CLASSROOM TECHNOLOGY JANUARY/FEBRUARY 2008 3n's Cinta Getting the Word Out The Paperless Business School Measuring the Impact of Faculty Scholarship

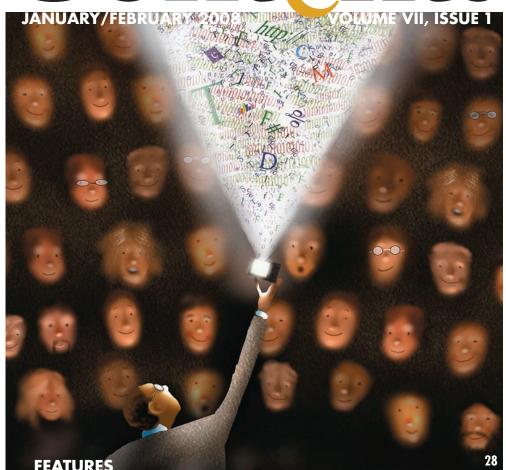
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Cover photo by Chris Corsmeier



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From the Editors

The Time Zone of Technology

About a month ago, I e-mailed a colleague to ask a work-related question. He responded a few minutes later to tell me he couldn't give me a comprehensive answer until he'd returned from a trip overseas. I e-mailed back to inquire, "Where are you now?" He replied, "On a bus in Istanbul."

The whole exchange struck me as a microcosm of our modern society. We were using sophisticated technology to communicate instantaneously across time zones, across oceans, around the world. And we were discussing global business.

I'm fascinated by the idea that technology has rendered both time and location irrelevant. As it happens, my colleague and I were having a real-time conversation, but e-mail has made asynchronous communication one of the simplest and most pervasive tools available to today's businessperson. It has rendered the clock obsolete.

As a TV junkie, I'm also intrigued by the way technology has warped the notion of time in the field of entertainment, particularly as television networks wrestle with the issue of "time-shifted viewing." Fewer television viewers are catching their favorite shows as they air—instead they record them on DVR, access them online, or download them to their MP3 players to watch when they want. Television producers are still trying to determine how to count these nontraditional viewers, but they better figure it out fast. The more viewers turn to time-shifted devices for their entertainment, the more such technology will determine whether a show succeeds or fails.

Technology is rewriting the rules of businesses in many fields outside of entertainment—and that means it's having a profound impact on business schools across the curriculum. In this issue of *BizEd*, we examine some of the ways schools are embracing technology. Allen H. Kupetz asks "Is the Paperless Classroom Possible?" as he details all the ways technology can change the classroom. In "Technology at Work," Lee Schlenker and Adam Mendelson recommend that business schools teach their students only the tools that will be so prevalent in the workplace that they will "practically disappear into the woodwork." In "Teaching Business in a Web 2.0 World," we explore the ways business schools are tapping into Web 2.0 technologies to enhance student learning, establish dynamic connections among their communities, and respond more quickly to advances in business.

If none of that seems challenging enough, go to YouTube and search for a video called "Shift Happens" by Karl Fisch and Scott McLeod. It's a head-spinning look at the changes to come in the world and how hard it will be for education to keep up. While predictions are inherently fallible, the creators of the video paint a picture of a tech-enabled future so rapidly changing that it literally leaves viewers dizzy.

Welcome to the new, ever-adapting, technologically complex world of business.

It's as big as the planet, as accessible as your cell phone, and available 24 hours a day. It's a stark fact that technology is only going to grow more complicated as it evolves—and the best business school programs will evolve right along with it.



Headlines

Social and Environmental Rankings for B-Schools

Stanford University in California is one

of the best schools in the world in terms of offering courses that address social and environmental responsibility. It came out on top in the most recent Beyond Grey Pinstripes, a biennial alternative ranking of business schools compiled by the Aspen Institute. Survey results compared data from 111 schools in 18 countries.

Rounding out the top ten were the University of Michigan in Ann Arbor; York University in Toronto, Ontario; University of California in Berkeley; University of Notre Dame in Indiana; Columbia University in New York City; Cornell University in Ithaca, New York; Duquesne University in Pittsburgh, Pennsylvania; Yale University in New Haven, Connecticut; and Instituto de Empresa in Madrid, Spain.

Among European schools, the schools ranked in the top ten were Instituto de Empresa; ESADE in Barcelona. Spain; Erasmus University Rotterdam in the Netherlands: the University of Nottingham in the U.K.; the University of Jyväskylä in Finland; Copenhagen Business School in Denmark; INSEAD in Fontainebleau, France; IMD in Lausanne, Switzerland; Cranfield School of Management in England; and the University of Bath in England.

"This year's survey tells us that society and the environment are

becoming significant issues on campus," said Rich Leimsider, director of the Aspen Institute

Center for
Business Education. "However, what we are not seeing in most schools is

an examination of these issues through the lens of risk management and strategy and the realization that mainstream, forprofit business can be a force for positive social and environmental change."

The Aspen Institute has also announced the winners of its Faculty Pioneers awards, which recognize faculty who are leaders in integrating social and environmental issues into their research and teaching. The 2007–2008 winners are David Cooperrider of Case Western Reserve University in Cleveland, Ohio; J. Gregory Dees of Duke University in Durham, North Carolina; Daniel Diermeier of Northwestern University in Evanston, Illinois; Kirk Hanson of Santa Clara University in California; Carrie Leana of University of Pittsburgh in Pennsylvania; Johanna Mair of the University of Navarra in Barcelona, Spain; Jeffrey Robinson of New York University; Warner Woodworth of Brigham Young University in Provo, Utah; and Chris Hope of Cambridge University in England. André Sobczak, professor at Audencia Nantes School of Management, has been named the European "rising star" in the field of global responsibility by the Aspen Institute and the European Academy for Business in Society (EABIS).

Hawaii the Site for the International Conference

"The Expanding World of Management Education" is the theme of AACSB International's 2008 International Conference and Annual Meeting planned for April 13-15 in Honolulu, Hawaii. More than 1,000 management education deans and faculty members from more than 40 countries are expected to attend the conference to exchange views and insights, learn about new ideas and technologies, and network with peers.

Session topics will include global issues in accreditation, strategic partnerships, curriculum development, and technology integration. More than 80 exhibitors will be on hand for all three days of the conference, showcasing new technology, research tools, and

strategic planning resources. Other events are scheduled for the two days before the conference opens. A pre-conference seminar led by Milton Blood and Lee Caldwell will help deans, faculty, and administrative staff develop a strategic management model. Affinity Group meetings, also held on Saturday and Sunday before the conference, will allow attendees to join with other management educators to discuss topics in which they share an interest.

Attendees who want to extend their stay in Hawaii can sign up for one-, two-, and three-day packages to neighboring Hawaiian islands. Pre- and post-conference packages cover Maui, Kauai, and the Big Island. More information can be found at www.aacsb.edu/hawaii.

The conference headquarters hotel is the Hilton Hawaiian Village Beach Resort and Spa on Waikiki Beach in Honolulu. Attendees may make reservations by visiting AACSB's Web site or by calling the Hilton's number at 800-445-8667.

More information can be found at www.beyondgreypinstrips.org and www.AspenCBE.org.

Professors Win Nobel in Economics

Three U.S. professors have been awarded the 2007 Nobel Prize in Economics for having laid the foundations of mechanism design theory. Leonid Hurwicz is Regents Professor Emeritus of Economics at University of Minnesota, Minneapolis; Eric S. Maskin is Albert O. Hirschman professor of social science at the Institute for Advanced Study, Princeton University, New Jersey; and Roger B. Myerson is the Glen A. Lloyd Distinguished Service Professor at the University of Chicago in Illinois. They will share the \$1.5 million prize equally.

