

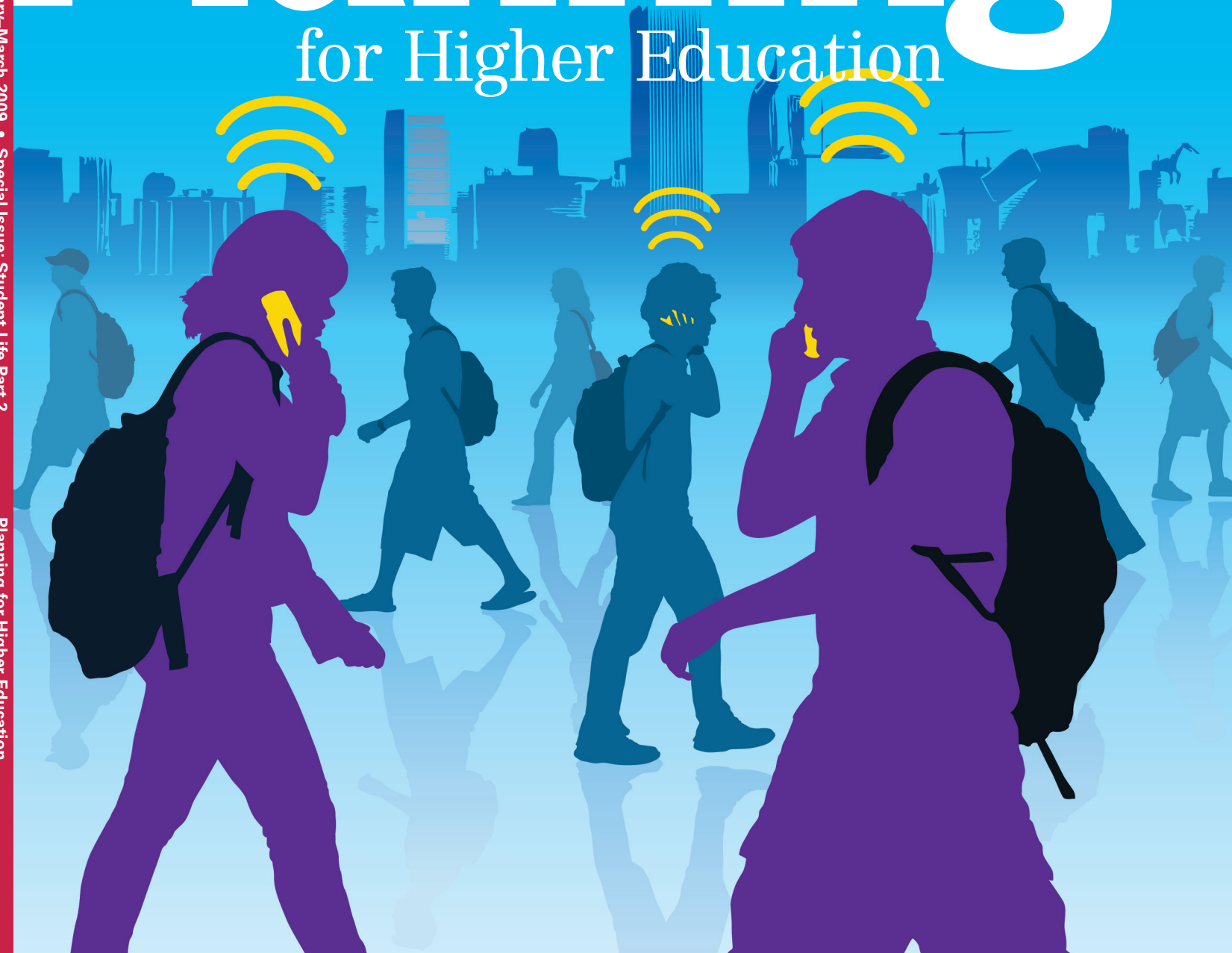
Volume 37, Number 2
January–March 2009

Planning

for Higher Education

Volume 37, Number 2 January–March 2009 • Special Issue: Student Life Part 2

Planning for Higher Education



Make Way for Millennials! How Today's Students are Shaping Higher Education Space

Special Issue: Student Life Part 2 Inside: Trends in Higher Education



The Journal of the Society for
College and University Planning

Make Way for Millennials!

How Today's Students are Shaping Higher Education Space

From generations in perspectives, through generational cycles, and on to the influence of Millennials on campus space.

by **Persis C. Rickes**

Persis C. Rickes is founder and president of Rickes Associates, a higher education planning firm focused on master planning, strategic planning, classroom utilization studies, and space programming. Prior to establishing the firm in 1991, she was director of planning for the University of Connecticut system. Over the past 17 years, she has worked with more than 150 college and university campuses in the United States and internationally. An active member of the Society for College and University Planning (SCUP) for more than two decades, she has held a number of regional and national posts in the association. In addition to pre-conference and concurrent session presentations at SCUP, she has also been an invited speaker at other professional association meetings.

The monikers are many: Generation Y, Echo Boomers, GenMe, the Net Generation, RenGen, and Generation Next. One name that appears to be gaining currency is “Millennials,” perhaps as a way to better differentiate the current generation from its predecessor, Generation X. Millennials are those individuals born between 1982 and 2002, give or take a couple of years (Howe and Strauss 2000, 2007). They represent a generation that began to spill onto college and university campuses at the turn of the millennium and have already had a subtle—and sometimes not so subtle—impact on campus space. Millennials now influence space planning, design, and construction and will continue to transform higher education as they return to campus as faculty and staff.

