



## **Students Directing Their Learning.**

Among the many forces changing higher education, students will take the lead, forcing teachers and colleges to transform themselves.

Part of this transformation will involve successfully relating to students who think differently about their education and where and how it happens. Learning spaces—how they're conceived and the form they take—will play a role in this transformation.

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The extraordinarily diverse and complicated system we call higher education has weathered previous storms—and criticism—with remarkable resilience. Yet the academy continues to move very slowly. If our world economy is in need of a major “correction,” is higher education, an entity several centuries in the making, ready to change in difficult times, or will it fight to remain what it has always been? If higher education is the immovable object, is there an irresistible force?

Yes—it is constant, escalating change, and the increasing complexity it causes.

Because change is everywhere—affecting how we meet, communicate, collaborate, purchase, and learn—the simplest processes, activities, and decisions become complicated and problematic. As the daily pace of life increases and the digital universe grows exponentially, one thing is certain: The future will be uncertain, filled with complexity, tensions, economic upheavals, dramatic twists and turns, and stress. Like the tax code, academia seems to become more complicated and complex with each passing day.

### Looking to the Future

Both individuals and organizations have pondered the future of education. Their suggestions for reforming it range from taking cautious, incremental steps through radical revision and transformation. Much of the deliberations, ruminations and predictions have centered on how colleges and universities must change to meet multiple challenges such as growing calls for accountability, economic issues, fast-changing technology, and new waves of students.

While there has been much discussion on how higher education will evolve, there has been less emphasis on how the next generation of students will change, forcing teachers and colleges to rethink their venerable traditions, pedagogies, and processes in order to effectively serve a new generation of learners, as well as returning students seeking skills improvement, career enhancement, and lifelong learning. There are warning signs emanating from prominent observers of the next generation of students that the rate of change in colleges must accelerate in order for them to successfully relate to these new students, who will be different because they will think differently.

### The New Learner

Harvard professor Howard Gardner, an expert in the field of human cognition, sees ever-increasing globalization influencing all aspects of society while education continues to be slow to adopt new methods or approaches. In his view, “current formal education still prepares students for the world of the past rather than for possible worlds of the future.”<sup>1</sup>

To meet the challenges of this new, fast-paced world, Gardner feels future students will need to develop five capacities, or skills—he calls them “minds”:

- The *disciplined* mind develops mastery in one field or subject—essential in an increasingly specialized and technological age.

Young people will trust their own initiative rather than choosing traditional careers. Work will become increasingly mobile and flexible. More people will turn their passion into a profession.

- The *synthesizing* mind is able to take information from a variety of sources, evaluate it objectively, and make sense of complex concepts, a skill valuable in an era of information overload.
- As a counterbalance to computers and robots, *the creative* mind can see information and ideas through an innovative and original perspective, reminiscent of Marcel Proust's statement: "The only real voyage of discovery consists not in seeking new landscapes, but in having new eyes."<sup>2</sup>
- The *respectful* mind sees and welcomes differences between individuals and groups of people, and tries to understand and work with them.
- In a more abstract manner, the *ethical* mind reflects on the nature of work and one's place, or role, in society and attempts to conceptualize how people can move past self-interest to improve relationships and society.

Gardner does not confine his analysis exclusively to college-age students; adult learners and the incumbent workforce are also included in his analysis. The era when one could acquire a degree or license and then coast through a long career with no further exposure to new ideas or information is long past. Given the dramatic increase of readily available knowledge, data, and information, any member of the workforce must become a lifelong learner in order to stay relevant and current. Understanding this concept will enable colleges and universities to broaden their offerings and welcome back, again and again, new and former students who need skills upgrading.

### Brave New World

German journalist Markus Albers sees an uncertain future challenging traditional "safe" parameters in life, such as permanent employment, fully funded pensions, and the 9-to-5 job. In his book, *Meconomy*<sup>3</sup>, he outlines some basic trends that will result in a less structured, self-energizing world.