They are being honored for work that examines how the market functions in the less-than-ideal circumstances of the real world, when competition is not always free, consumers are not always perfectly informed, production and consumption models generate costs and benefits, and many transactions take place within firms or among interest groups. They have asked a number of different questions: How well do different institutions perform? What is the optimal mechanism to reach a certain goal, such as social welfare or private profit? Is government regulation called for, and how is it best designed?

Mechanism design theory allows people to distinguish situations where markets work well from those where they do not. This distinction has led to more efficient trading mechanisms, regulation schemes, and voting procedures.





DESPITE FOCUSING ON BUSINESS SCHOOL CHALLENGES IN THE SURVEY, MANY DEANS STRESS THE VALUE OF SHARING INFORMATION, BEST PRACTICES, AND RESOURCES.

■ What Lies Ahead

When business school deans look to the future, what concerns them most is attracting and keeping faculty, according to a survey conducted last fall by AACSB International. The survey, which received responses from 240 of AACSB's member schools, was designed to help the association identify the issues deans will be wrestling with during the next three years and beyond. Some key findings:

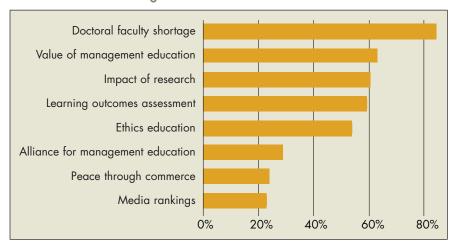
What Concerns a Dean the Most?

Short-Term	
Faculty recruitment & retention	86%
Financial resources	63%
Programs and curricula	37%
Assurance of learning	22%
Competition	14%
Research	9%
Business & business schools	1%
Long-Term	
Long-Term Faculty recruitment & retention	67%
Faculty recruitment &	67% 57%
Faculty recruitment & retention	
Faculty recruitment & retention Programs and curricula	57%
Faculty recruitment & retention Programs and curricula Financial resources	57%
Faculty recruitment & retention Programs and curricula Financial resources Competition	57% 54% 23%

In both the short and long term, deans are most focused on the challenge of finding and retaining top faculty. They are also concerned about dealing with financial pressures and designing strong, relevant programs that keep them ahead of the competition.

- Faculty-related issues, especially recruitment and retention, top the list of challenges deans expect to face in the next three years and over the long term. In addition, most respondents worry about the shortage of academically qualified faculty, which has led to high salaries for faculty during a time of budget constraints. Others express concern about achieving the appropriate balance of academically and professionally qualified faculty, while maximizing faculty productivity across teaching, research, and service.
- Financial pressures also will present a huge challenge for deans in the near future—and they don't expect things to get much better in the long term. When citing specific concerns, many point to the high costs of curriculum and program innovation, specifically when it involves the use of technology or development of global networks and operations. Others mention the cost of recruiting faculty and supporting faculty development.
- Deans also face the challenge of staying abreast of changes in the business environment—and incorporating these changes into the business school curriculum. In particular, they are concerned about addressing ethics, corporate social responsibility, technology, and/or globalization topics in their programs. Respondents say they are trying to determine the best way to balance program content and duration, how to teach a new generation of tech-savvy students, and how to prepare students for a global economy. While developing the curriculum is a topic that preoccupies them to some degree in the near future, it concerns them even more as they look at the longterm picture. Many deans believe that the best way to produce a more current curriculum would be to collaborate more effectively with the business community through partnerships and relevant research.
- Competition among business programs also weighs heavily on

What Should AACSB's Highest Priorities Be?



Deans were asked to assess the importance of current AACSB Thought Leadership initiatives on a scale of 1-5, using 4 as a high priority and 5 as the highest priority. The chart shows the percentage of those rating each initiative as high or highest priority.

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"I think the College of Management's graduate programs have the potential to be among the top two to three graduate schools of business for technology-oriented students.

It's not just the technical skills that you need to be successful; it's the people skills. Management programs round out a person's prior education, providing the skill sets needed for success in business today. This is what I think the college and this graduate school can offer to technology-based graduate students. That's why I'm so excited about this honor."



the minds of many deans. Respondents plan to meet the increased competition for students by seeking ways to build better brand awareness, sustain innovation and differentiation, and articulate the value of accreditation to their stakeholders.

■ Development of an assurance of learning program is an important short-term issue for one in five deans; however, it's clear that most deans expect to have processes largely implemented and running within the next few years, since this did not appear as a significant long-term concern.

Despite focusing on business school challenges in the survey, many deans stress the value of sharing information, best practices, and resources. Some of that sharing can be done through AACSB's Resource Centers, which provide a comprehensive source of information, tools, and discussion about many of the topics deans identified through this survey.

Additional survey results, as well as links to the AACSB Resource Centers, may be found online at www.aacsb.edu/resource_centers. Responses to this and future sur-

veys, which the association plans to conduct every three years, will help AACSB prioritize thought leadership and advocacy efforts for member business schools.

Alumni Donate to Retain Wisconsin Name

A naming gift is designed to identify a school for perpetuity, but as times change and more money is raised, some schools find themselves looking for new ways to honor generous donors. Alumni from the University of Wisconsin-Madison have found a creative solution to that problem as they donated gifts totaling \$85 million to the Wisconsin School of Business. The Wisconsin Naming Partnership's gift will preserve the Wisconsin name for at least 20 years, during which time the school will not be named for a single donor or entity. Future naming gifts still remain an option.

The 13 gifts were made by Paul and Carol Collins; Wade and Beverly Fetzer; Pete and Pat Frechette; Jon and Ann Hammes; Ted and Mary Kellner; Paul and Julie Leff; Sheldon B. and Marianne Lubar; John and Tashia Morgridge; Albert O. "Ab" and Nancy Nicholas; John and Anne Oros; H. Signe Ostby and Scott Cook; and two anonymous donors. Each partner committed a minimum of \$5 million to join the partnership.

The partnership underscores the connection between alumni and students. Says founding partner Nicholas, "We hope this naming gift inspires an even broader group of alumni to give back to the university that helped shape who they are today."

Headlines

■ GreenWatch

An ongoing survey of b-school initiatives aimed at raising environmental awareness and reducing a school's carbon footprint.

■ Thunderbird in Glendale, Arizona, has announced the Carbon Free Degree, a largely student-run initiative to make the on-campus studies climateneutral. The ultimate goal is for each graduating class to undertake unique business projects to compensate for the emissions generated during their studies.

The incoming fall 2007 class will begin this process by participating in an on-campus Sustainable Innovation Challenge asking students to identify projects that shrink Thunderbird's climate footprint in ways that pay for themselves and contribute to the educational goals of the school. The winning strategies will be implemented by the school, and the winning teams will receive a \$1,000 prize.

"As a business school, we have a responsibility to provide organizations with managers trained in finding strategic solutions. The Carbon Free Degree helps us achieve this in two ways," says Gregory Unruh, director of the school's Lincoln Center for Ethics in International Management. "First, it addresses Thunderbird's own impact as an institution. And second, it ensures that all our students are both knowledgeable about the sustainability problems facing business and capable of devising solutions that square economics with ecology."

■ Students at Babson College in Wellesley, Massachusetts, have partnered with the school's Facilities Management and Planning department to launch Green@Babson to promote energy efficiency, recycling, and other sustainable practices on campus. Students and the Facilities office also started the Babson Energy & Environmental Club (BEEC) to promote energy conservation. Together they engaged the students in a "Dark Dorm" competition, which measured each dorm's energy and water use. Each month the dorm that used the least energy was given a pizza party. After four months they had saved the College more than \$20,000.

■ The MBA program at HEC in Paris has partnered with EcoAct, a Paris-based organization that creates customized sustainable development programs. Working with EcoAct, the MBA program will carry out an audit of greenhouse gas production through the Bilan Carbone program. It will also participate in EcoAct's community collaboration project, which emphasizes environmental preservation and social development around the world. HEC is also supporting "Plant for the Planet: Campaign for a Billion Trees," a program launched by the United Nations Program for the Environment.

