should have a seat at the table to help integrate new

Data Point:

Using technology to support student success

Aiding nontraditional learners with smart technology

"As is the case for students whose disability accommodation requires the use of technology in class, certain technologies and applications enable first-gen students to access vocabulary, foundational principles not covered in high school instruction and other information necessary to advance their learning in the class.

"In our study, apps preloaded onto institution-provided iPads served as scaffolding for first gens' academic transition by providing information and instruction on note taking, time management, mind mapping, idea generation and strategies for learning complex information. . . .

"Mobile phones and iPads were deployed to access dictionary apps to understand vocabulary used by faculty. Students shared that they regularly used the dictionary app on their iPads during class to obtain quick definitions of terms they were not familiar with in order to follow the lecture and understand the lesson. Students shared that they would not have been comfortable raising their hands to ask what the particular words meant, for fear of being seen as unintelligent or uneducated by their peers and faculty. Whether discipline-specific vocabulary or terminology common in academic language, students used technology to access meaning in order to be fully engaged in learning."

— Ana M. Martinez Aleman, Heather Rowan-Kenyon, and Mandy Savitz-Romer, "Using Technology to Help First-Gen Students," *Inside Higher Ed*, October 10, 2018

systems into the campus and maximize their potential for success.

At the same time, facilities leaders need to stay on top of innovations within their own field. Building information management systems grow more pow-

erful every year, with more potential to automate routine tasks, ease maintenance chores, and prevent failures. Senior facilities officers must continually educate themselves and their teams on new developments and make the case for their implementation on campus.

Data Point:

APPA Thought Leaders Future Student Survey

Creating a positive learning environment

Before the 2020 Thought Leaders symposium, APPA surveyed its members about students of the future and facilities designs that will support their learning. (More information about survey respondents is available in Appendix B.) Following is a representative selection of their answers to the following question:

What factors make a positive learning environment for first-year students?

- Familiar and welcoming environment; inspiring, inviting, lots of spaces outside of classrooms for studying and teamwork; natural spaces; safety.
- Respect, active listening, and feedback. Open and flexible learning environment throughout the campus both within and outside of buildings. Integrated culture of learning, and space design and lived culture that demonstrates integrating planning and understanding of the importance of all aspects of the student experience.

(Answers have been lightly edited for clarity.)

- Good lighting, comfortable temperature and seats, interesting professor. I think the use of technology is important but overrated. I would say that lots of interaction areas are important.
- Social interaction in residence halls, collaborative space, active support programs, comfortable living and learning spaces
- A clean and safe environment.
- Sense of community and availability of resources.
- Direct interaction with senior faculty, flexible workspaces outside classrooms, extended hours.
- Eliminating distractions including problematic technology, unkempt spaces, lights out, rattling HVAC, and other elements that can draw attention away from learning.

Section 6:

Conclusion

The COVID-19 pandemic has been a humbling moment both for higher education and for the world. It reminds us that plans can be upset in a moment and that no one truly knows what the future holds. However, another lesson has emerged from the crisis: higher education *can* adapt.

Faculty members who never intended to teach online courses figured out Zoom. Student affairs officers who never anticipated suddenly meeting the needs of students made effectively homeless when their campuses closed found housing resources within their community. Facilities staff who never planned to sanitize an entire campus to stop virus transmission took a deep breath and got out the disinfectants. In fact, facilities staff have faced all sorts of unexpected challenges, like packing up the belongings of students who assumed they would be back on campus in a matter of weeks but in fact couldn't return to their residence halls in the spring semester.

In 2020 we were not only plagued by a global pandemic, but we also were attempting to reconcile what has been with us for 400 years—widespread racial inequality. Almost 60 years have passed since Martin Luther King Jr. said in his letter from a Birmingham jail, “Injustice anywhere is a threat to justice everywhere.”