In Albers' view of the future, young people will trust their own initiative rather than choosing traditional careers. Work will become increasingly mobile and flexible. Personal branding will be widespread, as more people turn their passion into a profession. The Internet will create a huge laboratory for learning, as ways of imparting knowledge increasingly become free, global, individual, and socially organized. In the Meconomy, individuals will take charge of their own careers, while employers will have to satisfy the needs of their highly qualified employees. Similarly, colleges will be challenged to find out what the next generation of students wants from their education.

Determining the wants of future students is likely to involve the challenge of fostering creativity. The KnowledgeWorks Foundation's 2020 Forecast<sup>4</sup> predicts that we are moving toward a "culture of creation" in which each individual has the opportunity and responsibility to help shape a collective future. The most vibrant innovations in education will come from outside traditional institutions, thus putting pressure on the educational establishment to keep up with innovation. As the foundation's website puts it:

"The validity and role of formal institutions of education will be challenged by key forces of change and will be reconsidered by an expanding group of stakeholders.

Together, the pressures of change and new stakeholder demands will create a new future for learning.”

Thus, higher education faces a dramatic change in how it relates to the new student. In an era where information proliferation increases the burden of making sense out of vast amounts of data, teachers and learners will need to become sophisticated in pattern recognition, much like Gardner’s *synthesizing* mind.

### Abandoning the Classroom

Recent surveys confirm that this brave new learner is causing ripples in education’s heretofore smooth waters by choosing to avoid or reject traditional classroom instruction.

Recent surveys confirm that this brave new learner is causing ripples in education’s heretofore smooth waters by choosing to avoid or reject traditional classroom instruction. A Sloan Foundation study entitled *Learning On Demand—Online Education in the United States, 2009*,<sup>5</sup> found that more than 4.5 million college students were taking at least one online course during the fall 2008 term, a 16.9 percent increase over the previous year. This growth rate for online enrollments far exceeded the 1.2 percent growth rate of the overall higher education student population. This means that just over 25 percent of all U.S. higher education students were taking at least one online course in the fall of 2008. To put it in a less positive light, one in four undergraduates chose not to go to a classroom for their learning.

But is the continuing growth in online courses a good thing? Is it increasing institutional effectiveness and enhancing student learning? Apparently so. In summer of 2009, the U.S. Department of Education released a report that examined 12 years of research comprising more than a thousand empirical studies. It found that online learning has clear advantages over face-to-face instruction. The study, *An Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*, summarized its findings in this way: “Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction.”<sup>6</sup>

The growing number of students seeking alternatives to classroom-based instruction indicates that traditional pedagogy may have to be re-evaluated to meet the needs of the technology-friendly student. The *2010 Horizon Report*,<sup>7</sup> a collaboration between the New Media Consortium and the EDUCAUSE Learning Initiative, identified a number of key trends that will affect traditional education:

- The sheer number of resources available through the Internet will increasingly prompt educators to keep their curricula and pedagogy current and appealing.
- Emerging certification programs, many of them online, may challenge the primacy of the academic degree.
- Learning will become ubiquitous, timely, and efficient as students expect to be able to work, learn, and study whenever and wherever they choose.
- The growing acceptance and adoption of cloud-based applications and services is changing not only the way we configure and use software and file storage, but also how we conceptualize those functions. This phenomenon makes learning accessible at any location and on any device.

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- The movement toward increased collaboration will dramatically change how students learn and how academic departments interact. A climate where students, their peers, and their teachers work toward the same goal can produce amazing gains in productivity and efficiency.
- New scholarly forms of authoring, publishing, and researching will continue to emerge. Appropriate metrics for evaluating new research and publication will evolve.
- Digital media literacy will continue its rise in importance as a key skill in every discipline and profession.