■ Fairfield University in Connecticut has just unveiled its new eco-friendly Combined Heat and Power Plant, which is designed to generate almost the entire electrical load of the campus.

SHORT TAKES

NEW APPOINTMENTS

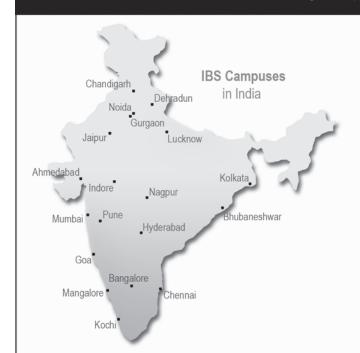


- Jean-Marc Xuereb has been appointed dean of faculty at ESSEC Business School in Paris. Xuereb, who succeeds Marie-Laure Djelic, holds the Sales and Marketing Strategy Chair.
- Yash P. Gupta has been named the first dean of Johns Hopkins University's new Carey Business School. Gupta most recently served as dean of the University of Southern California's Marshall School of Business. He takes his new position January 1.
- Amin U. Sarkar has joined Alabama A&M University in Normal as dean for the School of Business and professor of economics. Most recently, Sarkar was at the College of Business & Technology at Black Hills State University in South Dakota.

- Allan R. Cohen has been named interim dean of the F.W. Olin Graduate School of Business at Babson College in Wellesley, Massachusetts. Cohen holds the Edward A. Madden Distinguished Professor in Global Leadership and previously served as Babson's vice president of academic affairs and dean of faculty.
- Jim Simpson has been named interim dean of the College of Business Administration at the University of Alabama in Huntsville. He took office in December in preparation for the January 1 retirement of C. David Billings, who has been dean of the business school for more than 26 years. Simpson is a professor of marketing and chair of the school's Management and Marketing Department.
- James E. Post has been named the inaugural holder of the John F. Smith Jr. Professorship in Management at Boston University's School of Management in Massachusetts.

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- Gregory Crawford has been appointed chief economist of the Federal Communications Commission (FCC). During his appointment, Crawford will be on leave from his position as associate professor of economics at the Eller College of Management in Tucson, Arizona.
- Douglas R. Conant, president and chief executive officer

of the Campbell Soup Company, has been appointed the new chairman of the Students in Free Enter-

prise (SIFE) 2007 World Cup.

Mark Schankerman has been named the first James and Pamela Muzzy Chair in Entrepreneurship at the University of Arizona's Eller College of Management in Tucson.

■ Mark Beasley has been named to the new position of Deloitte Professor of Enterprise Risk Management at North Carolina State University's College of Management in Raleigh. Beasley is director of the ERM Initiative at the College of Management.

STEPPING DOWN

■ Steve Jones has announced he will step down as dean of Kenan-Flagler Business School at the University of North Carolina at Chapel Hill when his five-year term ends next summer. Jones, who was named dean in 2003, plans to remain on the faculty and assist in fund-raising efforts.

HONORS AND AWARDS

■ Entrepreneurship centers at six U.S. schools were singled out as the best in the nation during the 11th Annual National Consortium of Entrepreneurship Centers 2007 Conference held last fall at Syracuse University in New York. The NAS-DAQ Center of Entrepreneurial Excellence went to the MIT Entrepreneurship Center at Massachusetts **Institute of Technology**. Other winners were the University of Illinois-Chicago for Excellence in Specialty Entrepreneurship Education; Rice University for Outstanding Contributions to Enterprise Creation; Ball State University and Northern Kentucky University for Excellence in Entrepreneurship Teaching and Pedagogical Innovation; the University of Illinois-Urbana-**Champaign** for Exceptional Activities in Entrepreneurship Across Disciplines; and Syracuse University for being a Center of Entrepreneurial Leadership.

■ IMD professor Phil Rosenzweig has received the getAbstract Business Book of the Year Award for 2007 for The Halo Effect...and the Eight Other Busi-

ness Delusions That Deceive Managers.

PHIL ROSENZWEIG

Headlines

SHORT TAKES

COLLABORATIONS

- Harvard Business School of Cambridge, Massachusetts, will partner with the Harvard Business School India Research Center to offer the school's first executive education program in Hyderabad, India, this February. "Building a Global Enterprise in India" will be taught by HBS senior faculty, relying on cases tailored to the needs of companies operating in India.
- The Culverhouse College of Commerce and Business Administration at the University of Alabama in Tuscaloosa will partner with the University of Alabama in Huntsville to offer an executive MBA degree in Huntsville starting in July.
- The State University of New York and Nanjing University in China are collaborating to create a new Institute of Global Studies. The primary office of the Institute will be located in Nanjing on the site of the new SUNY/Nanjing International College. The U.S. office is housed at the Levin Institute in New York City. Co-directors will be Denis Simon and Zhang Rong.
- Northern Illinois University's College of Business in DeKalb has entered into a long-term relationship with the microfinance organization Opportunity International. The relationship began last spring when a team of graduate and undergraduate students developed a comprehensive marketing campaign for the organization. Because of the success of that program, the school has launched a course in social entre-

preneurship in partnership with the organization. As part of the course, ten business students traveled to Mexico this fall to help provide direct business training to some of the women who are receiving microloans through Opportunity International.

GIFTS AND DONATIONS

- A \$25 million gift from real estate developer Gerson Bakar will endow at least five new faculty positions at the Haas School of Business at the University of California in Berkeley. In recognition, the school will name its faculty wing the Gerson Bakar Faculty Building and the new faculty members will be called Gerson Bakar Faculty Fellows.
- Webster University in St. Louis, Missouri, has received a \$10 million gift from former U.S. Ambassador George H. Walker III. The gift, the largest in the school's history, will benefit Webster's School of Business and Technology.
- Real estate developer Leonard W. Wood has committed \$4 million to the Center for Real Estate Development at the Kenan-Flagler Business School of the University of North Carolina at Chapel Hill. The gift, which



includes a matching \$1 million gift from Wood's business partners, will establish The Leonard W.

Wood Foundation for Excellence in Real Estate and support other initiatives. UNC Kenan-Flagler will recognize Wood's gift by renaming the center the Leonard W. Wood Center for Real Estate Development. ■ The College of Business at the University of Missouri-Columbia has been renamed the Robert J. Trulaske Sr. College of Business in recognition of a series of gifts from Geraldine Trulaske in honor of her husband. The most recent gift, for an undisclosed sum, will allow the school to make advancements in undergraduate program, the School of Accountancy, the Crosby MBA program, research, and other initiatives.

NEW CAMPUSES

EM Lyon Business School in France is opening a new campus in Geneva, Switzerland, to serve the "Alpine

diamond" region formed by Lyon, Geneva, and Turin, Italy. The new school will focus on private banking, management of luxury products, management of international organizations, and

management of biotech companies.

an office in New York City in addition to its campuses in France and Singapore. The U.S. office will allow INSEAD to develop its brand in the Americas, enhance its alumni relations activities, build awareness within the corporate sector, and expand its work in executive education.

NEW PROGRAMS

■ The Carlson School of Management at the University of Minnesota in Minneapolis has revamped its undergraduate business curriculum to include a public/nonprofit management major, a mandatory international experience, a contemporary management course for freshmen, and immersion into a core set of



classes in students' sophomore years. The goal is to introduce students to the international world of business earlier in their educations and prepare them for the integrated business courses of the MBA program.

- A new joint Certificate in Innovation Management Program has been launched as collaboration between the Clark School of Engineering and the Smith School of Business at the **University of Maryland** in College Park. The five-module series pairs faculty from business and engineering and is aimed at entrepreneurs, small-business owners, and executives in corporate venturing.
- In January, the Graduate School of Management at the University of Dallas in Texas is introducing a new, mission-driven curriculum for its Dallas MBA program. The new curriculum has five components: courses on business fundamentals; training and assessment in leadership skills; core courses on value creation;

core courses that integrate value creation with strategy, social responsibility, and decision making; and industry-specific electives.