Generations in Perspective

The Baby Boomers have garnered much of the press in recent years given their sheer numbers, although we were clearly reminded by Tom Brokaw of the incalculable contributions of the G.I. or “Greatest” Generation. How do the Millennials fit into the historical constellation of generations? Although an entire generation cannot be uniformly categorized, it is clear that generational cohorts have some values and traits in common given their shared social and historical experiences. The dividing dates between cohorts are not rigid—and, indeed, individuals on the generational “cusps” share traits from neighboring generations—but there is rough agreement regarding how these cohorts are distributed over time. Following are brief

descriptions of the four generations immediately preceding the Millennial Generation (Howe and Strauss 2007):

- *The G.I. Generation* (born 1901 to 1924) arose at the start of the last century. Civic-minded and team-oriented, this generation was responsible for creating the suburbs and landing on the moon. Members also helped fuel a major campus construction boom when they flooded higher education institutions as beneficiaries of the G.I. Bill. Since time was of the essence in reducing the pressure on overtaxed facilities, many of the buildings built in response were basic in both design and construction.
- *The Silent Generation* (born 1925 to 1942) came of age betwixt and between the war heroes and the flower children; shaped by the Great Depression, members of this generation lacked a cause for which to fight. In many ways, they were a “quiet” generation, committed not only to their career (often spending their entire work life at a single company), but also to their family and friends. On college and university campuses, they are now the most senior faculty members and administrators.
- *The Boomer Generation* (born 1943 to 1960) exploded on the scene, especially in contrast to the preceding generation. As idealistic optimists, Boomers were confident of themselves and distrustful of authority, questioning the relevance of social structures. Their sheer numbers made them a dominant cultural force. They attended higher education in the turbulent 1960s and 1970s, and many are now returning to campus to enroll in courses for personal enrichment or to prepare for new careers in “retirement.” Roughly half of current higher education faculty and staff members are Boomers. With the first Boomers reaching retirement age in 2008, that number will begin to decline as Gen Xers and Millennials swell the faculty and staff ranks.
- *Generation X* (born 1961 to 1981) emerged in the 1960s. This is a generation that the media has pegged as cynical and disconnected, the first “latchkey kids” grown into adulthood who feel that the world is out to get them. In reality, Gen Xers are the practical skeptics and entrepreneurial free agents who fueled the dot-com boom. They attended higher education in the 1980s and 1990s and now make up over one-third of the faculty and staff at colleges and universities. Their

proportion will not achieve the lofty level of Boomers; as a generation, their numbers are relatively small, creating a generational birth dearth that led some academics like Lewis Mayhew (1979) to ponder how well higher education would survive the 1980s. The pessimistic view that higher education enrollments were in an unchecked tailspin proved to be unfounded. While enrollments did decline in the 1980s, births began to rise, foreshadowing the current higher education enrollment surge.

Figure 1 displays the generational cohorts by relative size, based on births only and excluding immigrants.

Generational Cycles

The current enrollment surge is fueled in part by the Millennial Generation, a cohort considered to begin with those born in 1982. Born to Boomer and Gen X parents, Millennials are wanted and nurtured children and are the first true “natives” of the Information Age. For this demographic cohort, personal computers have always been there and are as omnipresent and mundane as a toaster. In contrast, their predecessors have been branded “digital immigrants” who tend to lack Millennials’ natural and almost instinctual relationship with technology.

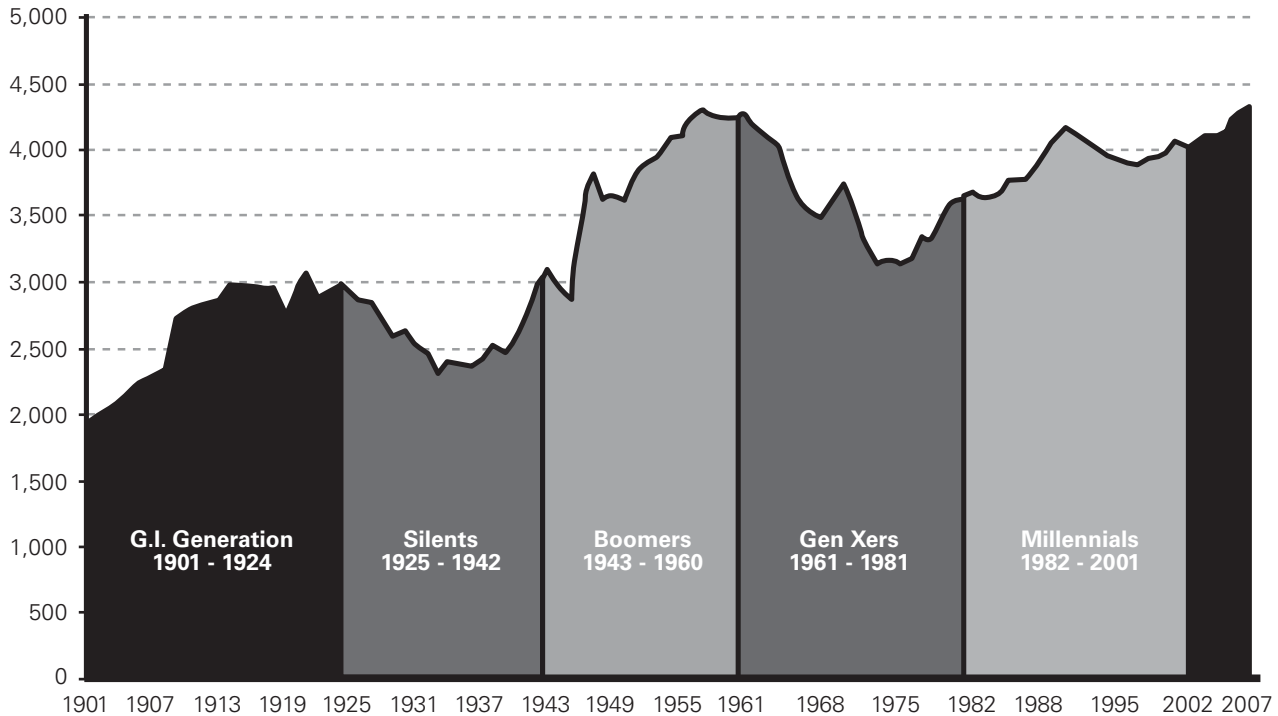
The first Millennials arrived on campus at the turn of the millennium and will be enrolled in higher education through 2020 and beyond. At nearly 100 million strong (including some 10 million immigrants), Millennials are the largest generational cohort in history. They are also the most racially and ethnically diverse cohort, with one in five Millennials the child of an immigrant parent.

