Cheryl Perkins
On the Leading Edge of Innovation

The Courses and Curricula That Foster Innovation

New Approaches to Teaching
On the Edge of Innovation
If organizations want to innovate, says Cheryl Perkins of Innovationedge, they must focus on products, processes, and people.

Innovation: A Leadership Essential
Business schools must go outside traditional courses to teach students new ways to think about business, suggests Stanford’s Garth Saloner.

Paths to Innovative Leadership
UC Berkeley’s Rich Lyons calls for business schools to find their own best approaches to innovation.

Following New Directions
Faculty at several business schools share how they take the traditional business curriculum into nontraditional directions.

Create Space for Innovation
Dartmouth’s Vijay Govindarajan argues that business schools must seek out disruptive innovation.

Teaching Differently
The University of Central Missouri shakes up the curriculum with a block of interconnected courses that take an unconventional approach to learning.
The Innovative Journey

I love my Prius, but I hate driving in heavy traffic, so there are times when I wistfully think about a day in the future when cars will actually be able to drive themselves. Thanks to the boundlessly creative folks at Google, that day might be coming sooner than I expected. Last fall, the company revealed that it had already built and road-tested a fleet of self-propelled vehicles, sending them off to navigate more than 140,000 miles of California roadways. The only accident occurred when a human driver rear-ended a Google car at a stop sign.

Experts expect self-operated cars to offer all sorts of advantages, from lower fuel consumption to fewer traffic fatalities, and I’m ready to see one parked in my driveway right now. But then I think about all the other innovations in transportation that I might like even better—flying cars, personal jetpacks, teleportation systems. It’s possible that, sometime in the future, no human will ever get behind the wheel of a car again.

Innovation is the theme of this issue, but we’re not just celebrating the kind of imaginative thinking that results in alternate modes of travel. We’re looking at innovations in management—and management education—that are transforming the way business is run in the boardroom and taught in the classroom.

We open by talking to Cheryl Perkins, a former chief innovation officer at Kimberly-Clark who now consults with business leaders on processes, strategies, and reward systems that will make their companies more innovative. We then share the details of new courses and curricula at schools like Stanford, Berkeley, and Aston Business School, where students are learning to think innovatively and manage creatively.

Soon we also will be showing off a few innovations of our own. BizEd reaches its tenth anniversary this November, and we plan to mark the milestone with a graphic makeover and a few other changes. In the May/June edition, we’ll introduce an updated logo, a new cover concept, and a different look for the feature pages.

Meanwhile, we’ve redesigned our Web site, which can be found at www.bizedmagazine.com. Before the year is out, we plan to have a digital edition of the magazine up and running so readers can access the issues online. When our anniversary issue rolls around, we plan to fill it with special content. We’ll not only look back on the most important trends we’ve identified over the decade, but also look ahead to what business schools might expect in the next ten years.

Of course, the nature of innovation is that it’s hard to forecast. Like the self-propelled car, it turns a familiar journey into a wholly new experience. At BizEd, we strive to find and share the stories of the business schools where the future is already being reimagined so we can develop a roadmap for where business is going next.
Executive MBA programs saw a modest increase in inquiries and applications in 2010, according to the 2010 Membership Program Survey conducted by the Executive MBA Council headquartered in Orange, California. On average, programs received 533 inquiries, up from 519 in 2009, and the number of applications per program was 93.3, up from 92.6 the year before.

The survey, which gathered information from more than 300 schools, indicated that the typical applicant profile remains fairly consistent. In 2010, EMBA students had an average of 8.4 years of management experience, 13.3 years of work experience, and GPAs of 3.18. In 2006, those numbers were 8.3, 12.8, and 3.16, respectively. But more students are older, and fewer are women. In 2006, the average age was 36.5 years; today, it’s 37.1. And four years ago, 28 percent of the EMBA students were women, compared to 26 percent today.

The program structure has not changed greatly during this time, remaining at an average of 20 months long. The average class size is 45 students, compared to 42 four years ago. Sixty-four percent of programs require an international trip, most often to China, Brazil, or India. More programs—9.4 percent, compared to 6.3 percent in 2006—focus on a particular industry or profession, with the most common being healthcare.

Costs are going up, too. The average program tuition in 2010 was $65,655, a 4.5 percent increase from 2009. Thirty-five percent of students pay their own tuition, 36 percent receive partial reimbursement from their companies, and 30 percent receive full reimbursement. Those numbers haven’t changed greatly, although there are slight increases in the number of students wholly or partially funding their own EMBA degrees.

AACSB International has formed a new Blue Ribbon Committee on Accreditation Quality to evaluate the state of readiness of AACSB’s accreditation standards and processes to ensure that management education aligns with global business practice. The committee also will set expectations for the level of quality and continuous improvement that business schools must demonstrate in the future.

The committee will perform a comprehensive review of AACSB’s accreditation standards, eligibility criteria, and accreditation process. Members of the committee represent a cross-section of AACSB members, including representatives from accredited schools, schools in the accreditation process, and non-education institutional members. The committee is co-chaired by Thierry Grange, dean and director general of Grenoble Ecole de Management in France, and Richard E. Sorensen, dean of the Pamplin College of Business at Virginia Tech in the U.S.

“As AACSB works to address the rising global demand for accreditation, it is important for us to
consider diverse models of education while encouraging innovation,” says John J. Fernandes, president and CEO of AACSB. “With the forces impacting businesses worldwide, it is the responsibility of AACSB to evaluate accreditation standards and processes to ensure business schools maintain their relevance and value to businesses—locally, regionally, and globally.”

The Cost of Dropping Out
Four-year colleges and universities in the U.S. that face rising expenses and tightening budgets can add one more lost opportunity cost to their lists: the $9 billion spent over five years by state and federal governments to support students who left school before their sophomore years. That figure is provided by the American Institutes for Research (AIR), a nonprofit that conducts research in health, education, and workforce productivity and is based in Washington, D.C.

In *Finishing the First Lap: The Cost of First-Year Student Attrition in America’s Four-Year Colleges and Universities*, AIR researchers analyzed 2003–2008 data from the federal Integrated Postsecondary Education Data System. They found that the 30 percent of first-year college students who failed to return to campus for a second year accounted for $6.2 billion in state appropriations for colleges and universities and more than $1.4 billion in student grants from the states. Additionally, the federal government provided $1.5 billion in grants to these students. California, Texas, and New York led the nation in government spending on students who dropped out before their second year.

*Finishing the First Lap* serves as the foundation for AIR’s new interactive Web site, CollegeMeasures.org, which provides graduation rates and expenditure data for all 50 states, six metropolitan areas, and more than 1,500 institutions.

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**Nobels in the News**

**Economists for Peace**
Banding together under the auspices of Scholars for Peace in the Middle East, 38 Nobel Laureates have taken a stand against attempts to punish Israeli academics and institutions through boycotts, sanctions, or divestitures. Among them are eight professors with Nobel Prizes in Economics.

The group is particularly concerned by actions such as a boycott of Israel’s Ben Gurion University threatened by the University of Johannesburg in South Africa; student government divestment efforts in the University of California system; and an initiative to shut down the Georgia Law Enforcement and Education Center at Georgia State University, which has connections with institutions in Israel.

According to the Nobel Laureates’ statement, “Academic and cultural boycotts, divestments and sanctions in the academy are: antithetical to principles of academic and scientific freedom, antithetical to principles of freedom of expression and inquiry, and may well constitute discrimination by virtue of national origin.” The statement goes on to say that such efforts are counterproductive to the dynamics of reconciliation that lead to peace. The full text of the statement, and a list of Laureates who have signed their names to it, can be found at spme.net/cgi-bin/articles.cgi?ID=7339.

**The Nobel in Economics**
Three professors have won the 2010 Nobel Prize in Economics for theories that analyze how the frictions of search markets affect unemployment, job vacancies, and wages. The Laureates are Peter A. Diamond, Institute Professor and professor of economics at Massachusetts Institute of Technology in Cambridge, Massachusetts; Dale T. Mortensen, Ida C. Cook Professor of Economics at Northwestern University in Evanston, Illinois; and Christopher A. Pissarides, Professor of Economics and Norman Sosnow Chair in Economics at the London School of Economics and
SHORT TAKES

NEW APPOINTMENTS

Partha Mohanram, an associate professor of accounting at the University of Toronto’s Rotman School of Management in Ontario, will be the first to hold the school’s new CGA Ontario Professorship in Accounting. The professorship is supported by the Certified General Accountants (CGA) of Ontario.

David L. Cooperrider has taken a role as the third Peter F. Drucker Distinguished Fellow for the Peter F. Drucker & Masatoshi Ito School of Political Science. They will share a prize of USD1.5 million.

According to the Nobel committee, the Laureates formulated a theoretical framework for search markets and analyzed the “frictions” that occur when searches do not match up. For instance, in a labor market, some people are looking for jobs, and some people are looking for workers. In each case, some demands will be unmet, leading to labor markets that contain both job vacancies and unemployment. Diamond first analyzed the foundations of search markets, while Mortensen and Pissarides applied the theory to the labor market.

The work of the three Laureates also examines how economic policies and regulations can affect labor markets. In addition, their analyses can be applied to search markets other than labor, such as housing, monetary theory, financial economics, regional economics, and family economics.

B-schools and the Innovation Curve

The Graduate Management Admission Council offers a wealth of information on how innovation and the ability to manage it are highly valued in the MBA job market.

Employers Want Creative Thinkers

When hiring MBAs, most employers look for innovators. Industry sectors with the highest percentage of recruiters looking for creativity and innovation in MBAs:

- 78% High-tech
- 76% Health care/pharmaceutical
- 74% Products and services
- 73% Energy/utilities

Source: 2009 GMAC® Corporate Recruiters Survey of more than 2,800 employers in 65 countries, including a third of Global Fortune 500 companies that work with business schools worldwide. The survey details hiring trends and market demand for graduate business students.

For Innovators, Business Degrees Pay

Among graduating students with job offers in the Class of 2010, those rated “innovators” (for their comfort with change and likelihood of accepting innovative ideas) saw the biggest change in average salary from their pre-degree earnings:

- Innovators = +58%
- Early adopters = +53%
- Early majority adopters = +51%

Source: 2010 GMAC® Global Management Education Graduate Survey of more than 5,000 business school students, who provided opinions about their programs, the value of their education, and their job search and career plans.

Sign up your school to facilitate GMAC’s upcoming surveys of graduating students and corporate recruiters, and get participant-only comprehensive results, including a free benchmarking report. The deadline is January 24, 2011. Visit gmac.com/surveys. Sign up today!

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**Headlines**

**Management at Claremont Graduate University in California.** Cooperrider is the Fairmount Minerals Professor of Social Entrepreneurship at Case Western Reserve University’s Weatherhead School of Management in Cleveland, Ohio.

**Richard J. Cebula** has been named the first Billy J. Walker/Wells Fargo Endowed Chair of Finance in the Davis College of Business at Jacksonville University in Florida.

**Georgia State University’s J. Mack Robinson College of Business in Atlanta has appointed Ihsen Ketata as director of the new Center for International Business Education and Research (CIBER).**

**Stepping Down**

Gail Naughton has announced that she will step down as dean of San Diego State University’s College of Business Administration in the spring. She has been dean of the California school since 2002. During her tenure, Naughton oversaw an increase in philanthropic support for the college, including $10 million from the estate of Charles Lamden to name the SDSU School of Accountancy. After leaving the deanship, Naughton plans to focus on her work as chairman and CEO of Histogen Inc., which she founded in 2007. She also will teach a graduate-level entrepreneurship course in the fall.

**Honors and Awards**

Marjorie Kalter has been awarded the Edward N. Mayer Jr. Educational Leadership award from the Direct Marketing Association. She is academic program director and clinical professor in the graduate program in integrated marketing at the New York University School of Continuing and Professional Studies.

The Nance College of Business at Cleveland State University has been awarded an Ohio Governor’s Excellence in Exporting Award for helping local companies increase their global exports. Among this year’s 20 recipients, CSU was named the Nonprofit Exporter of the Year. Through the school’s Global Business Center, CSU created the GlobalTarget program designed to help local businesses expand into international markets by leveraging the talent of experienced international business practitioners.

The future home of the Stanford Graduate School of Business in California has won the 2010 Green Project of the Year, Private Award, from the Silicon Valley/San Jose Business Journal. The newspaper cites the sustainable design features that distinguish the Knight Management Center, a complex of eight buildings in three quads. The facilities will incorporate innovative heating and cooling systems, use reclaimed building materials, rely on extensive natural lighting and ventilation, and include an on-site solar array. The Knight Management Center will seek platinum certification, the highest level available through the U.S.
Green Building Council’s Leadership in Energy and Environmental Design (LEED) program.

- The Consortium for Graduate Study in Management, a not-for-profit organization focused on diversity in American business and business education, has received the National Black MBA Association’s (NBMBAA) Outstanding Educational Institution signature award. The honor is bestowed on the college, university, or organization that has made the greatest contribution toward encouraging African Americans to enter the field of business. The Consortium is headquartered in St. Louis, Missouri.

- Raghuram Rajan has won the Financial Times and Goldman Sachs Business Book of the Year award for Fault Lines: How Hidden Fractures Still Threaten the World Economy. Rajan is the Eric J. Gleacher Distinguished Service Professor of Finance at the University of Chicago Booth School of Business in Illinois, as well as a former official of the International Monetary Fund.

NEW COURSES AND PROGRAMS

- A concentration in entrepreneurship is now available at the Dolan School of Business at Fairfield University in Connecticut, which is offering courses on issues such as launching technology ventures and managing family businesses. Among the professors who will be teaching the entrepreneurship courses is new faculty member Mukes Sud, who will cover social entrepreneurship and other topics.

- To reflect Jacksonville University’s commitment to holistic leadership development within its graduate programs, the Davis College of Business at the Florida school has redesigned its EMBA program to put a major emphasis on executive health and fitness. For the revamped MBA, the school is collaborating with the Mayo Clinic Jacksonville, which will provide personal executive assessment and offer a variety of seminars on physical and psychological well-being.

- This fall, Nova Southeastern University’s H. Wayne Huizenga School of Business & Entrepreneurship in Fort Lauderdale-Davie, Florida, launched a Sales Program and Institute designed in partnership with sales training firm Sandler Training. The alliance will help the school develop new undergraduate and graduate business degree programs, as well as certificate programs, in sales and sales management. A major gift from businessman H. Wayne Huizenga has resulted in the new institute being named the Huizenga Sales Institute.