OTHER NEWS

■ The Wharton School of the University of Pennsylvania in Philadelphia has established a new scholarship to benefit one Marine Corps officer annually, enabling the individual to attend a Wharton Executive Education course. The scholarship was created to honor Captain Robert M. Secher, who was killed in Iraq in 2006. Secher helped the Wharton School design its Quantico Leadership Venture, a leadership development work-



shop that builds upon the programs and facilities of the U.S. Marine Corps for developing leadership at its Officer Candidate School in Quantico, Virginia.

- A new initiative dedicated to advancing multicultural women in the corporate workforce has been founded by Ella L.J. Edmondson Bell, a professor at the **Tuck School of Business** at Dartmouth in Hanover, New Hampshire. ASCENT is a national nonprofit organization that develops skills and talent through research, executive education, networking opportunities, and corporate sponsorships.
- The College of Management at North Carolina State University in Raleigh has named its Jenkins Graduate School of Management in honor of Benjamin P. Jenkins III, vice chairman and president of the General Bank at Wachovia Corporation. The new Jenkins Graduate School includes the MBA and master of accounting programs, as well as the Graduate Economics Program, which is offered jointly by the College of Management and the College of Agriculture and Life Sciences.

15

The **instant**Messenger

be prepared to lead through a crisis, says
Cinta Putra, CEO of emergency notification communications company 3n. They need the perspective and know-how to help their organizations recover and survive.

by Tricia Bisoux

M. SMS. E-mail. Wi-fi. Texting. When it comes to the business of one-touch, "one-call-to-all" crisis communications, Cinta Putra often speaks in a rush of acronyms and technological lingo. As CEO of 3n (National Notification Network), a leading emergency communications systems provider based in Glendale, California, Putra knows that organizations can better survive a crisis if they can communicate instantly and reliably to everyone in their networks when disaster strikes.

Putra graduated with her BBA from California State University in Fullerton in 1989; she earned her MBA from Cal State in Dominguez in 1993. She knew early in her business education that problem solving was her passion, she says. That passion has largely driven her entrepreneurial success. In the wake of the attacks in the United States on September 11, 2001, Putra and her three business partners—Steve Kirchmeier, James Keene, and Patrick Stuver—realized how tragic it can be when organizations and emergency service providers are unable to communicate with their people in a crisis.

Together, the partners founded 3n, which provides technology that allows organizations to send important messages to everyone in their database across all communication paths, including voice mail, instant messaging (IM), short messaging service (SMS, or text messaging), and e-mail. They also can receive real-time reports that track who has received the message and who has yet to respond. Since its founding, 3n has provided communication services to organizations during Hurricane Katrina, the tsunami in Southeast Asia, and other emergency situations.

Recently, Virginia Polytechnic Institute and State University in Blacksburg selected 3n to provide its new emergency communication system, a plan already in the works before a gunman shot 32 students and faculty members on its campus in April 2007. Using the system, named VT Alerts, campus administrators can send emergency messages to students, faculty, and staff via phone calls, e-mails, and text messages sent to mobile devices; the school also can send instant messages through AOL, Yahoo, and MSN. Moreover, the system allows subscribers to list emergency contacts, including parents, spouses, and other friends and family.

As a business leader—and a wife and mother of four children—Putra knows a thing or two about crisis management. She emphasizes that unexpected emergencies are inevitable in business, and each requires a calm response and unique solutions. To manage through them and rise above them, business students must do more than rely on standard business models and traditional solutions. They must communicate effectively, work well with those around them, and think on their feet to attend to the problem at hand.



photos by Chris Corsmeier ${f Bi_ZEd}$ JANUARY/FEBRUARY 2008 17

"There are no shortcuts to success! Success is still 99 percent perspiration and 1 percent inspiration. The idea — the launch — is just the beginning of the journey. That's the 1 percent.

School administrators are now paying more attention to their institutions' crisis communications capability. What do university administrators need to know when it comes to communicating quickly to everyone in their communities during a crisis?

They need know what to expect from different communication paths and that different communication paths behave differently. They also need to realize that it's not just what they say, but how they say it. We can provide them with sample letters and e-mails that will help them increase adoption rates of the technology within their communities. We can also help them conduct more effective tests to successfully achieve a first alert.

In your experience, what is the biggest difference between a higher education institution and a business organization when it comes to effective mass communication?

In the corporate world, cell phones and business phones are typically the first communication paths; then, it rolls down to e-mail. It almost never goes into instant messaging. But in higher education, a large percentage of students select IMs as their first communication path. You have to pay attention to those kinds of nuances. So, in this case, schools must make sure that students make the emergency notification system part of their IM buddy list, so that they'll be sure to get the notification.

As 3n's CEO, what are the most important lessons you've learned about crisis management?

I think people sometimes waste valuable time at the onset of a crisis, because they deny that it has happened. Or they try to figure out exactly what happened or find someone or something to blame. But in a crisis, time is critical. The first step in crisis management is to accept that the crisis happened and figure out how to manage through it.

What do you think business schools can teach students about crisis management so they'll be ready for the unexpected difficulties they'll face in their careers?

Lesson No. 1 is that there will always be a crisis. The job of crisis management, then, is to ensure the survival of the organization. The question for a crisis manager to answer is this: What kind of recovery plan do we put in place so that, should a crisis happen, it doesn't wipe out the organization?

When you launched 3n in 2003, the market already included several well-established critical communications

companies. What did you learn about launching a company and product in a market with established competition?

No matter what company you launch, what market you face, or what point in time it is, there will always be established competition. But new companies and products, no matter what they are, all start by fulfilling a need, by solving an existing problem. The question isn't just whether you can fill that need or solve that problem, but whether you can do it better, faster, or cheaper than what is currently available.

When PCs first came out, they were competing against the established mainframe. When Google started, Yahoo was already the established player. But PCs and Google entered the market on the premise that they could deliver a product that was better, cheaper, or faster than what was available from the competition.

What was better or different about your product compared to what was already available?

When we first started, communications technology existed primarily as on-site solutions that used only a couple communication paths. There were many single points of failure, and the technology needed a lot of maintenance and knowhow. We realized that organizations would increase their chances of communicating in a crisis if they utilized all available paths of communication—not just voice and fax, but also instant messaging and e-mail.

We also recognized that technology changes all the time. Fax was "in" a couple years ago, but few people use a fax to communicate today. Today, the cell phone may be "it," but tomorrow, it may not be. We saw a need for a plug-and-play platform that was simple and worked quickly on a large scale. It needed to accommodate not only the communication paths available now, but also those that may be available in the future.

Many business students in entrepreneurship classes are planning to launch their own companies, as you did. If you were acting as their mentor, what advice would you give to help them succeed, or at least fail with grace?

That there are no shortcuts to success! Success is still 99 percent perspiration and 1 percent inspiration. The idea—the launch—is just the beginning of the journey. That's the 1 percent. From there it's hard work. Luck certainly plays into it, but you must be prepared and willing to do the 99 percent, over and over again.

And most entrepreneurs will fail many times before they hit on the idea that makes it.

From there it's hard work."

That's true. My first entrepreneurial attempt failed miserably! It's a funny

story. It was during electric deregulation in California. A friend of mine thought this would be a great market, so we began buying electricity from the California Power Exchange and selling to the end consumer. For a while, we were actually doing well, getting the business up and running.

But then that summer, Enron came along. The price of electricity went from \$14 a megawatt to \$2,000 a megawatt. We were stuck in the middle. We had customers at the end with contracts we had to fulfill, but we couldn't buy the electricity. So, we died overnight.

It was very painful, but I learned some important lessons from that experience. I realized that, in the end, persistence will prevail. You don't always succeed on the first try—you just don't. But you have to have the passion for what you're doing. You've got to have the emotional maturity and stomach for it. You can cry if you have to, but you get up and do it again.