Howe and Strauss (2007) note that “through the coming decade, they will transform the university world as profoundly as the Boomers did in the 1960s—but in very different, even opposite, ways. As happened in the ‘60s, some universities will figure out the new generation, deal with it correctly, and rise in reputation—and others will not” (p. 4). Martin (2007) ventures that Millennials are a burgeoning Renaissance Generation, or “RenGen,” that will culturally transform society.

A milestone was reached in 1998 when the number of Millennial births peaked, exceeding the 1957 peak year of Boomer births (Howe and Strauss 2007). The year 2008 was yet another milestone, marking the peak high school graduation year. Some have suggested that generations evolve not linearly, but cyclically (Howe and Strauss 2007;

Make Way for Millennials! How Today's Students are Shaping Higher Education Space

Figure 1 **A Century of Generations**



Data sources:

1901–1908

Coale, A., and M. Zelnick. 1963. *New Estimates of Fertility and Population in the United States*. Princeton: Princeton University Press. 1909–2006

U.S. Census Bureau. 2008. *Statistical Abstract of the United States: 2003, Mini Historical Statistics Table No. HS-13. Live Births, Deaths, Infant Deaths, and Maternal Deaths: 1900 to 2001*. Washington, DC: U.S. Census Bureau. Retrieved October 28, 2008, from the World Wide Web: www.census.gov/statab/hist/02HS0013.xls.

U.S. Census Bureau. 2008. *Statistical Abstract of the United States: 2008, Table 77. Live Births, Deaths, Marriages, and Divorces: 1950 to 2006*. Washington, DC: U.S. Census Bureau. Retrieved October 28, 2008, from the World Wide Web: www.census.gov/compendia/statab/tables/08s0077.xls.

(Beginning in 1970, data from both U.S. Census Bureau sources exclude births to nonresidents of the United States.)

2007

Tejada-Vera, B., and P. D. Sutton. 2008. *National Vital Statistics Reports 56 (21), Table A2. Births, Marriages, Divorces, and Deaths: Provisional Data for 2007*. Hyattsville, MD: National Center for Health Statistics. Retrieved October 28, 2008, from the World Wide Web: www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_21.htm.

Lancaster and Stillman 2002). Each generation “breaks” with the youth of the previous generation, “corrects” the adult excesses of the generation prior to that, and “replaces” the generational archetype associated with the departing generation. In the case of Millennials, they are breaking with the youth culture of Gen X and emulating only the “best” Boomer characteristics. Meanwhile, the loss of the G.I. Generation has left a societal vacuum to fill. If generations run in cycles, then this suggests that Millennials will display many of the characteristics associated with this departing generation.

Characteristics of the Millennial Generation

What of this new generation? Millennials clearly have a different set of life experiences. The Beloit College Mindset List is an annual set of observations about the experiences that have shaped incoming college students (Beloit College 2008). For example, where recent college students are concerned, IBM has never made typewriters, there have always been charter schools, a coffee has always taken longer to make than a milkshake, you never had to roll down a car window, bottled water has always existed, and members of the Rolling Stones have always been geriatrics (although the latter is not an issue, because many Millennials share the musical tastes of their Boomer parents and may even attend concerts together). This bond continues after college when a high proportion of Millennials graduate and “boomerang” by moving back home with their parents.

While both the number and nature of generational characteristics are subject to debate, the seven associated with Millennials identified by Howe and Strauss (2000, 2007) are described here. It is likely that these characteristics will continue to evolve as this generation ages, but many of the fundamental elements will remain the same. Millennials are motivated and achievement-oriented team players who respect authority and are concerned with social justice. They are also realists, blending the staid loyalty of Silents with the unbridled optimism of Boomers, while adding a healthy dose of skepticism from Gen Xers.