- In December, HEC Paris in Qatar, a member of Qatar Foundation’s Management Education and Research
**Headlines**

**SHORT TAKES**

Center (MERC), debuted a new executive program in the capital city of Doha. The program, Managing Strategic Finance for Value Creation, is aimed at encouraging the country to diversify its economic base. It will help senior managers assess the financial health of their firms, evaluate investment projects, and understand investor and stakeholder expectations.

The Neeley School of Business at Texas Christian University in Fort Worth is launching a new Values and Ventures Program, funded by a gift from a private foundation. The program features a national competition for undergraduate students that focuses on specific ways to ensure a new venture is viable while also creating meaning for the organization and significantly improving quality of life. The first Values and Ventures competition is set for spring 2011 at the Neeley School. Students from TCU as well as other entrepreneurship programs are invited to participate. The Values and Ventures Program also will include speaker events focused on innovation. The Jane and Pat Bolin Innovation Forum, funded by a separate gift, will be an annual event that features a speaker who has transformed a business or a business environment.

**COLLABORATIONS**

- **Baruch College** in New York City will partner with Sunshine Suites, a community-based shared office space, to offer greater assistance and support to entrepreneurs in the region. The collaborative educational pilot is being developed by Baruch’s Lawrence N. Field Center for Entrepreneurship and the Baruch Small Business Development Center. About 600 clients of Sunshine Suites will receive onsite guidance from Baruch’s Zicklin School of Business faculty and advisors. At the same time, students from Baruch College’s entrepreneurship program will learn from guest speakers drawn from the small businesses housed at Sunshine Suites and will also receive job and internship opportunities at those companies. Additionally, finalists in the annual Baruch College Invitational Entrepreneurship Competition who start their own businesses will be given free or discounted office space at Sunshine Suites during their initial launch phase.

- Two California schools—CSU Channel Islands (CI) in Camarillo and Santa Barbara City College—have created a partnership to offer the CI bachelor of science in business program at the Santa Barbara school. CI’s Martin V. Smith School of Business & Economics will hold classes at SBCC, retaining academic and administrative control over the classes while SBCC provides facilities and aids in recruitment.

- The Wharton School of the University of Pennsylvania in Philadelphia has established a Partnership for Globalization with Sovereign Bank, part of Banco Santander, a retail and commercial bank headquartered in Spain. The collaboration will be channeled through Santander Universities, the bank’s global higher education division. The partnership will support initiatives at the Wharton School and the Lauder Institute, focusing on the economic, technological, political, and social aspects of globalization. The Lauder Institute, a joint venture between Wharton and the School of Arts and Sciences, will launch the TrendLab on Globalization, which will provide annual in-depth analysis of globalizing trends and host a yearly five-day conference.

- **Lancaster University** in the U.K. has acquired the Work Foundation, an independent authority on work and its future. The Work Foundation will continue to operate as a distinctive entity, but the alliance allows the two organizations to exploit synergies and draw from each others’ networks.

- **Indiana University** in Bloomington has launched a collaboration with O.P. Jindal Global University (JGU), a private university in Haryana, India, just outside New Delhi. The alliance will encourage interaction between JGU and three of IU’s professional colleges: the Kelley School of Business, the Maurer School of Law, and the School of Public and Environmental Affairs, along with the IU Center on Philanthropy. For the Kelley School, the collaboration means joint work on a new master’s in business and law degree, an executive education program, and undergraduate initiatives.

**GIFTS AND DONATIONS**

- Henry R. Kravis, co-chairman and co-CEO of investment firm
Kohlberg Kravis Roberts & Co., has pledged $100 million to Columbia Business School in New York City. The gift, the largest in the school’s history, will support construction of new facilities that are part of Columbia’s long-term campus plan in an old manufacturing zone. One structure on the new campus will be named the Henry R. Kravis Building. The new campus will help broaden the business school’s community engagement and outreach programs, which will complement Kravis’ work in founding an investment fund that sustains businesses in inner-city New York.

Harvard Business School has received a gift of $50 million from Tata Companies, the Sir Dorabji Tata Trust, and the Tata Education and Development Trust, philanthropic entities of India’s Tata Group. A conglomerate founded in 1868, the Tata Group owns 28 publicly listed enterprises across seven business sectors.

The gift, the largest from an international donor in the school’s history, will fund a new academic and residential building on the HBS campus in Boston, Massachusetts, for executive education participants. The school hopes to break ground for the building, which will be named Tata Hall, next spring. Part of the money from Tata will also be used to support the Harvard Innovation Lab, which opened this fall with the goal of spurring innovative ventures at Harvard Business School, the university, and the nearby Allston-Brighton neighborhood.

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Headlines

SHORT TAKES

■ The Wharton School of the University of Pennsylvania in Philadelphia has announced a $15 million gift from Patty and Jay H. Baker to permanently endow the Jay H. Baker Retailing Center. Jay Baker is a member of the Wharton Board of Overseers and retired president and director of Kohl’s Corporation.

■ Investor Wilbur L. Ross, CEO and chairman of WL Ross & Co., has pledged $10 million to support construction of the new campus at the Yale School of Management in New Haven, Connecticut. His gift is directed toward the library in the new building, which will be a state-of-the-art facility supporting teaching and research.

■ The University of Toronto in Ontario has received $2.5 million from BMO Financial Group to support the expansion and renovation of the Rotman School of Management and create new scholarship funding. Of the gift, $1.75 million will go to refurbish the school’s finance lab, which will be renamed the BMO Financial Group Finance Research and Trading Lab. The balance of the money will establish BMO Financial Group Access to Higher Education Awards for students from disadvantaged communities and nontraditional educational backgrounds. The BMO gift is part of the School’s $200 million fundraising campaign.

FACILITIES UPDATES

■ This fall, the University of Washington Foster School of Business in Seattle dedicated PACCAR Hall, the first phase of an expanding campus for the school. The 132,000-square-foot, $95 million, privately funded building was designed by LMN

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Architects of Seattle and is expected to receive LEED Gold certification. It was named in recognition of a major gift from PACCAR Inc., a global technology company based in Bellevue, Washington. The new building features variable classroom sizes and designs, student breakout rooms, an auditorium, an atrium with a café, and faculty office space. It also is equipped with a wide range of technology enhancements that enable videoconferencing, audio and visual recording, and access to online course content.

To express appreciation for a large, confidential gift from business leader Ronald D. Offutt, Concordia College in Moorhead, Minnesota, has named its business school the Offutt School of Business. The chairman and CEO of R.D. Offutt Company and RDO Equipment has served as a longtime member and chair of the Concordia Board of Regents. The Offutt School of Business is in the process of raising $50 million to support its business program and facility. The new facility will include smart technology, boardrooms, trading rooms, and other amenities.

The University of Victoria in British Columbia is renaming its Faculty of Business the Peter B. Gustavson School of Business. Gustavson, head of private equity firm Gustavson Capital Corporation, has been involved with the school since 2003 as an employer, member of its advisory board, executive-in-residence, and chair of the Distinguished Entrepreneur of the Year Award event that he helped establish. In March, he donated CAN$10 million to the school, the largest single amount ever received by the University of Victoria.

OTHER NEWS

Educational Testing Service (ETS) has created an online Advisor Information Kit as part of its transition to the GRE revised General Test, launching in August 2011. The free kit, which is designed to help those who advise candidates about the application process, contains official information about taking the GRE General Test in 2011. Resources include an advisor video, an advisor’s guide, a variety of ads, plus student overviews. The complete Advisor Information Kit is available at www.ets.org/gre/advisorkit.

The Project Management Institute Educational Foundation, a nonprofit public charitable organization that offers a scholarships and awards program, will assume the administration of the Kerzner Award. The award goes to project managers who most emulate the professional dedication and excellence of Harold Kerzner, senior executive director at the International Institute for Learning.

This February, the University of Illinois College of Business in Champaign is holding its first Illinois MBA Scholarship Case Competition. Its goal is to introduce prospective students to the types of learning and critical thinking skills they will need if they enroll in business school. Participants will be asked to formulate recommendations on whether or not to go forward with a new product launch. The winner receives a two-year scholarship to the Illinois MBA program; second prize is a one-year scholarship, and third prize is a $10,000 scholarship.
On the Edge of Innovation

by Sharon Shinn

If innovation is the go-to strategy of the decade, Cheryl Perkins wants to be the go-to consultant on the topic. She’s founder and president of Innovationedge, a consulting firm based in Neenah, Wisconsin, that helps companies and individuals develop innovations and business solutions.

Perkins was no stranger to innovation before she launched her own firm in 2007. She has held a variety of positions at consumer products company Kimberly-Clark, most recently as senior vice president and chief innovation officer. In that role, she was responsible for innovation and enterprise growth in areas such as R&D, engineering, design, safety, and environmental sustainability.

She and her colleague at Innovationedge, Jeff Lindsay, recently distilled some of their learning into the book Conquering Innovation Fatigue, and they offer ongoing insights online at innovationedge.com/blog/. In the past five years, BusinessWeek listed Perkins as one of the top 25 Champions of Innovation in the world, and Consumer Goods Technology magazine named her a top executive driving vision within that industry.

While she’s highly focused on what businesses must do to thrive, Perkins knows that many executives count on higher education to support their efforts to grow and change. That’s especially true during uncertain economic times, when many workers—including top managers—are returning to school to acquire new skills.
Innovation is not a goal—it’s a mechanism to achieve a business goal, and it goes beyond a company’s products and services.

“As executives try to be more innovative in the workplace, they look to universities to meet their new demands, so universities also must innovate,” Perkins says. “Business schools have realized they need to diversify their curriculum and broaden their content, but many of them haven’t changed their modes of delivery.” Whether that means embracing online learning or expanding global travel requirements, she says, “content and delivery both need to change for schools to address demands for innovation in the workplace.” And innovation, she points out, is the strategy that will determine whether or not a business succeeds in the 21st century.

It seems like “innovation” is a word that’s being broadly applied to everything from marketing to design. Can it be narrowed down? What would be your working definition of the term?

Innovation in its simplest form is the introduction of something new that will create economic value. Innovation is not a goal—it’s a mechanism to achieve a business goal, and it goes beyond a company’s products and services. It can be about a company’s business model or processes, how it engages with customers, or how it communicates, translates, and services its brands. So innovation is not just about the what, it’s about the how—how entrepreneurs or corporations or universities leverage partnerships and/or networks to deliver on their final products.

Today, more companies want to harness innovation, but isn’t telling employees to “be innovative” like telling them to “be creative”—either they are or they aren’t? Or is innovation really something that can be taught?

Some people are inherently wired to think innovatively, but that mode of thinking also can be encouraged. An organization that wants to encourage innovation needs to focus on two things: creating the right culture and developing the right processes, which includes offering the right incentives. If an organization doesn’t reward innovative culture and behavior, it won’t stimulate innovation. So it’s important for an organization to set clear structures, objectives, and roles, and then reward the right behaviors.

Often, when companies stall, we see that they’ve put processes in place and told employees, “OK, now be innovative,” but they haven’t offered the right incentives. Nothing will change, because they’re asking for innovation in a culture that stifles it.

Why do you think innovation has become such a key topic at this moment in time?

Innovation is so important now because people are being asked to innovate with less—less money, less time, and fewer people. During economic downturns, organizations cut costs, focus on return on investment, avoid risks, demand accountability for everything, stop listening to their end users, and stop investing in innovation. These behaviors don’t stimulate innovation at all. Company leaders are saying, “Innovate,” but the company’s culture, processes, and rewards actually inhibit innovation.

What is your process for working with your clients? For instance, can you describe the typical consultation you would have with a solo entrepreneur?

We start with the analogy of a “circuit of innovation,” which we relate to the energy that flows through a circuit to turn on a light bulb. We learn about the entrepreneurs—what they’re passionate about, what their goals are—and we learn about their inventions.

Next, we create a market entry strategy and a market plan, and we connect the entrepreneurs with people who care. Those might be business owners or C-suite individuals who make decisions about bringing new products into their pipelines. We bring them the total package, the business proposition along with the invention, and, if appropriate, we facilitate the deal.

How is the approach different when you work with corporations instead of individuals? Is it more difficult to get a whole organization thinking innovatively?

When we work with companies, we help them establish processes to screen and enable inventions internally. We’ll modify the strategy and the process, and we’ll develop the measures and rewards to create the environment that allows them to leverage their competitive advantage.

One challenge during economic downturns is that employees begin to suffer what we call “innovation fatigue.” It has three components—human behavior, organizational flaws, and external factors. For instance, fatigue can set in when employees develop the “not invented here” syndrome. “Someone has come up with an idea and it might be great, but it’s not mine.” Fatigue can also result when the organization doesn’t reward innovation, or when a company tries to cope with ever-changing federal laws and regulations.

We work with a company to diagnose which factors are affecting them and which ones aren’t. Then we give the leaders a three-to-five-year roadmap that focuses on ele-
ments like strategy, culture, people, processes, metrics, and networks. Some companies ask us to come back a few years later and do another roadmap or audit the work they’ve done so far. It’s not unusual for us to refine the roadmap based on how the competitive landscape or the availability of resources has changed.

Like businesses, institutions of higher learning need to be innovative, but universities aren’t known for embracing new ways of operating. If you had been called in as consultant to help a business school at a traditional public university become more innovative, what kind of advice would you give?

I’d recommend three things. First, they should do the diagnostic. Administrators need to know what they mean by innovation and which of their processes are enabling and disabling it.

Second, they should create a roadmap to determine which important tasks they need to do this year versus next year versus the following year. These tasks might be related to anything from the curriculum to reward programs. The diagnostic points them to where their biggest issues and challenges are.

Third, they should get stakeholder alignment on the change process. Many times, organizations have innovative ideas, but they don’t do a good job managing change with their stakeholders. They don’t provide enough communication or explain what the changes will mean to each stakeholder. An organization has to manage change from day one, or it won’t happen successfully.

Many businesses these days have chief innovation officers. Is that something universities need as well? Or should innovation be the responsibility of everyone at a company or school?

Even if everyone has some responsibility for innovation, there still needs to be someone looking at the broad picture and delivering on the overall strategy. Many companies have a chief innovation officer or a VP of innovation. Some split the role, so one leader is responsible for near-term innovation and one is responsible for long-term breakthrough innovation.