What have been the biggest changes in your industry in terms of both trends and technological advancement since you launched?

There are more communication paths and better ways of getting back responses, especially via instant messaging. Five years ago, communication paths didn't really include IMs or SMS.

On the adoption side, the biggest change I see is that the market recognizes that an organization, be it a school or corporation or municipality, has the responsibility to communicate with its constituents, be they students, employees, or residents. That's true especially if the information they communicate could potentially prevent loss, remove people from harm's way, or even save lives. Such recognition moves the critical communication tool from a nice-to-have to a must-have.

You mention that plug-and-play communication platforms need to accommodate future technologies. What new technologies do you see in store?

Near term, I think we're going to see more connectivity through more communication paths. Not just phone, email, SMS, and IM, but also radio, electronic signs, and alarms. I see that coming very quickly.

In the medium term, I think we'll see more location-based notification and content. Today, it's more of a static, list-based notification. When something happens, an organization sends a message to the set of people in its database. In the future, though, it will be more dynamic and location-based. That is,



as you, the individual, enter an area, the location somehow knows that you are

there; then, pertinent information will be delivered to you, regardless of whether or not you're on a set list.

We've been discussing the challenge of keeping up with changing technology. Have you also faced specific challenges working in the IT industry, a field with so few women in positions of leadership?

For me, the challenge hasn't been in leading a company in a male-dominated field. The greatest challenge has been balancing all the demands of being a woman, a parent, a wife, a sister, a daughter, a friend, *and* a CEO.

Women are just wired differently than men. I don't think my husband would drive home from an important board meeting and then suddenly realize, "Oh, I need to pick up some milk! I need to make costumes for the kids!" It's not that I think my husband doesn't want to take care of those things—he just doesn't think of them. Whether we like it or we don't, women face these extra challenges. It's just who we are.

How do you balance those demands?

That's a deep question! I think we make difficult choices. The question for women has always been, "Can you have it all? Can you have a happy family and kids and a career?" I have found that, if women choose to have a family and a career, they must have the support of their families. My decisions have an impact not just on my life, but also on my family's life. So we sit down and decide what we give up and what we keep, because we certainly can't keep and do everything.

For example, we decided as a family that we would give up home-cooked meals. But we chose to keep game nights, because those are important for the kids. We make choices, and sometimes we must make sacrifices.

Did business school prepare you for this balancing act?

No. I learned to handle this juggling act as I went through it. Business schools teach the thought processes of business, but not the day-to-day realities. For women, especially, it would help if business schools could highlight the fact that, for a woman, a business career does come with extra obstacles and challenges. That's not something to cry about; it's just a fact. Then, they also should point out that women do succeed in spite of all these challenges and obstacles.

Given these challenges, how would you advise business schools to attract more women to business careers?

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"What separates one graduate from another is his or her passion for life. People with passion stand out."

I think it would help to hear from more role models, more real people, who can share their real successes and failures. How have these women accomplished these things? How did they deal with personal challenge? And why, at the end of it all, do they still love what they do? If I were a young woman and undecided about my future career, I would be very interested in hearing those stories.

Have you found the mentors and role models you needed to succeed?

Throughout my life and career I've had a number of people I'd call mentors, who passed along their principles to me. For instance, from my father I learned the concept of fairness, of believing in people and giving them second chances.

But overall, there are many people who have touched my life in different ways—some very casually over just one conversation, and some over many years. In many cases, I picked up their principles not by design, but by circumstance. I often didn't understand the importance of these lessons in their entirety at the time. And that's the way it often works: It can take years of personal experience for all you learn to finally sink in. One day, years later, you sit back and say, "Oh, that's what she meant!"

What has been the lesson you've valued the most?

The most important thing for me was the moment I realized that, no matter what my point of view is, no matter how certain I am about my set of facts, it's still just one point of view. For a long time, I looked at the set of facts that I had and applied my knowledge and my experience, looking at it from my chair through my glasses. Then, from that, I made a decision. Because I was seeing only one set of facts, one reality, I thought my conclusion was the only one possible.

But one day I realized the importance of perspective—that other people in different environments with different experiences look at things differently and do things differently. They could all make different decisions, and they could also all be correct. It was a good day when I realized that. That helped me move forward in business and understand other people better. I can look at problems from multiple points of view and not always judge situations only from my perspective.

How well do you think business school prepared you for your business career?

Business school prepared me to think through an issue. Every situation generally has a logical dimension to it, which is what business school teaches students to address. Business schools help students learn certain nuances, so that every time students walk into a familiar situation, they'll recall certain things that worked and certain things that didn't work.

But in real life, issues have more dimensions and complexity than business schools can teach in the classroom. There's the emotional dimension, the circumstantial dimension, and all the other colors that are unique to the particular situation, the time, and the person. It's one thing to learn how to build your budgets according to certain assumptions, run sensitivity tests on models, and propose solutions based on market changes. It's quite another to make real-time decisions that you know will potentially impact people's lives and change the future of the organization.

Real-life situations require people to have another level of emotional maturity if they're going to make certain kinds of real-time judgment calls. To really deal with complex issues, we still need to go through them ourselves and learn as we go.

What does it take for business graduates to be hired at 3n?

What separates one graduate from another is his or her passion for life. People with passion stand out. They really care about something, and they take a stand for what they believe in whether they're right or wrong. People with passion are more likely to win in life than those who may be right, but don't have passion.

What's your own passion?

Solving problems and delivering value. I like looking at a problem and asking, "What's missing? What's not working? How do we solve it?" I enjoy looking at a bigger picture, solving an issue, and bringing value that way.

You've obviously already learned to weather a crisis during California's electricity debacle. What most concerns you when it comes to your company's future?

I think my biggest worry is how to make sure we don't fail our customers—ever. Our business is in emergency communication, and our customers rely on us at critical times. We need to ensure the reliability and availability of our system, no matter what. We need to prepare continually, look at all possible scenarios, and keep adding, improving, mitigating, planning, and building redundancies. It's a never-ending process. We cannot fail our customers. That's the biggest thing on my list.

Technology at Work

he nature of business has radically changed in the past few decades. The image of the nine-to-five office has been increasingly replaced by the notion of a business staffed by part-timers and consultants working on an as-needed basis. For many, "work" is no longer a physical place they go to perform professional tasks, but rather an activity that can be conducted from any place at any time.

Enabling this far-flung modern workplace is a whole host of technologies, from e-mail to cell phones to Web conferencing to process management software. To be successful in business today, every executive must be comfortable with many of these new technologies. And business schools—whether they are enrolling first-year MBAs or customizing programs for high-powered executives—must prepare students for workplaces that will only become more dependent on IT.

Many schools have added technology components to their programs. But we believe these computer-aided programs are valuable only when they link content and software directly to real-world business. We refer to this approach as *work-based pedagogy* that relies on *authentic technology*. By teaching students to use workplace technologies most effectively, we can better prepare them to work, communicate, and interact in the 21st-century workplace.

have students use
technologies in the
classroom that they
will encounter in the
business world.

It's essential to

by Lee Schlenker and Adam Mendelson

Imperfect Approaches

Work-based pedagogy is built on the premise that management education should focus on the imperfect realities of the workplace rather than on the idealized models of best practice. Too often, management education operates on the principle that there is "one best way" of doing business. Local context and culture are considered anomalies that should be controlled and corrected, an attitude that ignores the realities of chaordic markets—that is, markets operating according to a kind of ordered chaos. Students are taught how to manage under perfect conditions, which rarely hold true in the real world.

Management education also is justly criticized for spending too much time teaching students about explicit practices and not enough time teaching them how to apply those practices in the workplace—in effect, concentrating on *know that* instead of *know how*. Work-based pedagogy places much more emphasis on *know how*. Schools that follow a work-based pedagogy embrace several guiding principles:

- They base learning objectives on authentic, on-the-job skills, tasks, or projects that are collaborative and cross-disciplinary.
- They design activities to help learners understand specific industries, markets, and organizations in terms of space, time, and culture.
- They develop course content that enables learners to acquire skills and knowledge applicable to future tasks.
- They make sure learning outputs are of intrinsic value to each student's work environment.