In *DIY U: Edupunks, Edupreneurs, and the Coming Transformation of Education*,<sup>8</sup> author Anya Kamenetz traces how technology has upset the traditional hierarchies and categories of education, placing the learner as preeminent rather than the teacher. Learners having access to technology allows them to determine when, where, and from whom information will be acquired, and in the process, contributes to the evolving transformation of education. Kamenetz identifies four trends guiding this process:

- **The 80/20 Rule:** Most of the growth in education in the future will come from the 80+ percent of students who are nontraditional—older adults, lifelong learners, and minorities. The elite institutions will remain stagnant while proprietary schools, community colleges, and open-enrollment institutions will continue to grow.
- **The Great Unbundling:** Traditionally, universities bundled social, educational, and other benefits in one package in one location—the campus. Digital technology liberates the student from a physical classroom. In the future, more specialization and collaboration will differentiate colleges from each other. Students can take courses from several institutions simultaneously.
- **Techno-hybridization:** Blended classes (combinations of in-person and online learning) are more effective than either technology-delivered or classroom-based experiences.
- **Personal Learning Networks and Paths:** With many learning options now offered online for free (TED, iTunes U, Open Courseware Consortium, Peer to Peer University, etc.), more learners will create their own curriculum, choosing learning experiences to match their interests and educational goals.

Kamenetz sees students increasingly rejecting high-tuition colleges and being concerned about the monetary value of a degree. If campus-based learning is in jeopardy due to increasing costs and change-resistant mentalities, is there a low- or no-cost alternative that may be more attractive to Net Gen learners? The answer is yes.

### No Cost Learning

In 2007, MIT celebrated the completion of a six-year initiative to put its entire curriculum online, with all 1,800 undergraduate and graduate courses, including lectures, readings, labs, problem sets, and exams available with just a few clicks—for free.<sup>9</sup> This generous gesture has since been adopted by more than 200 institutions in 32 countries that have posted courses at the Open Courseware Consortium,<sup>10</sup> an organization committed to the free and open digital publication of high-quality educational materials, organized as courses.

The increasing cost of traditional higher education will diminish applicant pools as fewer people see a college education as affordable or desirable. But some people will accept high cost in return for a customized educational program.

Having online access to university curriculum content at little or no cost is a direct threat to the business model of traditional colleges and universities, where tuition has increased at a rapid pace in recent years. Average tuition at four-year public colleges rose 6.5 percent to \$7,020 in the fall of 2009, according to the College Board's annual Trends in College Pricing report. At private colleges, the average list price for a year of coursework rose 4.4 percent to \$26,273. The residential experience raises the annual cost to \$35,636.<sup>11</sup>

One reason why tuition rates continue to climb is because we have traditionally measured education by the hour, which in turn drives the credit and full-time equivalent (FTE) calculations that trigger public higher education funding, as well as instructional costs at private institutions. This unit of measurement remains fixed and inflexible. If textbook costs continue to increase, if the cost of living and inflation rise each year, if faculty is guaranteed annual increases, and if governmental support is hindered by a weak economy, the cost of education will spiral upward, eventually driving all but the affluent to alternative, low-cost educational opportunities.

The increasing cost of traditional higher education will diminish applicant pools as fewer people see a college education as affordable or desirable. In a survey of 3,000 people conducted by Country Financial in the spring of 2010, 64 percent of those aged 18-29 said college is a good investment, compared to 77 percent the previous year; 62 percent of respondents over 65 years old said it is a good investment, down from 82 percent the year before.<sup>12</sup>

But some people will accept high cost in return for a customized educational program that suits their profile, work schedule, and learning needs. The for-profit proprietary colleges, some of which are listed on various stock exchanges, manage to produce educated citizens while making a profit. They offer convenience, flexibility, and accelerated courses. They promote networking among cohorts and have special appeal for those who want to enter the workforce quickly or improve their current status. While most of academia looks on the University of Phoenix with scorn, insisting that a for-profit institution cannot deliver the quality that the academy provides, UP's enrollment of more than 420,000 students at 200 campuses in more than 100 countries indicates that this alternative to the traditional campus-based education is popular.<sup>13</sup>

### Thoughts for the Future

The formidable combination of rising costs, an uncertain economy, education's resistance to change, and the technological revolution, coupled with predictions that a new breed of student and new type of thinker are on the horizon, all pose unique challenges to higher education. Herman Miller is committed to providing holistic design of effective learning spaces that can help meet these challenges. Based on our research, here are some thoughts on what the future may hold for higher education in the area of learning spaces.