Regardless of the leadership structure, every company and every university needs someone who is looking across the whole enterprise and asking, “Do we have the right skill sets? The right metrics? The right processes? The right curriculum?” That individual is working from a broader roadmap than anyone else who might own innovation in a single business unit, functional area, or academic department.

That leader needs a very different skill set than we’ve seen in the past. Innovation officers used to be technically savvy. They had deep expertise, but it was rarely broad. Today the people who are successful in these innovation roles understand the business and the technical sides. They don’t just focus on the invention, they think about the market, the end user, the business strategy, the value proposition, and the long-term sustainability. They’re truly business leaders.

How can business schools prepare their graduates to be leaders of innovation when they go into the workforce? What skills do they need to teach?

Innovation leaders succeed by influencing others. That means they need to have very solid communication and negotiation skills. They have to be able to drive change and migrate the culture, and they have to be able to influence those above them, below them, and laterally, even though they don’t have direct responsibility for these people.

Exerting influence isn’t just about understanding people, it’s about understanding organizations. Where are the decisions made, and how can you be part of them? Strong lines of reporting don’t exist any more in matrix organizations, so all the work gets done through influence, collaboration, and problem solving.

How can schools teach students those particular skills?

I’ve seen business schools offer courses like “Introduction to Persuasion,” “Negotiating to Yes,” and “Understanding Corporate Culture.” These are very different from your old “Marketing 101” class. Schools also can teach problem-solving skills by giving students cases where they have to fix a problem even when they have no direct accountability.

A number of universities are offering new programs that are more diverse in both content and delivery. For example, the Georgia Institute of Technology is offering an Enterprise Innovation program that focuses on enhancing innovation.
To screen candidates, build partnerships, and assess the health of partnerships beyond financial measures.

**Looking ahead, where do you think current businesses and business schools need to start thinking more innovatively?**

In the areas of marketing and communications built around social media. In order to reach people today—whether they’re students or businesspeople—you have to go through alternate channels. You have to reach them where they are instead of expecting them to reach you. So it’s important to engage with end users through alternate media, but these could be used by any function—R&D, supply chain management, and finance, as well as marketing.

**Let me close with a couple of questions about you. How did you become interested in innovation as a skill?**

In the future, a great deal of business strategy will be built around collaborative networks, because no single company or university has all the answers. An organization might have a solid strategy for today, but if it wants to plan for the next ten years, it has to find a partner.

Therefore, I think the most innovative strategies are happening around business models that companies use when they come together to share the risk and the revenue. How can organizations engage and make sure all parties are using the right processes, the right products, and the right reward systems? What channels do they use? How do they reach their end users?

Students who go into the business world will need to understand how to collaborate. They’ll have to know how to screen candidates, build partnerships, and assess the health of partnerships beyond financial measures.

**How do you hone that skill in yourself?**

In high school I got exposed to the world of innovation when I was really young. Later, during my time at Kimberly-Clark, I was able to work in many businesses in many locations and try new things. Then I went back to school! I’m kind of a perpetual learner.

What I learned early on is that when I would have a vision of doing something, it often would be way beyond my areas of responsibility. So I learned to focus on influencing and communicating with people, as well as understanding stakeholders. The soft skills were as important to me as the technical ones. I also learned how essential it is to have a well-rounded business perspective and to see an issue from every point of view, from the team member’s to the consumer’s.

**What inspires you to come up with a new product?**

For myself and the entrepreneurs I’ve worked with, a new product starts from a pain point. We experience a problem or see someone else struggling with something, and we think, “There has to be a better way.” Then we start jotting down ideas and playing with different models until we’ve come up with something that’s better, faster, and creates end-user value. It’s a process—of discovery, development, and implementation—but it really springs from a fundamental lack in some area. That’s the sort of thing that sparks my curiosity. Curiosity and persistence are traits that have helped me throughout my career.
Innovation: A Leadership Essential

by Garth Saloner

By the time Jake Harriman, a U.S. Marine who had served as a special operations platoon commander in Iraq, landed at Stanford University in 2006, he had concluded that the way to fight terrorism was to fight the kind of extreme poverty he had seen in the Middle East. He wasn’t sure how to tackle the problem, but two years in our MBA program gave him a good start. His degree equipped him with the financial, organizational, and managerial skills he needed to launch Nuru International, an African nonprofit that helps impoverished villages in high-risk conflict zones improve access to water, healthcare, education, agricultural solutions, and economic development. Today Harriman is completing his first project in Kenya.

Harriman’s situation illustrates where management education needs to be today. It remains essential for students to learn how to use financial statements to uncover a company’s underlying performance, identify an attractive industry structure, think holistically about the levers they can use to market a product, interpret statistical data about operations to spot production inefficiencies, and select the best options for raising capital. They also should learn many other ways to assess industries and companies, as well as ways to diagnose business problems. But, as Harriman’s situation illustrates, such knowledge is not sufficient.
Like Harriman, students must learn not only how to understand a problem, but also how to use new ways of thinking to generate innovative solutions.

**What Is Innovative Thinking?**
The “aha” moment is that elusive and invaluable instance when we suddenly see a forward path that’s so logical and, in retrospect, so obvious that we wonder why it took us so long to identify it. We all have such moments. The questions are: How can we have them more frequently? How can we call them up? And how can we act on them once we experience them?

At the Stanford Graduate School of Business in California, we’re teaching students how to take these “aha” moments and turn them into innovative solutions. Working with business, engineering, and other faculty who co-teach at Stanford’s Hasso Plattner Institute of Design, we’re developing knowledge in design thinking—the processes and methods that spur creativity and lead to quantum changes. Design thinking is an approach to problem solving that combines insights, ideas, and tools from the fields of engineering, design, business, the arts, and the social sciences.

Three elements underlie the design thinking process:

- **Empathy**—Students must learn to go far beyond traditional market research to develop true empathy for the end users of products and services, striving to understand what consumers need and what they find truly meaningful. To do this, they must immerse themselves in the world of the user, watch what people do—not merely listen to what they say—and discover alternate ways of capturing information.

- **Collaboration**—Harnessing many diverse perspectives through collaborative teamwork drives creativity. We create multidisciplinary teams and teach them the skills that will help them communicate, leverage their individual strengths and perspectives, and work toward a common goal. When teams unlock their creative potential, they transform how their members interact and what they can achieve together.

- **Iteration**—Design thinking turns typical business school thinking on its head. In design thinking, students don’t perform deep analysis to determine the optimal solution; they engage in rapid prototyping and iteration. With this approach, they establish a user-oriented point of view, brainstorm about techniques, and distill ideas into feasible prototypes. A critical component is iterating—i.e., developing prototypes in quick succession, with each one being better than the last. We teach students methods for testing their ideas, soliciting feedback, and ridding themselves of preconceived notions or biases.

**How Can Innovation Be Taught?**
Design thinking cannot be taught through lectures or case studies; it must be learned by doing. Therefore, we have our students apply design thinking to distinct problems in several of our classes.

**Entrepreneurial Design for Extreme Affordability**—Co-taught by business professor Jim Patell and mechanical engineering professor David Beach, this intensive, hands-on, project-based, two-course sequence attracts students from departments across the university. Four-person interdisciplinary teams are formed to create comprehensive solutions for challenges faced by the world’s poorest families. Midway through the course, two students from each team travel outside of the U.S. to gather information and get a firsthand look at the problem they want to address. Students have developed low-cost solar lights, human-powered irrigation pumps, corn shellers, devices that distribute vitamins through village wells and grain mills, and an asthma treatment device made from folded paper. (For details on one recent project, see “Extreme Creativity for Extreme Problems” on the following page.)

**Biodesign Innovation**—This course is co-taught by business professor Stefanos Zenios and medical school professors Todd Brinton and Paul Yock. Here, graduate students in business, engineering, and medicine work together to develop comprehensive solutions that address significant medical problems identified by physicians. Out of this class have come patented, commercialized technologies, such as an affordable device for home dialysis.

**Designing Happiness**—Taught by business professor Jennifer Aaker, this course focuses on increasing employee engagement and happiness. Relying on an iterative design thinking approach and armed with a happiness app that measures personal satisfaction, students uncover what real-
Extreme Creativity for Extreme Problems

Twenty million low-birthweight and premature babies are born each year. Of these, 4 million die annually, and those who survive often face a lifetime of debilitating health problems. One of the biggest risks these babies face is hypothermia, because they are unable to regulate their own body temperatures, and incubators are expensive, complex to operate, difficult to maintain, and rare in the developing world.

In Stanford’s Entrepreneurial Design for Extreme Affordability course, a team decided to tackle this problem by developing a product—ultimately called “Embrace”—that would increase the survival rate of low-birth-weight infants. The Embrace group started by researching user needs in Nepal. After spending several days observing the neonatal unit of the Kathmandu hospital, the students traveled to see how premature infants were cared for outside of the city. They learned that the overwhelming majority of premature Nepalese infants are born in rural areas, and most never make it to a hospital. The team realized that for an incubator to save the maximum number of lives, it must be designed to function in a rural environment. It would have to work without electricity and be transportable, intuitive, easily sanitized, culturally appropriate, and—perhaps most essential—inexpensive.

The students returned to Stanford, where they began the process of rapid prototyping and iteration. They brainstormed ideas; used a laboratory space to develop actual prototype products; developed cost, revenue, and cash flow projections for the product; had their prototype reviewed by other teams; gained feedback from experts and entrepreneurs who had launched ventures in the developing world; and iterated.

From this, the team developed an incubator that looks like a tiny sleeping bag. It keeps the baby’s body at exactly the right temperature by employing a gel-like substance that, once melted, is able to maintain a constant temperature for hours. The Embrace incubator can be heated and sanitized in boiling water; it’s small and light; and it conforms to the practice of holding a baby against a mother’s skin. Most important, it costs less than $100.

After graduating from Stanford, the Embrace team added new members and incorporated as a nonprofit. The group has been conducting clinical studies in India and planned to launch the product in December 2010. In 2008, CEO Jane Chen and CTO Rahul Panicker were awarded an Echoing Green Fellowship, a prestigious award given to 20 social ventures selected from almost 1,500 applicants. They also won the BASES Social Entrepreneurship Challenge at Stanford. Since then, they have received support from the Packard, Mulago, Lemelson and Robertson Foundations, as well as from individuals around the world. Embrace has been featured in publications such as National Geographic, Oprah’s O Magazine, Time, and The Wall Street Journal, as well as TED, a set of global conferences dedicated to “ideas worth spreading.”

Through this course, our students not only transformed how they think, but also raised their ambitions about what is possible. By launching a product that could save thousands or even millions of lives, they will also change the world.
of what the evidence does and does not imply. Once they acquire this skill, graduates can analyze problems, think independently, and recognize trends and opportunities that others may not. To this end, all MBA students at Stanford take a required Critical Analytical Thinking course in the autumn quarter of their first year.

- **Innovative thinking**—Once a problem is correctly identified, leaders must think radically and creatively about solutions. With the courses described above, such as Entrepreneurial Design for Extreme Affordability and Biodesign Innovation, we teach students to use innovative thinking to create novel solutions to old problems.

- **Personal leadership**—After a solution is targeted, leaders must implement it, often with and through others. Students develop “followership” skills by developing a deep self-awareness of their own strengths, weaknesses, and even identities. At the same time, they examine a myriad of influence styles and learn how best to use them. This knowledge enables graduates to enhance their personal effectiveness and their ability to motivate and inspire others. All Stanford MBA students take a required Leadership Laboratories course, in which they work in small groups and are personally coached on these important skills.

It is worth noting that while these leadership capabilities must be firmly grounded in the canon of business knowledge, they extend far beyond its limits. Graduates not only must know what, they must know how. They must learn to think differently, so they are more analytical and innovative; to act differently, so they influence others more effectively; and to dream differently, so they set lofty and noble aspirations.

### Preparing for an Innovative World

The world is changing at an astonishing and ever-increasing pace. New technologies are being rapidly developed and deployed, and information is available more readily than ever before. Entire industries and fields of study are being created just as others are growing obsolete.

We need to equip our graduates to succeed in this world. We do so in part by teaching them how to contribute to the innovation, to be part of the solution. We also do so by imparting ways of thinking, acting, and dreaming. We understand that the knowledge we give our students, no matter how well-intentioned, will eventually become dated, but the benefits they gain from personal transformation will endure.

Garth Saloner is Philip H. Knight Professor and dean of the Stanford Graduate School of Business in California.
Twenty-first century companies are in great need of innovative leaders. They need men and women who know how to put new ideas to work effectively and responsibly in every corner of their organizations. They need people who will define what’s next in our markets and societies.

But that doesn’t mean that all business schools must develop the same types of leaders. Different businesses will need different kinds of talent. To develop a wide-ranging workforce, business schools must first understand how all aspects of their programs—their curricula, their faculty, their locational advantages, their cultures—work together. Only with that understanding can they forge fresh approaches to developing innovative leadership.

Unfortunately, while virtually every business school teaches leadership in one way or another, I believe that there isn’t much differentiation among schools in the kinds of leaders they produce. At least, these differentiations are seldom explicitly stated. In fact, we have tended to blur these distinctions in our programs by failing to specify one set of leadership styles and capabilities over another.
Adaptive systems—like natural selection—respond to external changes, but do not anticipate them. Innovative strategies, on the other hand, are about anticipation. Business schools can innovate, rather than just adapt.

I think that’s a mistake. Business schools bring different strengths to the table and can foster business innovation in unique and interesting ways. At the Haas School of Business at the University of California, Berkeley, that realization has been a driving force behind the recent revamp of our MBA curriculum, which we launched in 2010. With this revamp, we wanted to emphasize what made our approach to teaching leadership distinct.

In today’s business climate, it’s critical for business schools to find their own paths to developing the next generation of innovative leaders. To respond to current trends and serve the needs of business, business schools must develop sharply defined strategies for doing so—and then they must deliver on those promises.

Changing Perceptions
Fostering diverse approaches to innovation among business schools is a first step in changing perceptions of what business education means to society. Just ask people on the street whether they think business schools have been breeding grounds for overconfidence and self-focus; many would answer with a resounding, “Yes.” Is this more perception than reality? In some cases, yes, but many people are still convinced that business school education is an underlying symptom of what’s wrong with business—and worse, that it somehow led to the global financial crisis. Business schools are certainly not entirely to blame, but we must view this issue as worthy of our attention.