The first characteristic is one of specialness. Millennials feel *special* and entitled, due in no small part to the media. Perhaps this could be dubbed the “Mister Rogers Effect,” after the children’s television show that repeatedly told children that they were special (Zaslow

2007). Millennial children “graduate” from kindergarten and are often awarded trophies just for showing up. For young adults, specialness has become a generational watchword: an iPod filled with selected songs, food made to order, or custom-fitted jeans. Between the 1960s and the 1990s, reported self-esteem among college students increased dramatically (Twenge 2006).

Sheltered by overprotective Boomer parents, Millennials are strongly tied to parents, family, and friends. Parents, in particular, may be heavily involved in the day-to-day activities of their Millennial children, earning the nickname “helicopter parents” (with the more aggressive dubbed “Black Hawks”). Some institutions have suggested that when they accept a student, they actually “co-admit” the parents. Many colleges and universities have responded accordingly by adding staff and programs that engage a student’s family more intensely or by drawing the line as necessary when parental involvement becomes counterproductive.

Millennials are both *confident*, believing that their generation is capable of correcting societal ills, and *team-oriented*, a closely linked fourth characteristic. Students study, socialize, and travel in groups, which lowers the pressure on individuals and raises confidence levels. Although Millennials are slow to establish deeply trusting relationships, they ironically tend to have a no-holds-barred approach to openness while online. The current generation of students is constantly online in a variety of venues: texting on their cell phones (the third screen), befriending others on social networking sites such as Facebook and MySpace (each now with over 100 million members), posting videos on YouTube, and inhabiting an avatar in Second Life.

While Boomers were radical and Xers detached, Millennials are much more conventional. Think any Harry Potter movie vs. *The Breakfast Club*. Millennials “have learned that one of the best ways of getting along is to go along” (DeBard 2004, p. 37). Millennials are drawn to campuses that are full of students much like themselves (Howe and Strauss 2007), an attitude that could prove challenging for the unconventional and experimental campuses that arose during the Boomer years. In contrast, today’s students are attracted to campuses with a strong sense of tradition and community-building rituals (Lancaster and Stillman 2002).

Pressured and *achieving* Millennials do not care about the journey as their Boomer parents did; they want a clear

indication of the destination to ensure that they are using their limited time wisely (Howe and Strauss 2007). They are the consummate multitaskers, juggling curricular and cocurricular activities, and are not shy about seeking professional assistance to help them with the daily juggling act. Above all, they want structure from within and without to guide them. And, since achievement is a badge of success, it is now considered cool to be a nerd.

Facilities and College Choice

It is clear that the quantity and quality of campus facilities play a marked role in a student's decision to attend a particular institution. A 1984 study by the Carnegie Foundation for the Advancement of Teaching reported that the appearance of an institution's buildings and grounds was the primary physical factor influencing students to choose the college or university they ultimately attended, with 62 percent identifying that particular factor (Boyer 1987).

The quantity and quality of campus facilities play a marked role in a student's decision to attend a particular institution.

A more recent and comprehensive study conducted by the Center for Facilities Research (CFaR), the research arm of APPA, specifically identified those physical factors influencing student recruitment and retention (Cain and Reynolds 2006). The physical factors leading students to select a particular institution included facilities related to a student's major (mentioned by 73 percent of respondents), the library (53 percent), academic technology (51 percent), classroom buildings (50 percent), and residence halls (42 percent). Echoing the Carnegie Foundation study of two decades prior, 64 percent cited the condition of facilities as playing a critical role in the decision to attend a particular institution.

Once a student is enrolled, there is a continued correlation between institutional cleanliness and academic achievement. CFaR recently reported that out of five descending levels of cleanliness, 84 percent of responding students preferred "orderly spotlessness" or "ordinary tidiness," the top two levels (Campbell and Bigger 2008). Once cleanliness deteriorates below those levels

(beginning with level 3, "casual inattention"), it becomes a distraction to students. After noise, air temperature, and lighting, cleanliness ranked fourth in terms of factors influencing student learning.

Facilities are noticed by college employees, as well. In a survey conducted by the *Chronicle of Higher Education*, college employees cited the physical environment as one of the elements of their job they value most (Biemiller 2008).

Influence of Millennials on Space

The generational characteristics and traits of Millennials, combined with their awareness of space (whether overt or subliminal), are driving physical change on college and university campuses. Some of these repercussions are explored below. These observations are certainly not intended to be a comprehensive distillation of all the ways higher education space may be transformed by changing demographics. Rather, the goal is to suggest how morphing generational characteristics and space are inextricably linked.

Some have likened recent construction activities to an amenities "arms race," which may begin to sort itself out as the underlying drivers are more clearly understood and used to inform capital expenditures. Above all, it appears there is an increasing emphasis on both human scale design (Strange and Banning 2001) and on aesthetics (Martin 2007).

Meeting and office spaces. Millennial students regularly seek out faculty for feedback and reassurance, which implies more meetings, either in an individual faculty office, in a common meeting room, or in "transitional" spaces where students gather before and after class. This has space implications, particularly for those campuses—many community colleges among them—with shared or particularly tight office space, and might suggest a need for larger offices, meeting "pods," or more shared common space with nooks and crannies.

Morphing generational characteristics and space are inextricably linked.

Admissions offices have already begun to experience a space pinch, as it is now not unusual for a prospective student's entire extended family to attend an information session. This trend points to a need for both larger waiting

rooms and larger meeting rooms, since an entire family cannot be readily accommodated in an office or in the small meeting rooms that currently exist.