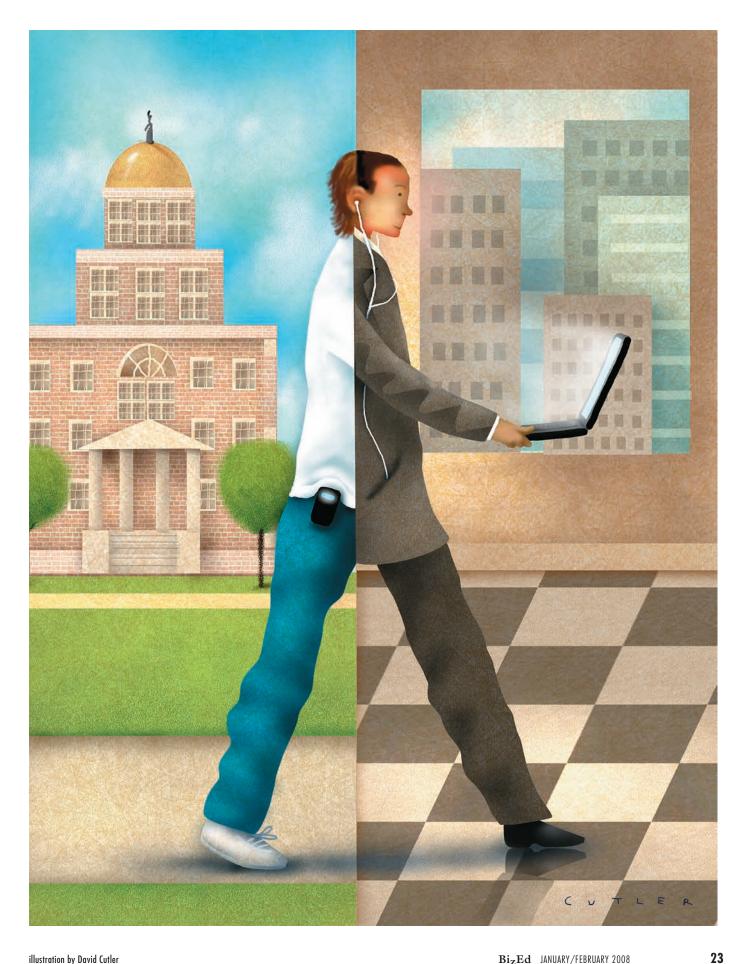


illustration by David Cutler $\mathbf{Bi_z}\mathbf{Ed}$ JANUARY/FEBRUARY 2008

We believe that technology should not be used to make the classroom more virtual, but to make the classroom more **corporate**.

In its purest form, work-based pedagogy is used in EMBA and customized executive programs. Participants first analyze specific practices at their own companies, then compare and contrast their situations with those of their classmates. Next, they collaboratively develop measurement instruments that they can take to actual work environments, and they often receive faculty coaching on specific work challenges.

Work-based pedagogy also can be found in full-time MBA programs, especially those that require students to develop business plans that span multiple disciplines. In those cases, students are not just coming up with justifications for their proposed businesses, but discovering how the inner workings of any enterprise are interrelated.

We must point out that there is no cookie-cutter approach to designing a curriculum around work-based pedagogy. We also acknowledge that incorporating business environments into the MBA program is much more challenging than teaching the program in a more traditional way. Nonetheless, we believe it is essential for business schools to teach their classes with technologies that are authentic to the workplace, not the university.

Technology at School

We feel that, to date, not enough schools are using technology in a way that supports work-based pedagogy. Most information technology has been applied to distance learning programs that push learning outside of the classroom into the realm of "free time." We believe that technology should not be used to make the classroom more virtual, but to make the classroom more corporate. If learning is to be linked to authentic work situations, the technologies that support learning must also be authentic—that is, native to those situations.

This is more complicated than it seems. Because today's workplace technology is constantly changing, companies continually invest in more computer literacy training for their employees. But because this training often takes place in isolation, without reference to a company's specific business challenges, it rarely improves individual performance. Not only that, it takes individuals out of the workplace during the training period, leading to an even greater loss of productivity.

Certain technologies regularly used in the classroom are also of questionable value. Tools that have been specifically designed for education—such as learning management systems and virtual classrooms—require students to acquire specific skills that don't translate to the work environment. We don't believe that, from a business standpoint, it makes much sense for students to learn those tools.

In contrast, corporate portals and online collaboration tools are becoming standard in the business world. Not only will these tools support online learning, but they will practically be part of the woodwork when students enter their professional environments. Thus, it's easy for schools to justify the time students need to invest to become familiar with these technologies.

That's the approach in the Global Executive MBA program at the University of Navarra's IESE Business School in Barcelona, Spain. Students use a combination of standard Microsoft products for a course on project management, learning a framework that they can apply to actual projects at their real-life workplaces. Teams of students track their progress using Project; they share resources and collaboratively produce deliverables using SharePoint and Office. They maintain regular communication asynchronously through Outlook and synchronously through Messenger. Many of these basic communication tools are already familiar to participants, while the advanced collaborative tools are ones they are likely to encounter once they're in the workplace.

We also believe that the technology used in a classroom should be determined by the project, not by the technology available. This is especially true for EMBA programs where the participants are working executives who face practical challenges at the office. We don't try to force specific technologies into learning activities that don't require them, nor do we opt for more advanced technologies simply because they exist. For example, if students are involved in a project that requires frequent real-time meetings, traditional teleconferences may be more appropriate than Internet-based communication tools.

MIT's Sloan School of Management in Cambridge, Massachusetts, delivers its executive MBA program using only pervasive technologies that participants will encounter in the workplace. Sloan's high-velocity EMBA students are not patient with technology hurdles, and the school did not want to attempt to customize its complex learning platform for each class. Instead, it has adopted a simple blogging system in several programs. The chosen blogs can distribute postings by e-mail, so the participants can choose this familiar mode if they prefer. As blogs gain more traction in the corporate world, these executives will find themselves already familiar with this common collaborative interchange.

Content Is Key

Choosing the content for work-based pedagogy is just as essential as choosing the technology, because real-world business is complex, cross-functional, and often hard to

In the working world, these technologies are only a means to an end— not the end in itself.



decipher. Ideally, work-based learning revolves around four types of content:

- Theoretical frameworks provided by faculty that can be used in real work situations.
- Output generated when teams or individuals work to put theory into practice.
- Relevant work done by previous students who have applied similar frameworks and theories.
- Related content from students' own organizations, especially in EMBA classes.

Obviously, this approach will require some customization of content and technology systems for each institution, although schools won't always be able to provide solutions that translate directly into the real world. However, as students interact with each other and external content providers, they'll learn the organizing principles of knowledge management—and they'll become familiar with the technologies that will enable them to share content. As a result, they'll not only gain insights into the best ways to manage knowledge when they're in a work setting, but they'll understand what tools to use as they do so.

For example, in graduate courses on process improvement held at EM Lyon in Ecully, France, students map both the formal processes and informal networks to be found in workplaces. They rely on tools typically found in office settings, such as Qualigram process mapping software and OSSAD modeling language, which is the standard in Europe. They also employ an array of Microsoft products: Office Suite software for documents and spreadsheets, Groove software for collaborative efforts, and SharePoint portals for connecting workspaces. Of course, they also communicate more

informally through e-mails, blogs, and podcasts. The class is designed to demonstrate the difference between the perfect processes possible in theory and the reality of the workplace. Students explore competing visions of how work is done now and how it might be done better in the future.