Perhaps more important, as business school leaders, we need to remind ourselves that we are in the human capital business—a long-cycle business. Is the future demanding different business leadership? If so, we must provide it. Are the management challenges of the 21st century different from those of the 20th? I believe they are, and we must address them.

We need only start with the future and work backward. My kids are 10 and 7. When they are my age, they will be able to judge the results of the efforts we’ve made today. I think about my kids’ futures differently than my parents thought of mine. I think about how they will be affected by unsustainabilities—the unsustainable paths that many elements of our economy are on today. If continued in a straight line, these lead to almost certain failure in areas such as healthcare expenditure, energy and water consumption, the economics of aging, public education—the list goes on and on. These unbent paths are certain to hit a wall in my kids’ lifetimes, if not my own. We need path-bending leaders to move us off these unsustainable trajectories.

Unsustainabilities are both opportunities and responsibilities for business schools. If we act now, we will have multiple opportunities to lead businesses to more sustainable and innovative futures. The choice we face now is very similar to the distinction between “adapting” and “innovating.” Adaptive systems—like natural selection—respond to external changes, but do not anticipate them. Innovative strategies, on the other hand, are about anticipation. Business schools can innovate, rather than just adapt. We can see these needs coming, and we can meet them head on.

As part of our curricular revision at the Haas School, we made three fundamental shifts within our full-time, evening, and weekend MBA programs. We believe these changes reflect shifts we’ve seen in global business environments—and help differentiate our integrated approach to teaching innovation and leadership from other programs.

Culture: From Implicit to Explicit
In the first change, we shifted from an implicit culture to an explicit culture. By culture, I am referring to the norms...
and values that guide our admissions decisions, define behaviors within our schools, and affect behaviors long after students have left the transformative experience that is business school.

That move reflects a growing trend in business, where firms with strong cultures encourage their employees to act in ways that create recognizable brands. They manage their cultures profoundly and deliberately, starting at the beginning with the many dimensions of employee selection, such as interviews, applications, and references. They continue with the many dimensions of employees’ “onboarding,” in terms of how they integrate their employees into their organizational cultures during their first hours, days, weeks, and years of employment. And they continue for as long as employees are at the company, through their training, peer-to-peer enforcement, and the “tone from the top.”

Just as every organization has a culture, so does every business school. But do we deliberately organize most everything we do around this aspect of our programs, the way great firms do? Do we say “No” to admitting applicants who are otherwise terrific, but do not share our schools’ values, to the same extent that the best firms regularly do? I think that business schools often don’t emphasize their cultures as strongly and consistently as they should. Rather than leave their cultures as implicitly understood among their students, faculty, and staff, business schools should laud and leverage their unique values just as the best firms do.

At Haas, we took steps to formalize our culture into an explicit code for all of our students, faculty, staff, and alumni. (See “Creating a Cultural Code,” at right). With that code in place, we can better encourage and help our students to adopt the attitudes and behaviors of innovative leaders.

Experiential Learning: From Independent to Integrated

The second shift at Haas is from a selection of independent experiential learning courses to a new, integrated experiential learning curriculum. It’s a process that starts with our MBA student selection and continues throughout all of our courses.

We initiated this change to capture a particular opportunity we saw in business to educate and graduate better problem finders and problem framers. I have been struck by how many times I hear from CEOs that there are too few business graduates who can think deeply about opportunities and problems further upstream and frame them effectively so they can see paths to solutions more quickly.

Creating a Cultural Code

As business students learn how to be more responsible, innovative leaders, the educational culture in which they learn will play a crucial part in their learning outcomes. For that reason, at the Haas School of Business, we are using our culture very deliberately to shape our MBA students. For the first time in its history, Berkeley-Haas codified its culture as part of a recent strategic planning effort. Our code asks our community to embrace these four principles:

- **Question the Status Quo**
  Be able to envision a different reality, take intelligent risks, and learn from failure, as well as have the courage to speak your mind.

- **Confidence Without Attitude**
  Be able to make decisions based on facts and analysis, with the confidence to act without arrogance and the ability to lead through trust and collaboration.

- **Students Always**
  Have a mindset of curiosity and lifelong learning, seek personal growth, and practice behavior that tells others you can learn from them.

- **Beyond Yourself**
  Consider the long-term impact of your actions and nurture the facility for putting larger interests above your own.

These four defining principles already are being used in the selection process of our MBA students. We also are integrating them into our curriculum and business processes in various ways. We believe that these principles have always been the school’s heartbeat, inspired in part by our location in the entrepreneurial San Francisco Bay area and by our anchoring in a public university. Now that we have codified them as part of our mission, we can use them deliberately to shape our students and graduates, not just during their MBA programs, but for their entire lives.
Rather than leave their cultures as implicitly understood among their students, faculty, and staff, business schools should laud and leverage their unique values just as the best firms do.

Much of the debate within management education has been about whether to focus on systems thinking or integrative thinking or critical thinking or design thinking. But all four approaches give us different ways to frame. Each approach opens our eyes to new and different solutions. This ability to frame—and, more crucially, to reframe—problems allows us to move from one solution to another in a disciplined way. Psychologists refer to this ability as meta-cognition, and it’s where the power to innovate lies.

At Haas, we help our MBAs hone their problem-framing skills through an integrated experiential learning process. They begin with our new required class, “Problem Finding, Problem Solving,” which provides critical backbone content for the experiential learning embedded in other courses.

For the main project in this course, students must gather publicly available data on a local startup company and chart the data on a business model canvas. This activity brings to light potential gaps in the business model. The students then present to the company’s CEO three alternative approaches to fill these gaps. In the process, they develop observational skills and learn to synthesize data to discover where opportunities lie.

Armed with these tools, our students all participate in at least one of eight experiential learning options that expose them to real-world business and organizational challenges. These options are designed to emphasize experience in the upstream activities of problem finding and framing. Three are particularly popular:

- **Haas@Work** is a recently launched course on applied innovation, in which 40 MBA students work in teams to address a strategic opportunity at a client company. At the end of the course, the client-executives deliberate on the proposed solutions in front of the students. A team of students is then selected to work with the company to implement the chosen solutions within 100 days. Recent clients have included Visa, Virgin America Airlines, Cisco, Disney, Panasonic, Clorox, and Wells Fargo.

- **Cleantech to Market** teams Haas students with graduate students in engineering, law, and other fields to work on projects for the nearby Lawrence Berkeley National Laboratory. The lab focuses on clean energy science and technology, or “cleantech.” The students evaluate the commercial potential of the lab researchers’ cleantech innovations or develop strategies to bring them to market faster.

- **Social Sector Solutions** connects MBA students with a consultant from McKinsey & Co. to develop business plans for nonprofit clients looking for enterprising ways to shore up their financial sustainability long-term.

Additional experiential offerings include a course in international business development, which sends two-thirds of our students overseas, as well as courses in new product development, entrepreneurship, and corporate social responsibility. Students also can create their own individual courses, as long as they develop team-based, applied innovation projects for real clients—which are, in some cases, the firms where they currently work.

While engaged in their experiential course, students also must participate in our new team performance module in which they learn advanced tools and coaching methods to become strong leaders and members of high performance teams. The module reflects the fact that students typically will not have the luxury of picking their own teams. In the workplace, their teammates probably will represent different cultures, abilities, and points of view. Successful innovation depends on students’ ability to lead and work with diverse teams effectively.

We also know adults learn best when they apply new ideas and practices to address a defined need. So, student teams work closely with professional coaches for support as they conquer challenges, whether they’re starting up their experiential projects, giving performance feedback to team members, or resolving a difficult conflict.

**Curriculum: From Coordinated to Connected**

Our third shift was from coordinating courses across the MBA core curriculum to connecting capabilities across the curriculum. We have identified a set of ten measurable capabilities, all rooted in the social sciences and highly valued in the marketplace, that support our approach to teaching innovative leadership with a competency model.

This was done as part of the Berkeley Innovative Leader Development (BILD) program, which runs through all core and elective MBA courses. Over the past year, those who led BILD’s development met with core faculty members to review their individual syllabi and learn where the ten capabilities appear in their courses. Then, they discussed how these areas could be integrated to give students a seamless educational experience. Faculty members now meet weekly during their courses to find ways to tie together what they teach for the MBA students.

The ten capabilities are divided into three primary categories: defining opportunities, making choices, and building organizational capacity.

- **Defining opportunities**—Within this category, we have identified the top three skills as problem framing, opportuni-
ty recognition, and experimentation. I already have discussed why problem framing and opportunity recognition are so crucial to today’s leaders. A willingness to experiment is no less important.

Why? Because today’s businesses are demanding it. They want to test new ideas with cost-effective experimentation rather than rely heavily on traditional planning. How quickly could a business evolve if the cost of running experiments went toward zero? What if testing the next idea in customer relationship management, brand management, revenue models, distribution, or service could be done at much less cost? The speed of innovation and evolution in such a business would accelerate significantly.

Making choices—Skills in this category include revenue model innovation, valuation of ideas, and risk selection. Revenue models—new ways that employees can get paid for what they do—are evolving rapidly in industry after industry, often in qualitative ways. A deep knowledge of why companies are changing the way they value ideas can trigger future path-bending where it might not otherwise occur. Similarly, risk selection, or the ability to identify the biggest risks a firm faces and weigh the potential rewards, is crucial. This is a skill often lost in curricula that focus more on risk management or avoidance.

Building organizational capacity—Our last four skills lead directly to organizational growth. These include the abilities to influence without authority, manage ambiguity and conflict, foster team creativity, and employ adaptive governance. They reflect the trend among businesses toward flatter organizations with more distributed authority. They’re relying less on command and control, particularly as workforce demographics shift toward the Millennial generation. Our students will need to influence without relying on authority, which includes knowing how to coach and give feedback effectively, show how people’s efforts matter to the organization, and lead organizational change.

In addition, the boundaries within organizations are becoming increasingly fluid—and stakeholders more often have conflicting interests. To become effective leaders, students must understand different perspectives and recognize the implicit assumptions underlying those perspectives. They will become clarifiers and conflict managers. And because they’ll often be expected to be members of self-sufficient but productive teams, they must know how to foster creativity among team members and react to, adapt to, and rectify problems as they arise.

We will measure students’ progress toward developing these competencies in the same way that industry does: through a combination of survey approaches, diagnostic instruments, and simulations.

Charting Our Courses
Even with all of these curricular revisions, Haas faculty continue to teach from a general management perspective. Business fundamentals such as finance, accounting, marketing, and strategy still anchor our core MBA courses. The core disciplines will continue to be the basis of most—if not all—graduate business programs.

The curricular revisions did not require a complete overhaul in every area. We often were able to restructure current courses to teach new skills for innovative leaders. For instance, we restructured two of the existing core courses at Haas—“Leading People” and “Leadership Communication”—to emphasize particular skills, such as the ability to influence without authority. And our new curriculum continues to evolve as we tweak the material and improve our delivery. In doing so, we believe that we are firmly on the path to preparing innovative leaders in our MBA programs.

It’s up to all business schools to discover how they will achieve that goal in ways that suit their own cultures, locations, and strengths—how they will educate leaders who will find opportunities in unsustainable trajectories and set us on a brighter course. We can produce graduates who are capable of path-bending feats of leadership. It’s what the future is demanding.

Rich Lyons is the dean of the Haas School of Business at the University of California, Berkeley. For more information about the Berkeley Innovative Leadership Development program, visit groups.haas.berkeley.edu/BILD/.
Messy. Exhausting. Exciting. Frightening. Fun. Unpredictable. Life-changing. These are just a few words that educators use to describe what it’s like to take management education in new directions—that is, to eschew tried-and-true classroom formats for approaches that often have no clear precedent and no assurance of success. While few of these pedagogical experiments turn out the way educators expect, almost all evolve into valuable learning experiences for students and faculty alike.

AACSB International’s recent report, “Business Schools on an Innovation Mission,” highlighted the need for business schools to embrace innovation in ways that suit their diverse missions and strengths. But to create cultures where innovation becomes a self-fulfilling prophecy, it helps for business schools to share ideas about how to inspire faculty to experiment and how to engage students in nontraditional classrooms—about what worked and what still needs tweaking.

Here, educators discuss the lessons they’ve learned as they’ve implemented innovation in their curricula. While no approach works for everyone, these educators hope there’s inspiration here for others who want to take new paths in management education.

Programs that have broken the mold in the business classroom offer eight ideas for successful innovation—and share how teaching within cultures of innovation has paid off for them, their students, and their schools.

by Tricia Bisoux
1 Showcase great ideas.

The Research Centre in Higher Education Learning and Management at Aston Business School in the United Kingdom has developed a series of what it calls “good practice initiatives,” including its Good Practice Guide in Learning and Teaching. Each year, the school invites faculty to write a few pages on new ideas that have worked in their classrooms.

“We wanted to find a way to showcase best practices across the school, so we started to identify faculty who were doing exceptional things in their teaching,” says Julie Green, quality manager at Aston. A recent edition of the guide includes a number of case studies, including one on using video recordings of student presentations to develop students’ presentation skills and another on asking students to write essays that outline their personal philosophies on management. The case studies follow diverse formats, but many offer summaries of the methods used, the reasons behind the experiment, the advantages and disadvantages of putting it into practice, feedback from students, and plans for the future.

Now in its eighth edition, the guide has been expanded to include support staff. It has led to wider adoption of technologies such as virtual quizzes and online feedback; it’s also part of a broader initiative that includes a postgraduate certificate in learning and teaching for new staff and an annual Learning and Teaching Symposium.

The guide and other initiatives have encouraged rich discussion and sharing of best practices across a range of subject areas, says Green. “More important, we have gotten more than 60 of our faculty and staff to write something for the guide, many of whom have never reflected or written on learning and teaching before.”

Past editions of the guide are housed online at www1.aston.ac.uk/aston-business-school/research/structure/centres/helm/gpg/.

2 Pair courses with competitions.

Boundaries can blur where innovation is concerned, not only between disciplines, but between activities. At many schools, faculty are designing new learning experiences that continue from one course to the next—or from a course to a competition.

A few years ago, faculty at Mississippi State University’s College of Business were looking for ways to cross disciplines, teach hands-on business skills, and spark interest in computer programming. They developed a course called Field Studies in Entrepreneurship (FSE), which requires students to develop an actual product and sell it all over the world. Normally, that task would seem too large to accomplish in a single semester, but in this case, faculty created a way to make it possible—they have students create an iPhone application and sell it through Apple’s online App Store. Total startup cost? $99.