Competition with traditional educational providers will escalate, with attractive learning environments, convenience, accelerated pace, 24/7 access, and lower cost being the

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differentiators. In particular, learning environments will become more important in terms of "branding," or positioning, an institution.

To achieve a competitive advantage, colleges will need to devise adaptable and flexible instructional spaces by providing embedded services, flexible furnishings, enhanced comfort, and individual control, thus allowing the learning experience to become a variety of "scenarios" in which conversation, collaboration, and engagement can occur. Primary emphasis will not be on color, form, and style, but on thoughtfully considering the user, pedagogy, social context, and impact of the experience on the surrounding environment.

Technology will continue to cause a rethinking of traditional methods of instruction, liberating the educational experience from a single place to a "learning anywhere, anytime" modality. Mobile digital communication tools will be increasingly embedded in the experience. Spaces that "sense" learner needs and consequently adapt and respond to those needs will make the learning experience both educational and transformational. The Internet will be an immersive experience, and the traditional concept of "campus" will change forever.

Learning locations will become more diffuse. As budgets are challenged, colleges will move to use all aspects of their physical plant as learning spaces, not just classrooms and laboratories. Emphasis will shift from maintaining traditional facilities and practices to reinventing existing spaces in new ways that are highly energized, engaging, flexible, and thought provoking. Repurposed venues such as strip malls, community centers, and vacated real estate will become community learning satellites as college campuses are maxed out due to space and budget limitations.

The more institutions can iterate and flex their learning spaces, the better they will fare in a future of higher education that will be volatile to say the least. Taking a problem-solving, research-driven approach to anticipating trends and issues will be critical for higher education as it evolves. As will a tenet that remains no matter how learners change—that learning spaces are the sum of people, pedagogy, and place. When they are combined in a way that's right for the institution, the possibilities can enrich teaching and learning for students, faculty, administrators, and the community.

## Notes

- <sup>1</sup> Howard Gardner, *Five Minds for the Future* (Boston: Harvard Business School Publishing, 2008).
- <sup>2</sup> Frog design web site, <<http://www.designmind.frogdesign.com/articles/work-life/the-free-lance-life.html?>> (accessed August 2010).
- <sup>3</sup> Markus Albers, *Meconomy* (Amazon: Kindle Edition, 2010).
- <sup>4</sup> KnowledgeWorks Foundation website, <<http://futureofed.org/forecast>> (accessed August 2010).
- <sup>5</sup> Elaine I. Allen and Jeff Seaman. *Learning on Demand—Online education in the United States, 2009* (Babson Survey Research Group and the Sloan Consortium, November, 2009).
- <sup>6</sup> U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies* (Washington, D.C., 2009).
- <sup>7</sup> L. Johnson, A. Levine, R. Smith & S. Stone, *The 2010 Horizon Report* (Austin, Texas: The New Media Consortium, 2010).

- <sup>8</sup> Anya Kamenetz, *DIY U: Edupunks, Edupreneurs, and the Coming Transformation of Education* (White River Junction, Vermont: Chelsea Green Publishing, 2010).
- <sup>9</sup> MIT Open Courseware, <<http://ocw.mit.edu/about>> (accessed August 2010).
- <sup>10</sup> Open Courseware Consortium. <<http://www.ocwconsortium.org>> (accessed September 2010).
- <sup>11</sup> Michael Lee, Jr., and Anita Rawls. *The College Board Completion Agenda, 2010 Progress Report* (New York: The College Board, 2010).
- <sup>12</sup> Country Financial website, *Fewer Americans Believe College is a Good Investment*, <<http://www.countryfinancialsecurityindex.com>> (accessed September 2010).
- <sup>13</sup> *Forbes BusinessWire, Apollo Group Inc. Reports Fiscal 2009 Third Quarter Results*, June 29, 2009, <<http://www.forbes.com/breakingnews/businesswire.html>> (accessed August 2010).

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