While the ideal content delivery platform at school would be the same system students will use at work, that might not be feasible in all situations, particularly if the company relies on proprietary knowledge or technology. In this case, students can use tools such as Web searches, industry reports, journal articles, and government reports to learn about their industries. At the same time, students can learn that the "perfect" information isn't always available. Instead they must know how to use imperfect information, which is often subject to the real-world constraints of the workplace.

In fact, many existing IT case studies can be quite misleading, because they seem to demonstrate that managers can rely almost entirely on enterprise systems when they need to gather information to help them make decisions. In reality, most managers draw data from a variety of sources, and only some of that information has been captured electronically. An important part of any manager's job is to learn to put the pieces of diverse, often partial, and sometimes contradictory information into a meaningful coherent whole.

Moving Forward

We believe that business schools must provide a richer educational experience for students through the liberal use of authentic technologies throughout the curriculum. Moreover, schools must provide not only the content and the technology, but the contextualized learning experience that teaches students how to apply the technology.

Yet, as in the working world, these technologies are only a means to an end—not the end in itself. Even as students become familiar with these work-based tools, they will not be focused primarily on understanding the features and functions of new software. They'll be learning to use these tools within their specific organizations and industries as they communicate, innovate, and market in the 21st-century world.

Lee Schlenker is affiliate professor in information systems management at EM Lyon in Ecully, France. Adam Mendelson, who designed and managed e-learning initiatives for IESE Business School in Barcelona, Spain, is now researching educational technology at the University of California in Berkeley. Toby Woll of MIT's Sloan School of Management in Cambridge, Massachusetts, also contributed to the research done for a longer paper on this topic.

Teaching Business In a Web 2.0 VVorld

In an entrepreneurship course at the University of Arizona, student teams tap the power of wikis, blogs, and social networks to take their startups from idea to launch.

by Tricia Bisoux

hen Jim Jindrick wants to check on the progress of the student teams in his entrepreneurship class, he doesn't need to make phone calls, send e-mails, or arrange meetings. Jindrick, a mentor-in-residence at the University of Arizona's Eller College of Management in Tucson, simply goes online and logs onto each team's wiki space. There, he can see the full extent of the students' collaboration on their startups, including their latest research and assignments, meeting agendas and minutes, and updated business plans. He can leave comments on their progress and read the comments of other advisors.

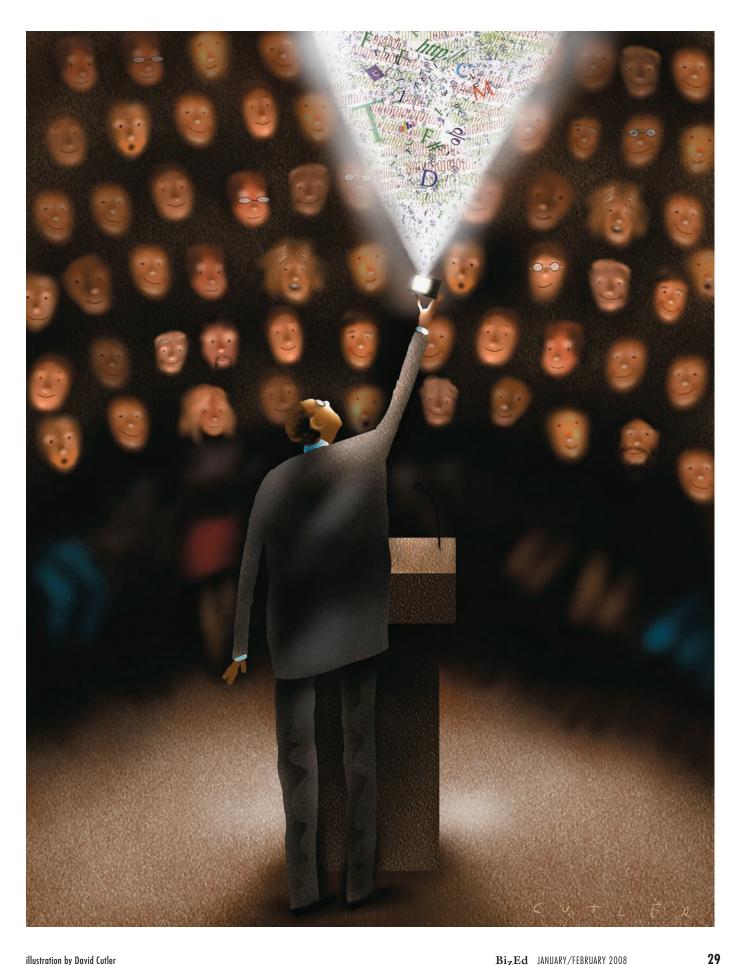
"In the past, there could be a week or two between a document's creation and its availability to instructors and mentors," says Jindrick. "With wikis, I can click on any team's wiki space and see the history of their work and exactly where they are today."

Jindrick is among a group of educators at Eller's McGuire Center for Entrepreneurship using wikis—digital documents that allow multiple users to make edits, additions, and comments—liberally in their courses. They began to look seriously at wikis in April 2007 when center director Sharon Hoskinson asked faculty to look for ways to incorporate the latest communications technologies into the center's yearlong entrepreneurship course for undergraduate and MBA students. "We wanted to infuse and embed these technologies, not as add-ons, but as integrated parts of the course," she says.

Hoskinson charged Randy Accetta, the program's business communications director, with the task of studying available technology. Accetta assembled a team of undergraduates to discover what cutting-edge communication tools and strategies students weren't already using to best advantage. Together, they decided that wikis were the way to go.

"The wiki is such a dynamic Web site and data storage tool," says Accetta. "I thought there were great ways for students to run with this technology and learn to use it for any intellectual venture." Wikis help students in three areas crucial to starting a business, says Accetta: internal project management, operational efficiency, and Web site design.

Student teams have been using wikis since the course began in September. In many cases, Eller faculty have found that wikis enable students to do more in less time and work better collectively than they could using more traditional technologies such as course management systems and e-mail. In the process, students haven't just been using wikis to organize the large amounts of information involved in planning and launching a new business. They've also been getting a thorough introduction to the latest Web 2.0 technologies. The more students use such communication technologies in their business coursework, say these professors, the better they'll be able to navigate business in a Web 2.0 world.



 $\mathbf{Bi_z}\mathbf{Ed}$ JANUARY/FEBRUARY 2008 illustration by David Cutler

"We wanted to infuse and embed these technologies, not as add-ons, but as **integrated** parts of the course."

-Sharon Hoskinson, director, McGuire Center for Entrepreneurship

Big Problems, Simple Solution

Students in the entrepreneurship program choose to develop new ventures in one of two areas: corporate entrepreneurship, which focuses on projects that would work within an existing company, and traditional entrepreneurship, which focuses on startups. Beginning this year, students at the McGuire Center also are working with students from the University of Arizona's Rogers College of Law to explore the legal implications of their new ventures.

With so many groups accessing the same information—business students, law students, mentors, and corporate sponsors—wikis streamline what would otherwise be a more chaotic process, says Hoskinson. "Before this year, the collection of information was disparate at best, and it all needed to be located, identified, researched, and applied. Teams had to send documents and revisions to mentors and advisors, who had to check them and send them back to the teams," she says. "Students weren't able to capitalize on a full command of the information they had gathered, because there was just

too much going on." The wiki, she adds, has become a good solution to a big problem.

Eller's wikis work much like smaller versions of Wikipedia, the well-known user-created and user-edited online encyclopedia. Students and faculty post everything they do for the course to the wiki, including their initial ideas, research, and interactions with mentors. Each team's wiki is password protected. Any team member can modify the content, and when anyone updates or edits a wiki space, everyone involved in the project receives e-mail notifications of the changes.

Wikis not only help keep the project organized; they also keep everyone working at the same pace, says Hoskinson. For example, in the past, if students asked for a mentor's advice independently, other advisors could be left out of the loop. As a result, one well-meaning mentor's guidance could conflict with another's, throwing the team off track. "Wikis help us manage all of this knowledge in a way that the mentors can see, so they can understand how their input is going to impact the entire project," says Hoskinson.