Unofficially called “iPhone Entrepreneurship,” FSE is a senior- and graduate-level course that attracts approximately half of its students from business and half from engineering, although students can enroll from any major. It is taught by five faculty members, including the director of the school’s Entrepreneurship Center, two marketing professors, one management professor, and Rodney Pearson, a professor of business information systems. The course includes discussions of business concepts, homework, presentations, and exams, in addition to students’ self-directed work on their projects.

The day after FSE ends, the MSU Innovation Challenge begins. The goal of the challenge is to create the most successful iPhone apps on campus. All MSU students, faculty, and staff...

3 Start where you are.

Innovation is a hard sell at Fort Lewis College School of Business Administration in Durango, Colorado, according to its dean Gary Linn. A town with a population of just over 16,000, Durango is located near several ski resorts and Mesa Verde National Park, which makes tourism a main focus in the school’s program.

“Our students aren’t seeing the value of courses in creativity because they don’t yet see how the jobs here require it,” says Linn. “With budget cuts looming, it’s difficult to convince the president and provost to start a course that will have fewer than ten students in it.”

But the school’s faculty are working to educate students on the
Three of our students were headed for corporate careers, but changed their routes to follow an entrepreneurial path after taking this course. All three said, ‘This class changed my life.’

—Rodney Pearson, Mississippi State University

are eligible to compete for $10,000 in prizes in two categories—paid apps and free apps. The top three entrants in each category, based on total revenue and/or total number of downloads, receive $2,500, $1,500, and $500, respectively. There also is a $1,000 Bulldog’s Choice Award for the most innovative app. Past winners have included Equater, a math skills game; iKnowMe, a set of personality quizzes aimed at preadolescents; and iPlan2Study, a study aid to help students organize notes, slides, videos, audio files, and other digital material related to their coursework.

However, innovation often means that the learning process will be messy and unpredictable—students won’t always be successful in achieving the goals they set. For example, last fall, two student teams didn’t complete their products and could not enter the competition, says Pearson. “In both cases, there were internal conflicts that they never got past,” he says. “That’s not a death sentence in the class, because there still are exams, homework, and presentations. But it definitely kept them out of the ensuing competition.”

Even so, the Innovation Challenge provides all FSE students motivation throughout the semester to create the best product possible, as well as a real-world measure of their success in mastering a range of skills, says Pearson. “From day one, the professors stress to students the need for less obvious skills such as managerial, organizational, motivational, marketing, communication, and more,” he says. “Three of our students from our fall 2009 class were headed for corporate careers, but changed their routes to follow an entrepreneurial path after taking this course. All three said, ‘This class changed my life.’”

value of innovative thinking in tourism and all industries. For example, the school has what it calls “Innovation Months” that send its students out of the U.S. for three to eight weeks to take at least one for-credit upper-level business course. In addition, the marketing department is working on courses that teach students to apply more creative thinking to their projects.

Linn says that a next step will be to arrange more internships related to innovation with local growth companies to further spark student interest. “We’re working on giving our students more global experiences and exposing them to innovation as much as possible,” says Linn.

4 Find new ways to deliver content.

The Center for Executive Education at the University of Pittsburgh’s Katz Graduate School of Business in Pennsylvania sees unique opportunities to innovate in international markets. But rolling out executive programs in foreign markets can be resource-intensive, particularly when they’re custom-designed for local companies.

The Katz School has been offering executive MBA programs in Brazil for ten years, but recently it took an unusual step for an English-speaking school—it began delivering a project management certificate program in Portuguese to the Brazilian market. “Brazil is going to be hosting the World Cup and the Olympics over the next few years, and it’s experiencing double-digit growth,” says Anne Nemer, director of the center. “We wanted to capture the opportunities created by growth outside the U.S. in a way that allows us to still focus on what we do well.”

The Katz School began vetting new Portuguese-speaking faculty in Brazil to deliver its project management coursework. Once the school had selected instructors, it began working with Pittsburgh-based PMcentersUSA and its vice president, Joe Lukas, to train the trainers. The program is now offered to executives in São Paulo and Campinas.

This approach allows the Katz School to deliver courses in a market where English fluency is still quite low. Only about 15 percent of the population in São Paulo speaks English. But people still need training to manage the large capital projects in Brazil, Nemer emphasizes.

“We had to think outside the box and put in standards for quality control that we were comfortable with. With a ‘train the trainer’ approach, we can sustain a program like this for the long term, in a way we couldn’t if we were using our own faculty,” Nemer says. “We imagine that the portfolio of programs we offer in Portuguese will expand, so that Brazilian managers don’t have to be fluent in English to access international business training.”
5 Dedicate separate space for innovation.

The business curriculum is already so crowded with core courses and electives that it’s difficult to make room for new experimental courses. At the Katz School, administrators always leave a couple of places in the program open so new courses can be inserted. Some schools take this one step further—they’re creating new entities for innovation outside the business school.

Innovatrium, a nonprofit located on the campus of the University of Michigan in Ann Arbor, is just such a space that attracts faculty, students, and entrepreneurs from the entire region. Innovatrium was created to help individuals and organizations jumpstart their big ideas, diagnose their strengths, hone leadership abilities, and develop innovative processes, says Jeff DeGraff, Innovatrium director and a clinical professor of management and organizations at the university’s Ross School of Business.

“Innovation happens at the edge of disciplines, so we need to create places where disciplines can come together without all the politics,” says DeGraff. “Innovatrium is like Switzerland—we’re completely neutral!”

Innovatrium works on projects that range from GE’s “eco-imagina-tion” initiative to new infrastructure for alternative energy projects. It also tackles problems presented by the university. Most recently, campus administrators asked Innovatrium for ways to improve the intercampus network and idea exchange for university staff.

Other schools also are opening their own dedicated spaces for innovation. Recently, for example, Harvard Business School in Boston, Massachusetts, announced that it would open the Harvard Innovation Lab in late 2011. In the first phase of the lab’s launch, planned for this fall, student entrepreneurs from Harvard’s undergraduate, graduate, and professional programs will work on new ventures under the guidance of entrepreneurs-in-residence, faculty, and administrators. Some teams will work independently, while others will work as part of established courses.

For example, teams of students in the course “Inventing Break-throughs and Commercializing Science,” taught jointly by professors from HBS and the Harvard School of Engineering and Applied Science, will use the lab to develop plans to commercialize scientific discoveries generated by the university. In addition, 150 teams entering the annual HBS business plan contest will be given workspace to develop their projects. In stage two of the launch, the lab will open up to entrepreneurs in the surrounding community.

“When schools are trying to build something new between departments, they have to answer questions such as who’s funding it, who’s getting tenure, how will it affect the number of journal articles,” says DeGraff. “Sometimes when you move this activity just a few degrees off center, you no longer have to deal with those kinds of issues.”

6 Act fast—but take it slow.

Perhaps one of the trickiest aspects of innovation is to balance the short-term and long-term vision that it demands. On the one hand, when it comes to implementing innovation, speed is of the essence, says DeGraff. “Innovation is has a shelf life—it’s like milk. It goes sour if you wait too long,” he says. That means to be innovators, business schools cannot follow the traditional format of waiting years to make curricular changes.

But while there should be systems and spaces in place to put worthy new ideas to the test quickly, administration should also be patient. It takes time for new ideas to evolve—and to find the right people, who have a passion for experimentation.

“Deans will visit us, and they all say that they have the staff they need to innovate at home. But then six months later they call to say, ‘I don’t have the right people,’” says DeGraff. “The biggest mistake people make is that they think these people are easy to find. They’re not. It’s taken me ten years to put my staff together. It can take that long to find people with academic credentials and experience launching new products or ventures.”

DeGraff also thinks long term when it comes to training innovators. Innovatrium includes on its staff “Innovation Fellows”—doctoral students that the center trains using the “See One, Do One, Teach One” approach, DeGraff explains. Initially, Fellows only watch as more seasoned staff work on large projects. Once they’ve seen how the process works, they take small roles in the next few projects while senior staff members offer guidance. Finally, with many projects behind them, they are asked to train the incoming Fellows.

“Expecting business students to learn how to innovate in six weeks is like thinking medical students can get through medical school in six weeks,” he says. “Students must learn to adapt to different industries—invention doesn’t look the same in a steel company as it does in a biotech. They need time to learn the tricks of the trade.”

“Innovation happens at the edge of disciplines, so we need to create places where disciplines can come together without all the politics.”

—Jeff DeGraff, University of Michigan
Expect trial, error, and evolution.

Administrators might be reluctant to add a new course to the curriculum because they fear it will be difficult to drop if it proves unsuccessful. But that fear can keep a curriculum static, says Nemer of the University of Pittsburgh. Not to mention, it fails to take into account the ability of courses to evolve, as instructors improve upon aspects that didn’t work so well and adapt to needs over time.

In fact, many of the new courses introduced by the Katz School have significantly evolved over time, Nemer says. For example, a course on outsourcing transitioned into a broader course that also covered the political, social, and economic realities in developing markets in China and India. That course then evolved to focus on global change management and leadership in turbulent times. “Faculty members who created the original course now allow others to view their syllabi and build on that,” says Nemer. “We use courses like this as places where we can collaborate on a more meaningful level across the university.”

According to DeGraff, innovation is an “iterative game.” To be innovators, administrators, faculty, and students alike must try new ideas and even expect to fail. Expecting success defeats the purpose of innovation, which is to discover unexpected ideas, he says.

What business schools can model for their students—and for the companies they serve—is that even the best innovators don’t get it right the first time. “If they do, they got lucky,” says DeGraff. But in business and in teaching, he and other educators believe, it’s what people do after failures that lies at the heart of innovation. By responding to failure with even more new ideas and improvements, faculty can end up with courses that succeed far beyond their original visions. And business schools can break traditional molds to venture in new directions, where they can better meet the needs of an unpredictable global business market.

Let students lead.

Many business school innovations result in student-driven courses. Rather than consisting of lectures and exams, these courses allow students to design their own learning experience.

This fall, Rouen Business School in France opened its Entrepreneurship and Innovation Center in response to students’ growing interest in entrepreneurship. Within this space, faculty guide—not direct—students through the start-up process. “The students have the power, responsibility, and freedom to lead and make entrepreneurial decisions based on their experiences, skills, and coaching,” says Denis Gallot, head of Rouen’s entrepreneurship specialization program.

Another such course is part of the MBA program at the School of Management at the University of Buffalo, The State University of New York. Its Leadership PACE (Personal Achievement through Competency Evaluation) program, developed by management professor Jerry Newman, offers what the school calls “person-centered learning,” explains Muriel Anderson, visiting assistant professor. At the beginning of the course, students complete a variety of assessment tools to gauge their skill levels in four different competencies, including self-management and adaptability, interpersonal skills, communication, and team leadership. Then, over the course of the semester, they complete assignments to reveal their interests, abilities, values, and future goals.

“This process calls for each student to identify patterns indicating areas of strength and areas that need improvement,” says Anderson. Students practice new behaviors that target their weaknesses. By the end of the course, students have created a personal competency portfolio that outlines their talents, values, and aspirations. Leadership PACE has proved so popular with students that the school has expanded it into a new certification program called LeaderCORE (Certification of Readiness and Excellence).
Create Space For Innovation

Vijay Govindarajan has spent years developing a sense of what it takes to execute innovative ideas within organizations. He served as the first Chief Innovation Consultant for General Electric and today sits as the Earl C. Daum 1924 Professor of International Business at the Tuck School of Business at Dartmouth College in Hanover, New Hampshire. His book with Chris Trimble, The Other Side of Innovation: Solving the Execution Challenge, came out last fall.

In a recent conversation with BizEd, Govindarajan spoke about the obstacles business schools face as they design and implement innovations in their curricula. His thoughts below reinforce the sense among educators that now is the time for change—and that the biggest mistake they can make is to believe that the last century’s model of business education is sufficient to advance management in the years ahead.

On disruptive innovation...
At one level, there is innovation in the business school. As faculty, when we do research, we bring what we learn into the courses we teach. We learn new things, and we write new cases.

But we haven’t seen disruptive innovations in the business school. By that I mean we haven’t seen what has happened in the computer industry when mainframes were disrupted by personal computers or what happened in the music industry when the iPod fundamentally changed how people listen to music. The question is, is that kind of disruptive innovation needed in our industry? My gut feeling tells me it is.

Disruptive innovations happen when there are fundamental, nonlinear changes within an industry. Already, I see three trends that will call for business schools to make deeper fundamental changes. First, we have seen such phenomenal advances in digital technologies, from data to voice to video and now to telepresence, which may be replaced by something else in the future. Second, we have seen the emergence of countries such as India and China, where there is a tremendous need for MBA education. Finally, we have seen the appearance of a whole new set of competitors coming from India and China that are world-class, but they have very different orthodoxies and different needs.

These three trends will affect how we deliver, to whom we connect, what we teach, how we teach, and how we need to be thinking about innovation.

On obstacles to innovation...
If you think of some of the biggest innovations of the last decade, you can wonder, why was Netflix not innovated by Blockbuster? Why was Google not innovated by Microsoft? Why was Skype not innovated by AT&T? I have come to the conclusion that there are three traps that prevent some organizations from becoming innovative.

The physical trap is an organization’s unwillingness to abandon current investments. This was the problem for Blockbuster—it was unwilling to abandon its brick-and-mortar infrastructure even when it saw NetFlix coming. Business schools suffer from that same problem. We have so much infrastructure built to support our current business
model—not just our buildings, but our faculty, our reward systems, the type of applicants we attract—that any kind of deep change is difficult.

The psychological trap is about mindset. Look at Kodak, for example. It came up with the digital camera in the early 1980s. It wasn’t that its executives didn’t understand disruptive innovation, the technology, or the product. They had the product. The problem was that they handed the digital camera over to the guy who was running their film business and said, “Make it happen.” But he didn’t make it happen, because his assumptions and biases were all rooted in film.

The same thing happens in business schools. We can’t ask faculty who have spent years working and teaching one way to suddenly do something fundamentally different. We’re not trained that way. Instead, if we want to create innovation in the business school, we have to create a separate space for it.

The strategic trap refers to myopic thinking, which happens when organizations worry only about today’s customers, today’s competitors, today’s technologies. When railroad companies analyzed their competitors, they only looked at other railroad companies. They thought the things flying over their heads had nothing to do with their business!