However, there are trends that point to a need for less space, rather than more. In fall 2007, about 100 colleges and universities participated in a first-of-its-kind virtual college fair. Admissions officers staffed virtual “booths” and responded to student inquiries in real time via streaming video (Toppo 2007). As well, a growing number of higher education institutions have begun to develop YouTube style-Web sites that can take the place of a campus visit.

In addition, it is interesting to ponder what may happen once Millennial faculty and staff have populated higher education. Given their current penchant to work in groups and to “see-and-be-seen,” will the private office be gladly shed in favor of flexible work spaces? Recent trends toward an open-office environment at such firms as the New York office of Bloomberg may presage a potential future.

Academic and personal support spaces. Millennials are pressured and achieving. They actively seek out tutoring and help with testing skills to excel and then look for recreational spaces to let off steam or meditation rooms and quiet sanctuaries to refocus. There is no longer a stigma associated with seeking counseling, either personal or academic, and sheltering parents encourage students to take advantage of all available services.

Recently, there has been a rise in the number of students who have mental health issues, suffer from complicated or chronic diseases, or take medication. Levels of depression have risen over the past 20 years, with one in three college freshmen reporting that they were “frequently overwhelmed” (Twenge 2006).

According to the 2007 findings of the National College Health Assessment, 15.3 percent of responding students reported having been diagnosed with depression at some point in their life; one-third of those individuals had been diagnosed in the past year (American College Health Association 2008). A smaller study of national universities and top liberal arts colleges suggested that, typically, more than one-third of the student body was actively seeking treatment for a host of anxiety disorders (Lopatto 2007). The study also noted that students at these liberal arts colleges were more likely to take advantage of mental health services than were their counterparts at larger universities, which could suggest a need for increased

space to support traditional counseling services at smaller liberal arts institutions.

All institutions, however, should consider expanded academic support space accessible to students at every level. Workshops on stress reduction and study skills can also proactively address anxiety issues. Pressured Millennials see this assistance as a way to manage what is expected of them. They are also concerned with finding the “right” job, suggesting that career centers may be revitalized to take a more hands-on role.

Instructional spaces. Technology and pedagogy are converging. Given their comfort level with technology and penchant for team-oriented behavior, Millennials are substantively changing instructional space—as well as the very nature of instruction. Because today’s students socialize, study, and collaborate in groups, the learning environment is no longer place-bound. This translates to a need for multipurpose spaces for group activities, including small group/seminar rooms and blended social/academic spaces. As veteran multitaskers, students do not view spaces as single purpose in nature. Indeed, a recent survey of the Society for College and University Planning suggested that adaptability is the most critical characteristic of learning spaces (Grummon 2008). Support of student engagement and collaboration ranked second.

Classrooms will begin to undergo a change, especially as Silent and older Boomer faculty retire. The average age of faculty is now around 50. The “sage on the stage” will be gradually replaced by the “guide on the side” approach. Student learning is now based on “seeking, sieving, and synthesizing” rather than on relying on a single source (Dede 2005, p. 7). This is partly a function of the trial-and-error style of a Nintendo generation that is more interested in hands-on, problem-based learning than passive listening.

One way to engage students in courses that may be more passive in nature is through the use of classroom response systems, or “clickers.” Faculty ask a question in real time and students “click” in their responses, which are immediately tabulated. This provides the desired instant feedback to pressured students, as well as to faculty who may not be altogether certain that students are “tuned in.”

Because Millennials prefer to learn and work in teams, small group rooms are needed that can be used as breakout space during class or for study and project work after class has ended. The permutations are limitless and

range from “flyspace” at North Carolina State University to “GroupSpace” at Stanford University to SCALE-UP classrooms at North Carolina State that support large introductory classes (Oblinger 2006). However, these types of space pose a challenge to institutions in states with space planning guidelines predicated upon scheduled classroom seat-time.

Alternatively, students may also break out within the classroom environment during class, brainstorming while clustered in small groups around “huddleboards.” Collaborative hands-on learning has been stepped up in specialized instructional spaces as well. Instructors are interested in shifting seamlessly from a didactic approach to a hands-on demonstration, all in the course of the same class—and same space. This type of hybrid teaching space requires a considerable increase in square footage, sending space planning guidelines into a tailspin. The demand for space to support these new modalities is compounded by the anticipated increased interest in math and science (Howe and Strauss 2007) at a time when many such facilities are clearly dated.

And how do faculty embrace these new teaching modalities? They will need access both to appropriate training in a center for teaching and learning and to a faculty technology training laboratory where they can practice new teaching techniques privately and without interruption. This support must extend to the classroom, where immediate assistance with technology should be available whenever a faculty member is teaching.

Of course, some classroom needs seem basic and intuitive, but are not always adhered to: students should be able to see and hear what is presented and be comfortable along the way (Allen et al. 1996). Classroom furniture should be flexible and movable so that it can be repositioned as needed. Furniture criteria should also consider the “pedagogical value of a comfortable chair” (Bartlett 2003, p. A36). The traditional tablet armchair with its limited work surface is simply physically too small and uncomfortable for many of today's students.

Finally, instructional tools should not be limited to the classroom proper; smart boards, video screens, and seating should be present in hallways and gathering areas to support informal interaction.