This is what higher education can do. Through all the fear and chaos, institutions held on to their values, put their students first, and got on with the job. Learning has never stopped; the priority has never shifted away from the *people* of the college or university—the students, faculty, and staff. In the words of Maya Angelou, “People will forget what you said; people will forget what you did; but people will never forget how you made them feel.”

This is something to remember going forward, when, as, we most sincerely hope and believe, life returns to normal—perhaps a new normal, but normal nonetheless. Yes, it is true that higher education resists change. But never let it be said that higher education cannot embrace change when it is necessary. As Nelson Mandela aptly said, “Education is the most powerful weapon which you can use to change the world.”

The changes called for in this report will help prepare our institutions for as much of the future as we can see, and that future is one where colleges and universities remain strong, vibrant, and essential in the lives of their communities and the life of the nation.

Appendix A:

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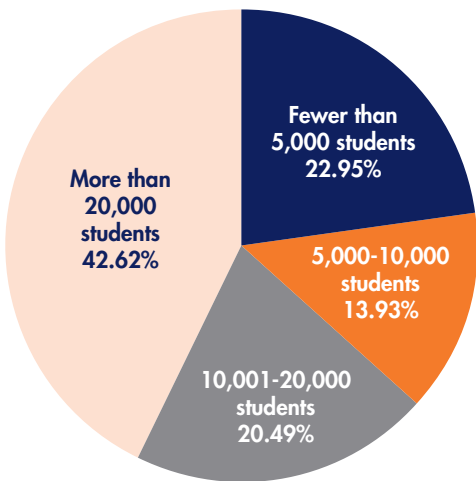
Appendix B:

APPA 2020 Thought Leaders Future Student Survey

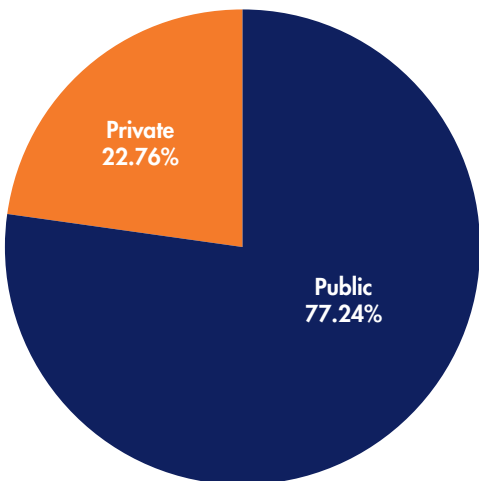
In advance of the 2020 Thought Leaders symposium, APPA surveyed its members about the students of the future and the facilities that will support their learning. You can read the five questions and a selection of representative answers in the Data Point sidebars toward the end of each chapter of this report.

APPA also collected information about the survey respondents, which provides some context for the results.

APPA Thought Leaders Future Student Survey

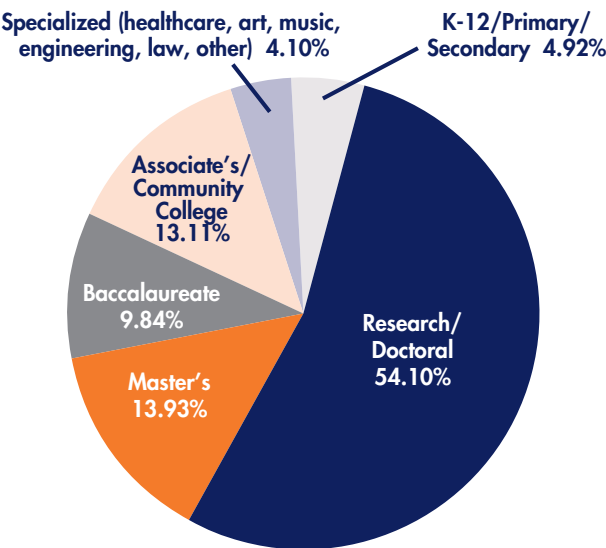


Is your institution public or private?



TLS
47

What is your institution’s Carnegie Classification or closest institutional type?



Appendix C:

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Many thanks to the following staff for their valuable support:

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