On making innovation happen...
We are very good at innovating within the current model of business education. The barrier we face is disruptive innovation. For that reason, we must create separate organizations to innovate.

We can learn from a company like IBM. It faced a crisis in the early 1990s when its mainframe business was being attacked from every angle. Talent was migrating away because MBAs didn’t want to work for a company like IBM—they wanted to make billions in Silicon Valley! But after Lou Gerstner took over as CEO, he wanted to show that IBM could be as cool as Google, Amazon, or eBay. So he started the project that created Deep Blue, the supercomputer that beat Gary Kasparov at chess. Then, he launched the project to create Blue Gene, the computer for genetic engineering that was 500 times faster than any other computer at the time. Suddenly, talent began migrating back, and IBM recreated itself as a services and solutions company. It transformed itself.

IBM took almost a zero-based approach, creating entirely new organizations to take on new challenges. To achieve fundamental disruptive innovation, business schools can’t take the same organizations we now have and ask them to do something different. We have to innovate in different spaces.

On the MBA....
We must broaden our focus beyond the MBA to develop other nondegree programs that allow us to interact with executives at different levels. For instance, ten years ago at Tuck we created a program called the Global Leadership 2020—although we’ve had to change the name to 2030 because 2020 is coming up too soon! When we started, I asked several CEOs what they thought they would have to do to prepare for what their companies would look like in 2020. Almost all of them said that they would have to develop their own leaders.

So we created this nine-month program in a dedicated space for half a dozen companies. Each CEO handpicks six to ten people who have the potential to rise all the way to the CEO position. We meet for a week in Hanover; then there’s a three-month period where they complete a hands-on project and network with each other. Next, we spend a week in India, and then they complete another three-month project. Finally, we spend a week in China.

This is not how you do an MBA program. We had to create a separate program based on the idea that leadership is developed through knowledge, experience, and networking.

On the purpose of business schools....
What is the fundamental purpose of business schools? We can’t say that our business is to produce MBAs. That’s like Coca-Cola saying that its purpose is to produce cola. Coca-Cola’s business is to quench thirst. Our business is not to produce MBAs, but to transform the world of business. When we look at it this way, we can see that we’re not just competing with other business schools, but also with corporate universities like General Electric’s Crotonville Management Development Institute. We’re competing with the people at McKinsey, who hire fresh undergraduates and train them themselves. They don’t need MBAs, because they can create MBAs themselves. Once we think of it that way, we free ourselves to actually create disruptive innovations.
Nothing spurs innovation in a business curriculum like consensus among faculty that it’s time for new ways of teaching. That’s what happened nine years ago at the University of Central Missouri’s Harmon College of Business Administration in Warrensburg, when its senior faculty wanted to shake up Harmon’s curriculum and hire teachers who didn’t mind making radical changes to the traditional lecture format. When they heard about a program called the Integrated Business Core (IBC) at the University of Oklahoma’s Price School of Business in Norman, they were more than a little intrigued.

OU’s IBC, developed by management professor Larry Michaelson, comprises a multicourse one-semester program in which students create business plans, apply for bank loans, and start businesses, all while taking courses in which content is carefully timed to provide information just as they need it. (IBC was profiled in “Junior Executives,” an article in BizEd’s May/June 2003 issue.)

UCM faculty were so intrigued by the OU program that they offered Michaelson a job implementing a similar program at Harmon. He took the school up on the offer, and with Michaelson’s help, Harmon College developed its Integrated Business Experience (IBE), a block of four courses that management majors take during the fall semester of their junior year. The block includes courses in management, marketing, and information systems, as well as an entrepreneurship and community service practicum.

In IBE, students work as employees of a 20-35 member company where they apply concepts they learn in their courses to engage in two ventures—a startup business and a service project to benefit a charity organization. Students receive a $5,000 loan from a local bank to start their enterprises and are charged with paying off the loan and making a profit for their charities before semester’s end.

So far, students have sold everything from bobblehead dolls to T-shirts. Last fall, the three student “companies” in the course decided to band together to sell related products—sweat pants, sweatbands, and water bottles. So far, all student teams have paid back their loans and made money for their charities. In the six years IBE has been in place, teams have raised more than $170,000, logged hundreds of service hours, and completed a number of projects. One team renovated a Salvation Army disaster relief trailer and wrote a grant to support the renovation of another. Another team built a gymnasium for a local youth home. Yet another raised $23,000 for a local homeless shelter.

With IBE, students don’t just learn business skills and concepts—they also discover firsthand why those skills and concepts are so important in the workplace, says Christine Wright, a professor of management at UCM who was hired just as IBE was getting started.

“I came here because I wanted to teach differently,” says Wright. “In this program, faculty give few or no lectures, we plan hands-on projects—and many times, we don’t know what’s going to happen next.”

Not all faculty can handle that format, says Wright. “Some faculty have come and left because they weren’t able to let go of control in the classroom. They reverted back to lecture format,” she says. But for those who stay, it’s truly a chance to go off the syllabus and see where students’ own learning processes take them.

Going Beyond IBE

IBE has sparked a culture of innovation that has gone beyond its four core courses. It now sets up a series of nontraditionally taught courses that build on the lessons students learned as they created their businesses in the IBE block. Wright teaches operations management, a spring-semester junior year course that includes a four-week project in which students have to write a request for a proposal to manufacture 60,000 origami stars. They must determine how to fill the order, including where to buy the materials, how much those materials will cost, and how long they would need to complete so large a project. That’s a different experience, she says, than they’d have learning operations management from textbooks and lectures.

Eric Nelson, associate professor of management, teaches teams systems and organizational behavior—also known as “experience-based management” (XB)—which business students take in the spring after IBE. At the start of the course,
Students in Eric Nelson’s experience-based leadership course at the University of Central Missouri participate in an egg drop to learn lessons of leadership, teamwork, and product development.

students are placed into 12 teams, each with four department heads.

“Then we basically give them a 350-page manual and say, ‘Now teach each other,’” says Nelson, with a laugh. “We want them to know that they do indeed have something of value they can impart to other people.”

Why not require students to take the team course before IBE? “The faculty here agree that we have the courses in the right order,” says Nelson. “Sure, IBE would run more smoothly if they took XB first, but IBE gives them a shared series of mistakes. When they get to XB, they can discuss those mistakes and try to run their groups differently.”

He has no set grading system for the course—each semester, students determine the standards by which they will all be graded, so the criteria for success in the course change each time Nelson delivers it. During each meeting, different students lead the discussion—they decide among themselves who will teach which topics. And they receive harsh criticism if those presentations aren’t helpful for the group, Nelson says.

XB is a “messy, messy course,” Nelson admits. It’s designed to replicate the work environment, where students are judged by their output, not by a grade, says Nelson. “In XB, they experience situations that don’t have clear outcomes, and that can be difficult,” he says. “If students have never been measured in ways other than grades on tests and papers, it can be hard for them to understand what they’ll need to do.”

Learning from Failure

For each of Harmon College’s experiential courses, faculty are there to provide guidance, but they also must let the students fail so they can learn from their mistakes, emphasizes Mary McCord, a professor of management and entrepreneurship who teaches in the IBE program.

McCord points to the IBE team that sold bobbleheads—it was barely able to repay its loan because it failed to take into account the $3,000 air shipment of its product from China. “They didn’t make much money, but they learned a huge lesson,” says McCord. “When I first taught IBE, I wouldn’t sleep well because I was worried about the decisions my students were making. Now I sleep like a baby because I know that even when they make mistakes, they’ll overcome them. As faculty, we start to trust our students more and help them realize their untapped potential.”

When courses are student-driven, however, it can be difficult for faculty trained in traditional teaching techniques to accept that failure is part of the innovation equation, says McCord. “It’s difficult to ask faculty to shut up and let their students do the learning,” she says. “Most professors think that if they’re not talking, they’re not teaching. But students learn by trying to do something. Yes, they’ll flail around at first, and it’s not going to be efficient. You’re going to want to step in and fix it. But you need to let them do it. When students fail, they learn.”

Embracing Mistakes

When faculty are given opportunities to experiment, they’re bound to suffer some missteps themselves. Nelson is quick to admit he’s no exception. For instance, Nelson also teaches a post-IBE leadership course, in which students teach leadership topics not to each other, but to client organizations. Their audiences range from corporate executives to a class of eighth-graders. Students meet with representatives from the organizations beforehand to discuss their biggest leadership problems. Then, the students design workshop presentations...
with those problems in mind, pulling from their textbook and individual research.

When his students gave their first corporate leadership workshop, he did not have them meet with the clients first to target the discussion. He now knows that was a mistake. “We weren’t sure how to get this started, so we just presented a random workshop,” he says. “But that didn’t work for the company. We learned from that, and now we know we need to have a specific business problem to tackle.”

But making those mistakes is part of the larger innovative process, he says. The workshops, for example, spark conversations about leadership among students. They learn about leadership through their discussions with clients, their preparation for the workshops, and their experience of teaching the workshops themselves. The events are so popular that every organization has asked the students to return—“with the exception of that first one,” Nelson jokes. “No one thought those workshops would work, but they did.”

**Breaking from Tradition**

Even though students are often considered the vanguards of change on college campuses, even they can be uneasy when professors stray from the traditional—and often passive—classroom format of lectures, tests, and grades, says McCord. When students in Harmon College’s new courses realized they were in for a different kind of learning process—where they would determine their grading standards and even teach content—many weren’t initially happy with the change. Some even complained to administration.

“Students often resist learning outside the ‘norm.’ In fact, if the administration doesn’t support or understand innovation, some students can use the bureaucratic academic system to change their grades or even return the methodology back to a passive assessment method,” McCord says.

With a supportive administration, however, faculty can prove the value of new approaches to students, using everything from testimonials from past students about the effectiveness of the courses to statements from employers that prefer to hire students with these experiences. “Once a college or department has a culture of teaching innovatively and once students find and implement solutions to real problems, their resistance evaporates,” she says.

Other faculty also might doubt that new teaching methods educate students as well as the old. They want to see hard evidence of skills learned, even if an innovative course offers tangible results such as higher employability, better interpersonal interactions, and better citizenship, says McCord. “Despite clear quantitative assessments, such as product creativity, net revenue, profit, hours worked, charity benefits, and service impact, our nonmanagement colleagues felt that the students were not learning as well as students in classes that did not use the IBE innovation.”

But an analysis of years of multiple-choice tests dispelled much of the skepticism, says McCord. The tests had been completed by students in Harmon’s marketing and information systems courses before and after IBE was implemented. “IBE students scored as well as or slightly higher than non-IBE students,” says McCord. “For these professors, the only valid way to measure learning in an innovative format was the score on a traditional multiple-choice test!”

**Making It Easy**

In an environment such as that of Harmon College, faculty creativity increases dramatically, says Nelson. Like Wright, Nelson came to UCM because he wanted a place where he could teach a little differently and have room to experiment with new approaches.

Last semester, for example, students in his XB course decided to teach themselves teamwork by holding their own egg drop contest, in which student teams create packages designed to protect an egg inside from breaking when the package is dropped from great height. “I want to find more ways like this to get students excited and help them learn. I love that XB never runs the same way twice,” says Nelson.

“Here, innovation doesn’t happen in a vacuum—we have multiple courses, multiple approaches, and multiple ways of experiencing content,” he adds. “This is the coolest department, because everyone wants to try new things and is open to new ideas. That’s what makes innovation easy.”
When it comes to relationships between startups and venture capital (VC) firms, distance does not make hearts grow fonder—or profits bigger—according to a study by Xuan Tian, assistant professor of finance at Indiana University’s Kelley School of Business in Bloomington. Instead, too much distance between these firms can lead to costly increases in financing.

Tian looked at 10,000 startups that went public between 1980 and 2005, analyzing their financial performance in relation to how far their offices were from those of their investors. He found that the closer VCs are to the startups they fund, the better they monitor and manage the startup’s activity. That reduces the need for more frequent financings and improves overall performance.

“When VC investors are closer to their portfolio companies, the startups are more likely to go public and enjoy higher operating performances in their initial public offering year,” says Tian. Their long-term survival after the IPO is also more assured, he says.

That doesn’t mean that startups are more likely to fail when they’re farther from their investors, Tian finds. But it does mean that VCs often must make up for a lack of face time with entrepreneurs with more frequent rounds of financing.

This study indicates that as advanced as communications technologies have become, none are yet able to replicate in-person eye contact and conversation, Tian says. That leaves it up to VCs to develop other, more cost-effective ways to support startup firms outside their regions.


Many multinational firms face disadvantages when they cross borders to enter foreign markets. However, there is one area where they might have the upper hand. In a working paper, three researchers argue that by hiring people whom local companies typically exclude from the workplace—mainly women and ethnic minorities—multinationals can benefit from this pool of talent and gain a competitive edge over their less diverse peers.

This finding appears in a working paper written by Jordan Siegel, associate professor at Harvard Business School in Boston, Massachusetts; Lynn Pyun, a graduate student in urban studies and planning at the Massachusetts Institute of Technology in Cambridge; and Byung-you Cheon of Hanshin University and a fellow at the Korea Labor Institute in Seoul, South Korea.

The researchers interviewed a number of executives from multinationals and local firms in South Korea. They also studied the performance of multinationals operating in South Korea during the years 2005 and 2007. The majority of these firms were from Europe, U.S., and Japan. The researchers found that a 10 percent nominal increase in the number of female managers a company employs results in a 1 percent nominal increase in its return on assets.

However, there also is a downside to hiring from culturally excluded groups. Companies that do so can risk being alienated from local business networks. “Multinationals entering such markets must decide whether to aggressively hire and promote the excluded group, thus reaping the benefits of their underutilized talent, or to conform to local practice and avoid provoking bigoted policy makers, executives, purchasers and/or supply agents,” the authors write.

When it comes to hiring women, the authors admit that their findings may apply only in countries where firms have no more than
a token representation of female managers. As countries such as South Korea slowly become more diverse, they say, the competitive advantage of hiring excluded groups will decrease.


## Culture Predicts Performance

Can an individual’s cultural heritage tell a potential employer more about his or her promise than a personality test? A recent study finds that culture can trump personality when it comes to predicting future work performance and organizational loyalty.