Libraries. When Samuel Johnson suggested “Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it,” he never envisioned the Internet and the World Wide Web (Boswell 1998, p. 627). Perhaps the contemporary version

of this observation would be “Knowledge can no longer be measured by what you know, but rather by what you can access.” While the library proper is still required to access historical material that has not yet been digitized and contemporary material unavailable in electronic form, it is clear that “access” potentially exists wherever a student is located.

To adapt to a new generation of students, the library has become another partner in collaborative learning. Given the penchant of Millennials to multitask, it frequently serves as a quasi-student union space—and vice versa. Traditionally, a student went to a library to sit alone and read a book quietly. For Millennials, that approach is disconnected to the reality of their pressured lives: they want to work in groups, have access to multimedia materials, and consume coffee and energy drinks. The Johnson Center at George Mason University may have been ahead of its time with its combination ballroom, food court, movie theater, office, and convenience store building. And oh, yes, the Johnson Center includes a library as well (Geraghty 1996). Similarly, the Valparaiso University Christopher Center for Library and Information Resources has soft seating and a café, along with a gas fireplace and a piano.

The “information commons” concept integrates a variety of resources and services, ranging from traditional library services to multimedia technology to small group rooms, providing a one-stop, secure environment for harried Millennials. Examples include the InfoCommons at Northwestern University and the Digital Union at Ohio State University (Oblinger 2006). Where construction of a new library to accommodate changing student needs is not feasible, some libraries have relocated portions of their collection to compact or off-site storage to repurpose existing space.

Student centers and service spaces. Achieving Millennials seek outlets in extracurricular and cocurricular activities. While athletic facilities were constructed in response to the demands of Gen Xers, Howe and Strauss (2007) suggest a need for a new “extracurricular infrastructure” that includes technology-rich space for art, student clubs, theater, and music to meet the needs of Millennials.

- *Student centers.* There has been a building boom in the construction of student centers over the past decade. The title of a telling article from 2003 proclaimed: “Forget Classrooms. How Big Is the Atrium in the New Student Center?” (Lewis 2003). Because libraries

now offer amenities that were once the sole purview of student centers, today's student centers are attempting to shake out the cobwebs by differentiating themselves through expanded amenities and programs.

- *Bookstores.* Bookstores on college and university campuses, frequently located in a student center, now offer cafés and a wide array of merchandise and services. The bookstore at the University of California, San Diego, for example, sponsors a weekly farmer's market. The increase in retail offerings and services requires additional space. Bookstores may also want to be placed in a more visible location, given that they regularly compete with online alternatives.
- *Contemplative spaces.* On secular campuses, contemplative spaces are frequently relegated to the odd room in a basement or at the end of a hallway. While the literature is distinctly mixed with regard to whether students are becoming more or less religious, anecdotal evidence seems to suggest a growing interest in nondenominational space for reflecting, praying, or meditating. Students may engage in such activities individually or may see them as a way to connect with others. Such a space may require plumbing, which makes its placement within a building crucial.
- *Mailroom.* No longer a back-of-the-house operation, the mailroom is quickly becoming a comprehensive "postal center." This change is driven by the increasing number of packages students receive as they order everything from textbooks to electronics to gourmet coffee online. Space is required to receive, track, and temporarily store large numbers of packages; additional space is needed if the center offers shipping services as well.
- *Campus safety.* Millennial students, already sheltered by Boomer parents, came of age during an era of school shootings. The result is a marked rise in concern regarding student safety on campus and an increased focus on sufficient and visible campus security, ranging from an appropriate number of officers to the placement of emergency boxes. One challenge resulting from the desire to have a 24-7 campus operation is the provision of adequate security. Smaller or more remote campuses, perceived as easier to secure, could consequently seem more attractive. Community colleges could also fall into this category.

Food service. Food has become an increasingly important element of campus life. When it comes to food, today's students typically graze, consuming four meals a day at hours that may not be consistent with "typical" mealtimes. In part because they feel they are "worth it," Millennials crave made-to-order food—and when students get what they want, there is actually less waste. Food preparation is high drama, and students actually enjoy seeing their meal prepared, making the wait for the typically impatient, want-it-now Millennial worth it.

Alternatively, more than 200 campuses have adopted a Web portal that offers one-stop dining service (Maimone 2008). Students can view dining options across campus, order food electronically instead of at a counter, and view nutritional content information, which is particularly important for today's increasingly health-conscious students. At the College of William & Mary, which piloted the portal in 2005, satisfaction scores associated with food service were consistently higher than the national average.

Millennials are conventional and oriented to brand names and comfort foods, but they also want choices. It is no accident that, according to a recent advertisement, Starbucks has 87,000 possible beverage combinations. Cereal cafés and bars have begun to proliferate, offering one of the ultimate comfort foods at any time of the day. And what goes on that cereal? Milk choices include skim, low fat, soy, rice, flavored, and carbonated. One mechanical cow in the dining hall is no longer an option.

Residence halls. Residence halls are expected to have all the comforts of home and then some. For example, private bathrooms and showers are not simply preferred; they are expected. (Apparently, being team-oriented does not necessarily carry over to the area of personal hygiene.) There may be growing pressure for more single rooms and apartments, since most students have never shared a bedroom at home and many have never shared a bathroom.