The study was conducted by Vasyl Taras, assistant professor of international management at the University of North Carolina at Greensboro’s Bryan School of Business and Economics; Piers Steel, associate professor of human resources and organizational dynamics at the University of Calgary’s Haskayne School of Business in Calgary, Alberta, Canada; and Brad Kirkman, associate professor of management at Texas A&M University’s Mays Business School in College Park.

The authors examined data from nearly 600 previous studies—which together surveyed 200,000 individuals—on how employees’ cultural values affected their job outcomes. The data involved 80 factors, including nonverbal communication, perception of justice, and employee rewards.

The researchers found that the

## RESEARCH RECOGNITIONS

- **Kuntara Pukthuanthong**, associate professor of finance at San Diego State University’s College of Business Administration in California, has received a 2010 Lamfalussy Fellowship from the European Central Bank. Pukthuanthong was recognized for her research proposal, “Are Jumps Between High and Low Volatility Regimes Correlated Across Countries?” The fellowship is one of five awarded on an international basis to scholars younger than 36 years old.

- The Aspen Institute has awarded its Faculty Pioneer award to four business professors. The 2010 recipients of the award in the “Lifetime Achievement” category are James Post, the John F. Smith Jr. Professor of Management at the School of Management at Boston University in Massachusetts, and David Vogel, the Solomon P. Lee Professor of Business Ethics at the Haas School of Business at the University of California, Berkeley.

  The winner in the “Faculty Pioneer” category is Mark Swilling, a professor of sustainable development in the School of Public Leadership at the University of Stellenbosch in South Africa. The winner in the “Rising Star” category is Aaron K. “Ronnie” Chatterji, associate professor of strategy at the Fuqua School of Business at Duke University in Durham, North Carolina. Vishal Agrawal, assistant professor at Georgetown University’s McDonough School of Business, received the 2010 Dissertation Proposal Award from The Aspen Institute’s Center for Business Education. The award honors innovation in research in core business disciplines that consider the interdependence between business decision making, society, and the environment.

- Two professors from the Stevens Institute of Technology’s Howe School of Technology Management in Hoboken, New Jersey, each received a Bright Idea Award in Information Technology from the Stillman School of Business at Seton Hall University and the New Jersey Policy Research Organization Foundation, the public policy research affiliate of the New Jersey Business and Industry Association. German Creamer, associate professor of quantitative finance and financial engineering, received the award for his paper “A link mining algorithm for earnings forecast and trading,” published in the journal Data Mining and Knowledge Discovery. Assistant professor Tal Ben-Zvi was honored for his paper “Data analysis: A roadmap to better decision-making: Methods, techniques and applications.”
way companies rewarded their employees could result in different outcomes, depending on the cultural background of the employees involved. For instance, U.S. culture values personal achievement, so individually oriented rewards can motivate teams to perform better. However, in cultures that value hierarchy, seniority, or egalitarianism, those types of rewards can fail to motivate effectively.

Such cultural differences can be as important to predicting employee achievement as other more traditional predictors such as demographics, personality, and intelligence—if not more so, says Kirkman. “National cultural differences have persisted over time and remain a powerful explanation for outcomes that organizations care deeply about,” he says.

The study describes what happened when an American corporation working in China rewarded two well-performing team members with leather jackets—only to find that the Chinese team found the action inappropriate. Only after the company bought jackets for all the team members did the team return to its former productivity.

The authors also point to General Motors, which found that self-directed assembly line teams that work in the U.S. fail in Mexico, where workers don’t value self-management. Even when employees have been working in an adopted culture for years, their cultural values will still affect their perceptions, the authors emphasize.

The article “Examining the Impact of Culture’s Consequences: A Three-Decade, Multilevel, Meta-Analytic Review of Hofstede’s Cultural Value Dimensions” appeared
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“Surveys of independent directors suggest that, while independent directors believe their strategic role to be extremely important, increased monitoring requirements leave them less time to devote to this role,” says Rani Hoitash.

Not surprisingly, the more time and resources a board devotes to its work on audit, compensation, and nominating committees, the better oversight gets. The researchers found that when the majority of independent directors serve on two or more of the primary oversight committees, they are more likely to rein in excessive CEO compensation, replace underperforming CEOs, and submit higher quality earnings reports.

But those benefits come at a cost: weaker strategic vision and decreased long-term value, says Udi Hoitash. “Corporate acquisition performance, research and development investments, the quality of

in the Journal of Applied Psychology in May 2010. The researchers are writing another article on this topic targeting practitioners for the journal Organizational Dynamics.

Board Oversight Comes at a Cost

In the eight years since the enacting of the Sarbanes-Oxley Act in the United States, boards have become increasingly good at oversight. But how is a company affected when its board must spend more of its time on managerial oversight and less on strategic guidance?

This is a question explored in a study by Olubunmi Faleye, associate professor of finance at Northeastern University College of Business Administration in Boston, Massachusetts; Rani Hoitash, assistant professor of accounting, also at Northeastern. The three examined whether various roles of the boards of public companies overshadow each other.

They found that when directors are asked to serve on multiple oversight committees and place too much emphasis on monitoring managerial decision making, they often neglect their strategic role in the company—which is to advise top management in creating value for shareholders.
FOCUS ON FACULTY

Learning from LEGO

IMD’s David Robertson studies the rebuilding and rebranding efforts of toy company LEGO in order to learn the building blocks of innovation.

After Denmark-based toymaker LEGO experienced its first financial loss in company history in 1998, it embarked on a wide range of new projects in an attempt to rebuild its brand. For more than a decade, company executives created numerous products ancillary to LEGO’s trademark colorful construction blocks, including video games, theme parks, educational centers, plush toys, and watches. They even partnered with Lucasfilm Ltd. to create a line of LEGO toys linked to George Lucas’ legendary “Star Wars” series.

“They hired diverse, creative people. They thought outside the box. They did everything everybody still says a company should do to boost innovation,” says David Robertson, a professor at IMD in Lausanne, Switzerland. “And it almost put them out of business.”

Robertson has been studying LEGO since 2007, when he became fascinated with its comeback story. Last year, he became IMD’s LEGO Professor of Innovation and Technology Management. He has written two case studies on the LEGO Group, as well as articles detailing its return to being one of the world’s leading toy companies.

In 2003, CEO Jørgen Vig Knudstorp and his management team developed what they call an “innovation governance system.” As part of this system, the company formed an Executive Innovation Governance Group to manage innovation across the organization. It delegates authority, evaluates how well proposed innovations suit LEGO’s brand, and allocates resources for the best ideas. Knudstorp and his team then identified innovations they wanted to see within the company.

Finally, they assigned employees to four areas to make that innovation happen: functional groups that handle innovative processes in areas ranging from sales to manufacturing to supply chain; a concept lab that develops new products and play experiences; a marketing and development unit that innovates existing products and experiences; and a “community, education, and direct” unit that reaches out to customer communities and collects their best ideas. These areas have managers who facilitate the innovations within their areas and work with the Executive Innovation Governance Group to obtain the resources they need.

“In most companies, the biggest challenge to managers trying to bring new innovations to market is getting the people and resources they need,” says Robertson. “LEGO has created a coordinated system that simplifies this process.”

The company ultimately discovered that its earlier efforts missed a big part of its market appeal: People just wanted to build stuff with its blocks. Today, the company is no longer opening theme parks. Instead, it’s working to offer customers more interactive experiences with its product. For instance, the company is currently beta testing a multiplayer online gaming site called LEGO Universe. There, visitors can build whatever they like in the virtual space—if they choose, they then can purchase a kit with the blocks they need to build their creation in reality.

“LEGO went out and asked customers and companies like Wal-Mart and Target what was wrong. They were told, ‘You guys have really lost your way. We love LEGO more than you do,’” says Robertson. “By finding out who the core customers are and why they buy, the entire company refocused itself on that and innovated around that core.”

patents and overall firm value all suffer.”

Now that increased corporate governance is a given, boards will need to work harder to strike a balance between governance and guidance. “An exclusive focus on board monitoring and management oversight can have unintended consequences which can lead to a deterioration, rather than an increase, in shareholders’ value,” says Faleye.


Video Games Make Workers Smarter

Video gamers have known it all along, but now they have proof: Interactive video games improve cognitive skills. A study from the University of Colorado Denver Business School finds that workers trained via video games do their jobs better and retain information longer than those trained via more passive methods.

Tracy Sitzmann, assistant professor of management and author of the article, examined 65 studies and data from 6,476 trainees. She discovered that those who trained with video games demonstrated significantly improved skills over those in comparison groups. Their demonstration of factual knowledge was 11 percent better, their skill-based knowledge was 14 percent better, and their knowledge retention rate was 9 percent better.

In her study, Sitzmann points to the example of Cold Stone Creamery. After losing money because workers were serving up too much ice cream, the company created an interactive video game that taught them how much should go into each scoop. She also cites Miller Brewing Company, which is developing a game called Tips on Tap that shows bartenders how to pour the perfect glass of beer. They lose points if the mug hits the tap, where it could become contaminated.

To be most effective, video games must have three characteristics, says Sitzmann. First, they must be interactive. Sixteen percent of the video games that Sitzmann studied were no more effective than more traditional teaching methods because they allowed trainees to remain passive as they learned. Second, employees must be free to play the game whenever they like—and the more interactive the game, the more often employees will want to play.

Finally, the video games must be only one part of a larger training plan, says Sitzmann. Trainees also should be given instruction before and after the game is played to assure they’ve learned the concepts presented.

The study “A Meta-Analytic Examination of the Instructional Effectiveness of Computer-Based Simulation Games” will be published in the winter edition of Personnel Psychology.

Twitter Helps Small Biz Compete

Not every small business can afford high-profile marketing campaigns or catch the attention of news media. But when small companies “tweet” their messages, they can make up for that disadvantage, say Greg Miller, Hal White, and Beth Blankespoor of the University of Michigan Ross School of Business in Ann Arbor.

The three sampled nearly 3,700 press releases from 73 information technology firms between 2007 and 2009. They then examined how a company’s level of tweeting during the time of major news events affected how much news coverage that event received. They also looked at the effect the level of tweeting had on a company’s bid-ask spreads—the difference between the highest price buyers bid for company shares and the lowest price sellers are asking.

They found that tweeting during a news event lowers that spread and increases the number of shares available. Moreover, the smaller the firm, the stronger that effect.

The authors speculate that tweeting provides investors with information they otherwise would not have about smaller firms—and, therefore, prevents them from trading out of fear of losing money. And it helps companies get important information out to a wider audience. “After all,” says Miller, “if investors or other intended recipients don’t receive the information, disclosures become meaningless.”

More Schools Move Content Online

The London School of Business and Finance caught the attention of the media last November when it announced that it would post the content of its Global MBA program on Facebook. Users of the site can audit the entire MBA curriculum—including 80 hours of video and hundreds of hours of study resources—for free. If they wish, they can even pay a fee to be formally assessed—and earn the school’s MBA credential, accredited by the University of Wales in the U.K., if they pass.

LSBF’s move isn’t completely new. Many schools have posted videos of their lectures on YouTube and iTunes. But few brick-and-mortar schools have posted the full line of courses for an MBA, few have done it through Facebook—and few, if any, have offered students who access that content the potential to earn a degree with what they’ve learned.

The school has invested £7.5 million (approximately $11.8 million) in the initiative. Aaron Etingen, LSBF founder, expects more than 500,000 Facebook users to access the courses during the first year. By giving students the chance to “try before they buy,” he believes LSBF can drive more students to pay for the opportunity to earn the actual MBA degree. Even if people do not decide to pursue the formal credential, he adds, “the LSBF Global MBA will, at no cost, better equip business students to deal with the global job market.”

While educators debate LSBF’s method of delivery, few question the demand for online business education that inspired it. More business schools are responding by offering more content in online formats. But in addition, new entrants, with new models, are emerging. Most recently, the American School of Entrepreneurship, a new online provider based in Phoenix, Arizona, announced that it was launching a series of online courses targeting entrepreneurs. ASE will offer a combination of recorded sessions and live chats with mentors for $29 to $49 per session.

ASE’s mini-courses don’t compete with full-fledged degree programs, but they do indicate a shift in the market, says Raghu Tadepalli, dean of Babson College’s Olin Graduate School of Business in Wellesley, Massachusetts. “As competition intensifies, there will be more opportunities for these niche players to come in,” says Tadepalli. That will be especially true, he says, as more students demand educational opportunities that are less time- and money-intensive than a degree program.

Babson’s Olin School is responding to this trend with a new online certificate program in entrepreneurship called “Global Venture Feasibility.” As a joint program with EM Lyon in France and Zhejiang University in China, the course will require students to choose an industry to explore and compare in the U.S., French, and Chinese markets.

“We are accepting the notion that not everyone needs an MBA, so we’re developing these programs to deliver to a broad audience across the country,” says Tadepalli. “We hope that they will also help us leverage...
Arizona State University’s Carey School of Business in Tempe has offered students the option to earn an MBA fully online since 2003. Its program has grown from 100 students to more than 450 students.

“We have been blown away by the number of students who have shifted to the online model, and we’re in the process of trying to understand this trend more deeply,” says Robert Mittelstaedt, dean of the Carey School. “I think these numbers are growing not because students are lazy, but because a large number of our students work full-time, and some are just more comfortable learning through online models.”

Beth Walker, associate dean for the Carey MBA, notes that one of the biggest challenges for business schools as they move to online formats will be to create models that produce the same results as their face-to-face programs. “We do have to think more deeply about how we make this shift,” she says. “But while new delivery models may change how we teach, they don’t change what we teach.”

Mittelstaedt notes that even well-established online programs must pay attention when new players enter the market. “As universities, we often worry about competing with our peers, but it will be outsiders who are most likely to disrupt our business model,” he says. “At the moment, we can look at many of these outsiders as great foils for us to demonstrate why we offer a higher quality product, but what worries me most is if these schools wake up and start delivering higher quality themselves.”
Technology

How Long Before Libraries Go Digital?

While tablet PCs and e-readers haven’t replaced printed texts just yet, students and faculty are accessing more content digitally. Business school libraries are responding by converting much of their content to electronic formats as new titles become available.

For example, the budget for digital materials at the Kresge Business Administration Library at the University of Michigan in Ann Arbor far outweighs the budget for printed materials, explains Nathan Rupp, Kresge’s collection development librarian. In the fiscal year ending in June 2010, the library spent 2.4 percent of its budget on printed books and 21.8 percent on printed subscription-based materials. The remainder—75.8 percent—went toward electronic resources.

However, Rupp says it is unlikely that Kresge will become an all-digital library any time soon, because it must maintain access to printed materials currently unavailable in digital formats—approximately 125,000 volumes. But the library is moving in that direction. Just this summer, the library discarded several thousand print volumes, most often because they were available at other libraries on campus.

Libraries from all disciplines are becoming increasingly digital, says Rachel Frick, director of the Digital Library Federation Program Council on Library and Information Resources (CLIR) in Washington, D.C. She refers to data from the Association of Research Libraries, which indicate that its members are directing larger portions of their budgets to electronic resources. As of 2007–08, the median percentage of budget allotments surpassed 50 percent.

Frick notes that the conversion to all-digital formats might happen more quickly for discipline-oriented libraries, such as those in engineering and science, than for larger undergraduate and graduate libraries. For example, earlier this year Stanford University’s Engineering Library removed all but 10,000 printed volumes from its collection. Most recently, the University of Texas at San Antonio opened one of the United States’ first completely bookless libraries for its colleges of engineering and science.

Business libraries are also on the fast track to digital, says Frick.

NEWSBYTES

■ NCSU Launches Online MBA
The College of Management at North Carolina State University in Raleigh plans to launch an online MBA as part of its Jenkins MBA program. The two-year, 45-credit program has the same requirements as the school’s traditional MBA. Its design will serve the needs of traveling executives or those likely to relocate, members of the military, stay-at-home parents, international students, and those who prefer online methods of course delivery. The majority of their instruction will be offered through NC State’s Distance Education & Learning Technology Partners, using asynchronous methods such as podcasts, streaming video, and online discussion boards, as well as tools such as Camtasia and Elluminate.

■ iPad Pilot at Stern
In partnership with custom course material provider XanEdu, the New York University Stern School of Business is conducting a test of the Apple iPad in 50 courses this fall. Instructors will use the XanEdu CoursePack Management System to publish materials on students’ iPads, and XanEdu will gather input from students through usage logs, surveys, and focus groups. The company plans to use this input to design features for its iPad app, including digital note taking, collaboration tools, and integration into learning management systems.

■ Digital Research Library for Africa
In August, the nonprofit United States Civilian Research and Development Foundation announced plans to spend $1.5 million to create a digital library for scientists in Algeria, Morocco, and Tunisia.
The library will be similar to one the foundation opened in June for scientists in Iraq; plans also are in the works for digital libraries that will serve Afghanistan, Pakistan, and Madagascar. These projects were funded by a $5 million grant from the U.S. State Department, which also will support conferences and training in these areas.

Even so, most agree that the availability of electronic content and the capabilities of e-readers are still ahead of most students’ willingness to use them. The Baker Library at Harvard Business School in Boston, Massachusetts, is waiting to see where e-book trends are going before making the full leap into digital content, says Lydia Peterson, Baker’s content manager.

“We certainly have been making the shift to e-journals wherever it makes sense for us to do so,” she says. “We have not jumped as wholeheartedly into the e-book world, however.” The reason, says Peterson, is simply that library users still prefer to read longer texts on paper, not on screen.

The transition to digital will be most difficult for dedicated research libraries, says Frick. “It is probably too early for most academic libraries to offer access only to electronic collections,” says Frick. “Whereas journals and reference collections are mostly available online, recently published monographs, for the most part are not, and they remain critical for teaching and research.”

CLIR has released a report that includes the article, “Can a New Research Library Be All Digital?” It is available at www.clir.org/pubs/reports/pub147/pub147.pdf.
Like anyone who has been a professor for a long time, I’ve spent hours serving on committees that determine faculty promotion and tenure at the department, college, and university levels. While I believe it’s critical for instructors to participate in evaluating teaching methods and techniques, I see a real problem with the system that’s currently in place: It’s rarely fair.

Too often, faculty serving on tenure and promotion committees must assess a colleague’s teaching abilities in areas that aren’t their own specialties. It’s so challenging for committee members to balance student evaluations with comments from the dean and department heads that some are tempted to base their decisions on the effectiveness ratings these professors have received from students over time. Universities sometimes rank teachers’ scores by department and college, and those receiving higher scores are generally interpreted as being better instructors.

Yet there is so much room for error in these scores that I think members of promotion and tenure committees must ask themselves some nagging questions. Is it fair to rely on student opinions to determine merit rewards and promotion eligibility for faculty? Is it fair to compare scores in a number-oriented department like accounting to scores in a writing-oriented class like management communications?

I think the answers are no. I would argue that the numerical student scores given to faculty are flawed and should be significantly revised, if not eliminated. I believe that, instead, schools should apply due process guidelines to faculty assessment. They also should rely on alternative evaluation processes—such as the student outcomes data required by accrediting bodies—to evaluate professors. In the end, I think, higher education institutions and their faculty both would benefit by employing methods that more accurately assess classroom learning.

**Due Process in the Classroom**

One reason a numerical score is unfair is that it gives professors no way to defend themselves against harsh or untrue criticism. It allows for no due process, a term I borrow from the legal field. The Fifth Amendment of the U.S. Constitution states that the government can’t take away someone’s rights to “life, liberty, or property without due process of law,” and the Fourteenth Amendment extends the principle to state legal actions. Essentially, due process guarantees that an individual will be treated fairly under the law. But universities that rely on student evaluations ignore a professor’s guaranteed rights to fairness.

When due process is granted under the American legal system, the accused is told in a timely manner who has made a complaint against him, and he’s allowed to cross-examine his accusers. He can compel individuals to appear in court if their testimony will help in his defense, and he has the right to legal counsel. All actions take place within a reasonable time period, in the place where the alleged activities occurred.

On the university campus, none of this occurs. Evaluations are compiled after the semester is over, and specific students are never identified as the authors of complaints. These measures are in place so the instructor cannot retaliate against students who grade him unfavorably—but they also prevent the instructor from questioning the students or even instituting meaningful dialogue with them. Once the class is disbanded, there is no chance to carry out due process in the room where the course was held, or to call in accusers or witnesses from the classroom. And “counsel” usually means a department chair or a representative of the dean’s office, most of whom do not have legal training.

I believe that, if schools instituted a due process procedure, evaluations would be more fair. Faculty could meet with students and get a clearer idea of the perceived problems. They could also present their own cases to administrators and undo any damage caused by false student evaluations, while petitioning to have an unfair score expunged from their files.

At the same time, administrators would be able to judge the accuracy of student evaluations. For instance, they might find that low student evaluations are disproportionately given to professors in large classes and difficult courses, while high marks are given in number-based classes like accounting. Such discoveries might cause administrators to do away with student evaluations altogether.

**Student Opinions**

There’s another reason I believe student evaluations are unfair to professors: In some respects, students aren’t qualified to judge whether the professors are doing their jobs or not.

Most of today’s business professors have two roles. They teach, and they conduct research within their disciplines. Conducting the research...
allows professors to relay up-to-date information about their fields to their students. But as the market shifts, or as the professor’s ongoing research uncovers new information, the content of the course will change continuously. Since students have no role in the research effort, they don’t have the background or expertise to report on or evaluate class content.

What students can accurately evaluate is how well the professor creates an environment that promotes learning. A useful tool is a class management report, in which students note if the syllabus was clear, the class met as scheduled, exams were held on promised dates, grades were provided on a timely basis, and the teacher treated them with respect. The class management report might also include narrative personal replies from students. Because these can’t be tallied and presented in numerical scores, they give administrators a different kind of insight into a professor’s performance. Students’ perceptions—such as “The salary paid this professor is too high,” “Class is too easy/hard,” and “There are too many exams”—comment on classroom expectations rather than the level of material learned.

On the other hand, administrators must be aware that student perceptions can be greatly influenced by the instructor’s personality, which might have nothing to do with whether or not he or she is an effective teacher. In a 2000 article in Assessment & Evaluation in Higher Education, authors Mark Shevlin, Philip Banyard, and Mark Davies noted that the “instructor charisma factor” explained 69 percent of the variation marks given to professors on their ability to lecture.

Therefore, it’s essential that both the professor and the student understand the difference between the academic content and the overall experience of the class. Students might find a class enjoyable because the teacher is entertaining or their internships are fun, but those usually aren’t the components that warrant academic credit. And those shouldn’t be the components that drive a student’s—or an administration’s—assessment of a professor.

Learning Objectives
While due process proceedings and class management reports are excellent tools for helping determine a professor’s effectiveness, there’s another one that could be even more useful. At schools that have achieved or are pursuing accreditation, much of the focus is on assurance of learning. When a school establishes assurance of learning processes, the professor and the department establish learning objectives before the semester even begins, and the school captures a constant stream of data to determine if those objectives are being met. Individual college departments also frequently devise ways to capture additional data. These are much fairer and more objective measures of a professor’s effectiveness than a student evaluation.

The professor and the administration also work together to determine what class inputs—such as texts, exams, homework assignments, and lab work—will be used to judge whether the professor has met the learning objectives. In fact, once the learning objectives and class inputs are clearly established, the success of the class depends on the instructor’s ability to deliver the material. It’s up to the professor to make students understand what topics and concepts will be important in the course, what level of technology students are expected to master, and how the class inputs will be used to determine assurance of learning.

My assumption is that, as professors spend more time preparing learning objectives and inputs, they will create more structured and more disciplined classes. By that, I mean classes that require and receive original work from each student. The professor’s class expectations will become the student’s expectations.

Such well-regulated class environments will become even more important as the popularity of online classes increases, but they are essential even in a traditional classroom. I believe professors will perform at their peak if they know they are being fairly evaluated by data-driven methods, and not purely by student perception—and if they know they will be able to defend themselves against any criticism that arises.

When professors are at their best, students are at their best. Fair and impartial faculty evaluations thus improve the classroom experience for everyone. ■

Donald Epley is a Distinguished Professor of Real Estate in the marketing department and director of the Center for Real Estate Studies at the University of South Alabama’s Mitchell College of Business in Mobile.
A business leader faces constant challenges, but only a few can be classified as true crises: events that are infrequent, significant, played out in public, and likely to affect multiple stakeholders. It’s the rare CEO who knows how to get through such an event with grace. In *Leading Under Pressure*, Erika Hayes James and Lynn Perry Wooten explore what defines a crisis, what skills will help executives weather it, and how they can prepare for it in the first place. They identify the five phases: signal detection, preparation, damage control, business recovery, and learning. According to James, of the University of Virginia, and Wooten, of the University of Michigan, “Crisis leadership is a frame of mind accompanied by a key set of behaviors. The frame of mind is characterized by openness to new experiences, willingness to learn and take risk, an assumption that all things are possible, and a belief that even in times of crisis people and organizations can emerge better off after the crisis than before.” They don’t minimize the trauma of a crisis, but they do offer hope for surviving it not only intact, but strong. (Routledge, $59.95)

Despite all the coverage it gets in business media, China is still a largely mysterious country where even the most sophisticated multinational firms can fail. Jonathan Story, an emeritus INSEAD professor now at Rensselaer Institute, provides a look at China’s past and a glimpse into its future in *China Uncovered*. Designed to help CEOs figure out how to succeed in this complex market, the book is part history lesson, part strategy session—and part admonishment that any company doing business in the country must be infinitely adaptable. “China’s rapid and radical transformation towards a market economy has created a business environment that varies widely and changes almost daily, and there is no sign that it is slowing down,” Story warns. He touches on the myriad factors that influence Chinese business, from Communist politics to the *guanxi* underlying relationships to the vast differences between urban and rural areas. With his detailed and absorbing book, Story helps business leaders learn how to think about this constantly evolving nation. (Prentice Hall Financial Times, $19.99)

Breaking up isn’t the only thing that’s hard to do—so is closing down an underperforming division or firing a subpar staff member. Generally speaking, most people aren’t good at making *Necessary Endings*, says psychologist Henry Cloud, and that flaw might prevent them from being successful, in business and in life. He makes the case that endings are natural and essential events that open the way for improved careers and relationships. “Endings are the reason you are not married to your prom date or still working at your first job,” Cloud observes. “Endings are crucial, but we rarely like them. Hence, the problem.” In an approach that is both compassionate and implacable, he outlines why endings are so important, what “internal software” keeps many people from accepting them, and how to tell the difference between something that can be fixed and something that ought to go. He acknowledges that endings are often painful, but he makes a persuasive case for their positive power. (Harper Business, $25.99)

It’s hard to resist a book called *Zombie Economics*, and University of Queensland professor John Quiggin makes his tale as compelling as his title. His premise is that the global financial crisis can be partly blamed on economic theories that died long ago, but that stubbornly keep shambling around, destroying individual fortunes and whole economies. He writes, “In the history of economics, there can be no more durable zombie than that of a New Era, in which full employment and steady economic growth would continue on indefinitely.” According to Quiggin, other destructive undead include privatization, trickle-down economics, and the efficient markets hypothesis. He’s not afraid to call out advocates and authors of these ideas, especially those trying to reanimate the tattered corpses. His own prescriptions to keep the economy breathing include relying “more on realism, less on rigor, more on equity, less on efficiency, more on humility, less on hubris.” It’s the rare read that’s both thoughtful and fun. (Princeton University Press, $24.95)

“If businesses managed their money as carelessly as they manage their people, most would be bankrupt,” write Bill Conaty and Ram Charan in *The Talent Masters*. Their book presents companies...
In 1977, the University of Texas at Austin launched the Innovation, Creativity and Capital Institute (IC2) to stimulate economic regional growth by connecting academia, government, and business. Twenty years later, the institute has been so successful at helping turn Austin into a high-tech entrepreneurial hub that it serves as a model for other universities and regions looking for their own transformations. The IC2’s story is one of six international case studies presented in The Development of University-Based Entrepreneurship Ecosystems edited by Michael Fetters and Patricia Greene of Babson College, Mark Rice of Worcester Polytechnic Institute, and John Sibley Butler of UT Austin. The other schools profiled are Babson, EM Lyon, University of Southern California, Tecnológico de Monterrey, and National University of Singapore. The book’s goal is to show the various paths universities can take to construct “ecosystems” on their own campuses and how these can nourish whole geographic areas. “Given the challenges of today, the world needs more than ever the positive change exemplified by entrepreneurial thought and action,” write the authors. “University-based entrepreneurship ecosystems are uniquely capable of developing entrepreneurial talent and providing a context where it can thrive.” (Edward Elgar Publishing, $99.95)