Purdue University is constructing a two-building residential complex that includes a private bedroom and bathroom for each student along with communal spaces on every floor to encourage interaction. Pennsylvania State University and Stanford University have taken a similar approach (Schenke 2008). Iowa State University recently razed two high-rise residence halls and replaced them with contemporary facilities. Indiana University of Pennsylvania assessed its outmoded housing stock and took the bold step of replacing it—all of it—at a total cost

of \$270 million. The replacement project also allowed the university to promote its living-and-learning program as a means of enhancing student engagement outside the classroom (Supiano 2008).

The amount of electronic gear lugged to college by students—from micro-fridges to flat screen televisions—places an increased strain on residence hall electrical systems and also requires additional space. Based on an annual survey of newly constructed residence halls, the average square footage per bed continues to rise, currently exceeding 330 gross square feet (Abramson 2008). Almost one-third of recently completed residence halls include classrooms to support a living-learning environment, and one-fourth include fitness centers and computer centers. In addition, new residence halls consistently include study rooms, kitchens, and television rooms, and all contained a laundry.

Although doing laundry is not necessarily a high-pressure activity in and of itself, “LaundryView” was rolled out in 2004 at institutions in the greater Boston area to help students better manage their time (Pazzanese 2004). Washers and dryers can be monitored via a Web-based system, and students can be “pinged” on any Internet device when their laundry is done or a machine becomes available. Those so inclined can also watch their laundry dry virtually as the remaining minutes tick off. After its debut, LaundryView quickly became a “how-did-we-live-without-this?” amenity.

Recycling. Environmental concerns that began as a whisper almost 40 years ago are now deafening, with globally aware and civic-minded students among those at the forefront. Millennials are driving recycling efforts and encouraging college and university presidents to sign the American College & University Presidents Climate Commitment. There are 575 signatories to date (Presidents Climate Commitment 2008). In addition, *The Princeton Review* has provided “green ratings” for the first time in its 2009 edition (Princeton Review 2008). A total 11 institutions were awarded the highest score.

RecycleMania (see www.recyclemaniacs.org) is a 10-week contest that ranks various recycling efforts on participating campuses. Begun in 2001 with just two participants, interest has snowballed. There were 400 participants in 2008, recycling a total of 58.6 million pounds of material (RecycleMania n.d.). Although clearly valuable, recycling has space implications, ranging from providing clearly marked collection containers in public locations

around campus to back-of-the-house operations. Older residence halls, in particular, may lack collection space in waste rooms or the space to create other convenient collection points. If recyclables must be carted to a different floor or to the loading dock, then recycling efforts may suffer.

The institution as a whole must also deal with the space required for the collection and temporary storage of recyclables, ranging from cardboard (a particular challenge on check-in weekend) to compost to cooking oil. Meanwhile, architects have begun to realize that they must appeal to the environmental awareness of students as much as to the interests of the institutional holders of the capital purse strings.

What of the Future?

One of the key traits of Millennials is “specialness.” But when does the acknowledgement of a student’s specialness go too far? A recent *Chronicle of Higher Education* article described the “Club Ed” atmosphere at High Point University in North Carolina (Bartlett 2008). The amenities at High Point are numerous and unusual: a concierge desk, a gift card and balloons sent to each of the 2,000 undergraduates on their respective birthdays, kiosks offering free snacks around campus, and an ice cream truck with more free treats. The university’s slogan is “At High Point, every student receives an extraordinary education in a fun environment with caring people” (High Point University 2008, unpaginated Web source), and a Director of WOW! ensures that the fun never stops.

But how can the needs of future occupants be realistically anticipated?

Is this outrageous? Perhaps not entirely. Google is consistently ranked as one of the most desirable places to work by college students. On its Web site, one of the top 10 advantages cited for potential employees is the following: “There is such a thing as a free lunch after all. In fact we have them every day: healthy, yummy, and made with love” (Google 2008, unpaginated Web source). At Ben and Jerry’s, the positions of Grand Poobah and the Joy Gang have existed since the company’s founding in 1978. Meanwhile, back at High Point, enrollment has tripled and 18 buildings are either new or under construction. This is not to suggest that High Point’s efforts are to be slavishly

emulated, but to emphasize the fact that it is not “business as usual” for higher education, and a sea change is at work.

Just like their occupants, buildings have a generational locus. They are designed with the expectation that they may stand 100 years or more—the equivalent of five generations. But how can the needs of future occupants be realistically anticipated? Barely a decade ago, ubiquitous data jacks and desktop computers were the goal. Students toiled in electronic isolation; achieving the designation of “most wired campus” was an institutional badge of honor. Today, transparent technology is the norm for the current generation of “digital natives,” the Millennials who use technology to build a community that transcends time and space. However, this community also has a place in real time and space, a place where students learn, work, and socialize in groups, suggesting that walls may need to come down as frequently as they go up. 🏠

References

- Abramson, P. 2008. Large or Small, at Public or Private Schools, Residence Hall Costs Continue to Rise, in Living on Campus: College Housing Annual Report 2008, special issue, *College Planning and Management* 47 (5): 24–26, 28, 30. Retrieved October 18, 2008 from the World Wide Web: www.peterli.com/global/pdfs/CollegeHousing2008.pdf.
- Allen, R. L., J. T. Bowen, S. Clabaugh, B. B. DeWitt, J. Francis, J. P. Kerstetter, and D. A. Reick. 1996. *Classroom Design Manual*. 3rd ed. College Park, MD: University of Maryland.
- American College Health Association. 2008. American College Health Association–National College Health Assessment Spring 2007 Reference Group Data Report (Abridged). *Journal of American College Health* 56 (5): 469–80.
- Bartlett, T. 2003. Take My Chair (Please). *Chronicle of Higher Education* 49 (26): A36–A38.
- . 2008. Club Ed: This University Is at Your Service. *Chronicle of Higher Education* 54 (43): A1.
- Beloit College. 2008. Beloit College Mindset List. Retrieved October 18, 2008 from the World Wide Web: www.beloit.edu/mindset/.
- Biemiller, L. 2008. To College Employees, the Work Environment Is All-Important. *Chronicle of Higher Education* 54 (45): B12.
- Boswell, J. 1998. *Life of Johnson*. Unabridged ed. Ed. R. W. Chapman and J. D. Fleeman. Oxford World's Classics. Oxford: Oxford University Press.
- Boyer, E. L. 1987. *College: The Undergraduate Experience in America*. New York: Harper & Row.
- Cain, D., and G. L. Reynolds. 2006. The Impact of Facilities on Recruitment and Retention of Students, Part I: Research Findings. *Facilities Manager*, March–April, 54–60.
- Campbell, J. L., and A. S. Bigger. 2008. Cleanliness and Learning in Higher Education. *Facilities Manager*, July–August, 28–36.
- DeBard, R. 2004. Millennials Coming to College. In *Serving the Millennial Generation*, eds. M. D. Coomes and R. DeBard, 33–45. New Directions for Student Services, no. 106. San Francisco: Jossey-Bass.
- Dede, C. 2005. Planning for Neomillennial Learning Styles. *Educause Quarterly* 28 (1): 7–12.
- Geraghty, M. 1996. A New Kind of Student Union Aims to Meet Academic and Social Needs. *Chronicle of Higher Education* 43 (14): A39–A40.
- Google. 2008. Google Jobs: Top 10 Reasons to Work at Google. Retrieved October 18, 2008, from the World Wide Web: www.google.com/support/jobs/bin/static.py?page=about.html&about=top10.
- Grummon, P. 2008. *Summary Report of a Survey of Learning Space Design in Higher Education*. Ann Arbor: Society for College and University Planning.
- High Point University. 2008. 99 Reasons Why Students Love High Point University. Retrieved October 18, 2008, from the World Wide Web: www.highpoint.edu/.
- Howe, N., and W. Strauss. 2000. *Millennials Rising: The Next Great Generation*. New York: Vintage Books.
- . 2007. *Millennials Go to College*. 2nd ed. Great Falls, VA: LifeCourse Associates.
- Lancaster, L. C., and D. Stillman. 2002. *When Generations Collide: Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work*. New York: HarperCollins.
- Lewis, M. J. 2003. Forget Classrooms. How Big Is the Atrium in the New Student Center? *Chronicle of Higher Education* 49 (44): B7.
- Lopatto, E. 2007. Anxiety Disorders on the Rise at Colleges, Study Says (Update 1). *Bloomberg.com*, March 27. Retrieved October 18, 2008, from the World Wide Web: www.bloomberg.com/apps/news?pid=washingtonstory&sid=aTCAU6rwxB50.
- Maimone, C. A. 2008. Technology Comes to the Table. *Business Officer*, January, 22–26.
- Martin, P. 2007. *RenGen: The Rise of the Cultural Consumer—What It Means to Your Business*. Avon, MA: Platinum Press.
- Mayhew, L. B. 1979. *Surviving the Eighties: Strategies and Procedures for Solving Fiscal and Enrollment Problems*. San Francisco: Jossey-Bass.
- Oblinger, D. G., ed. 2006. *Learning Spaces*. Boulder, CO: Educause. Retrieved October 18, 2008, from the World Wide Web: net.educause.edu/ir/library/pdf/PUB7102.pdf.
- Pazzanese, C. 2004. Students Watch Web to Do Their Laundry. *Boston Globe*, February 8, W1.
- Presidents Climate Commitment. 2008. American College & University Presidents Climate Commitment: Signatories of the ACUPCC. Retrieved October 18, 2008, from the World Wide Web: www.presidentsclimatecommitment.org/html/signatories.php.
- Princeton Review. 2008. *The Best 368 Colleges 2009 Edition*. New York: Princeton Review.

Make Way for Millennials! How Today's Students are Shaping Higher Education Space

- RecycleMania. n.d. Final Results—RecycleMania 2008. Retrieved October, 18, 2008, from the World Wide Web: www.recyclemaniacs.org/results.aspx.
- Schenke, J. 2008. Purdue Students Prefer to Go Solo. *College Planning & Management* 11 (6): 60, 62–64.
- Strange, C. C., and J. H. Banning. 2001. *Educating by Design: Creating Campus Learning Environments That Work*. San Francisco: Jossey-Bass.
- Supiano, B. 2008. Swanky Suites, More Students? *Chronicle of Higher Education* 54 (31): A1.
- Toppo, G. 2007. Registration Open for “Virtual College Fair.” *USA Today*, November 13, 6D.
- Twenge, J. M. 2006. *Generation Me: Why Today's Young Americans are More Confident, Assertive, Entitled—and More Miserable Than Ever Before*. New York: Free Press.
- Zaslow, J. 2007. Blame It on Mr. Rogers: Why Young Adults Feel So Entitled. *Wall Street Journal*, July 5. Retrieved October 18, 2008, from the World Wide Web: online.wsj.com/article/SB118358476840657463.html.

[illegible]