Ways to Wiki

Teaching with blogs and wikis is a way to add a new dimension of learning to the business classroom, say Randy Accetta, Jim Jindrick, and Sharon Hoskinson of the University of Arizona. However, they recommend several think-ahead strategies for effectively embedding Web 2.0 technologies in a business course:

- Choose the right tool for the right job. "Blogs are great for posting newsletter-type information, which will soon be yesterday's news," says Jindrick. "Wikis are more appropriate for encyclopedic information such as business plans—they organize material that has long-term value."
- Before introducing blogs and wikis to the classroom, embed them in a few faculty activities as a painless way for faculty members to learn how to use them. "Professors shouldn't have to add on this skill just to teach a course," says Hoskinson.
- As a faculty champion for a Web 2.0-based course, choose a professor who already lives and breathes the latest communication technologies.
- Define course objectives clearly. Will students be using wikis to create business plans? Write a textbook? Learn to collaborate on teams? Setting course objectives ensures that the technology is embedded in the course as a means to an end, rather than as the means itself.

- Create a wiki template, complete with the categories that students will need to properly organize information for the project at hand. A template can serve as a guide to get students started, but also can be modified as needed.
- Hold a "Wiki 101" class. Even if professors are teaching younger students, they shouldn't assume all of those students are comfortable with these technologies. It makes sense to dedicate a short amount of time at the beginning of the course to show examples of wikis and blogs and discuss how they work. Minimal preparation up front can help all students become more comfortable with the technology.
- Choose a "techie" on each team to be its "wiki manager." Ideally, this team member should be comfortable with the technology and able to guide others through the process.
- Know your budget. Many blogging and wiki vendors offer free versions. The drawbacks, however, are that vendors will display advertising in the space and students won't be able to have a dedicated Web address. For a cost, which depends on the number of users and the extent of features, these companies also provide adfree wiki and blogging tools that offer more versatility.



SmartVine

The right wine every time

Once completed, each team's wiki will provide the basis for its company's Web site. At year's end, students will be able to avoid the usual last-minute scramble to gather and arrange information for their Web content. Because they've

completed the work as they go, they'll have their information at-the-ready to be converted into public Web pages for investors and clients to view.

Testing the Tools

Although he appreciates the wiki's function, Accetta wants to be careful to keep the technology subordinated to the course's real objective—teaching entrepreneurship. "I'm not a big fan of technology replacing human community," he says. "I simply want this to be a tool students can use to collaborate more effectively. I want them to be on the cutting edge."

Before choosing specific wiki software for the course, Accetta researched offerings from more than 30 companies. Some are free but require users to display advertising on their wiki spaces. Other ad-free, more customizable wikis can cost between \$50 and \$1,000 a month, depending on the number of users.

Accetta's students are using a mid-priced wiki tool from Peanut Butter Wiki, while Jindrick's students are using a tool by WikiSpaces. The instructors are using their different wiki programs in different ways. Accetta's student teams are working externally in Microsoft Word and then posting Word documents to their wiki pages. Jindrick's teams, on the other hand, are doing all their work in the wiki space, using embedded applications such as Google Docs for document creation and Google Groups for group message boards and file sharing.

Left: Logicalife, a team working with Jim Jindrick, has created its wiki using Wiki Spaces and the Google suite of office applications. The students' wiki will ultimately be both a completed business plan for their health management company and that company's future Web site.

Below: A team working with Randy Accetta in Eller's entrepreneurship course has used a product from PBWiki to create categories for all the documents pertaining to its wine company, SmartVine.

To De List

This two-way approach allows Accetta and Jindrick to experiment and compare notes on what works and what does not. "We intentionally went with two different wiki programs," says Accetta. "We wanted to see if there were any real differences in using different versions of the same tool."

In addition to Google Docs and Google Groups, Jindrick also uses Google's Blogger to write an ongoing blog, where he notifies students of new

assignments, guest speakers, and calendar changes. "Google has many products that students can use, and they're all free," says Jindrick. "They provide a great way for students to learn about publishing online and managing public documents."

The wiki tools still lack some features, says Jindrick. Uploading is still somewhat slow, and the software's editing and graphic design functions are basic. In addition, student wikis must be saved on the vendors' servers rather than on the university's intranet, an arrangement that could put students' data in jeopardy if those servers go down. For this reason, he continually reminds students to back up their wiki documents onto their own hard drives.

These limited features can be "both a curse and a blessing," says Jindrick. "I don't care if my students' wikis are pretty—I want them to focus on content, not fluff," he says. "Still, their wiki presentations are pretty plain. In the spring, when they convert their information to Web sites, we'll spruce them up."

Tapping Social Networks

Through wikis, blogs, and profiles on social networking sites like MySpace and Facebook, Eller's entrepreneurship students are learning to build and strengthen relationships with a wider network of investors, advisors, and customers. Some teams are providing corporate sponsors access to certain areas in their wikis—that way, they can keep their sponsors apprised of their progress before their businesses even launch.

"Until now, the Internet has been viewed as a giant encyclopedia. Now, its use is **shifting**. People are using it as a place to go."

-Ron Burns, president of ProtonMedia

Bringing Virtual Worlds to Business School

As part of its "Duke Digital Initiative," Duke University in Durham, North Carolina, has explored the use of laptops and podcasting to enhance student learning. Now, it plans to experiment with another piece of the Web 2.0 puzzle: virtual worlds.

Duke's Fuqua School of Business recently announced its strategic partnership with ProtonMedia of Lansdale,

Pennsylvania. ProtonMedia's product, ProtoSphere, integrates Web 2.0 technologies in a business-friendly three-dimensional virtual world—what company representatives call a "telepresence portal." Together, Fuqua and ProtonMedia plan to explore the possibilities of three-dimensional, computer-generated spaces that can be used for education.

"We're trying to find a thoughtful blend of technology for an enhanced learning experience," says Nevin Fouts, Fuqua's associate dean for information technology. "For instance, if a company offers to present a real-life problem to our students, we could have company executives speak to the students through the telepresence portal."

Second Life, one of the most prominent examples of an online virtual 3-D environment, has already attracted a deluge of media attention. Last summer, INSEAD of Fontainebleau, France, announced that it was building a virtual campus in Second Life where its own students and alumni could meet for courses and other events.

The upside to Second Life is that it provides an interactive central meeting place for users. The downside: It's publicly accessible and vulnerable to an often unpredictable Internet environment. Products like ProtoSphere allow organizations to tap three-dimensional online environments while keeping them secured on private networks. Represented by animated characters called "avatars," students and stakeholders can enter into a 3-D telepresence portal for virtual meetings, training simulations, and project collaborations.

What differentiates an online "telepresence portal" from, say, a video conference? The level of interaction,



An example of a "telepresence portal" for the Fuqua School of Business, generated by ProtoSphere, a virtual worlds software tool by ProtonMedia.

says Ron Burns, president of ProtonMedia. The key word is "presence." "Up until now, the Internet has been viewed as a giant encyclopedia," he says. "Now, its use is shifting. People are using it as a place to go."

This next-generation Internet brings users out of isolation into the presence of others, he adds.

Burns emphasizes that the three-dimensional aspect of ProtoSphere is only a small part of its function. It actually bundles several communication technologies in one. In addition to virtual meeting spaces, the software includes voice-over-Internet-protocol (VoIP), Web 2.0 social networking tools, blogs, wikis, and messaging. The program also includes application sharing so that users can share their desktop contents with each other.

"When I'm on the network, I could be looking at a two-dimensional page, or I could jump into 3-D to look at a simulation or have a conversation with someone," says Burns. "The 3-D aspect is not the whole story."

Fouts believes the tool could be useful for virtual information and brainstorming sessions, and especially for learning simulations. For example, students who need to learn negotiation skills could enter a virtual world, represented by their personal avatars, to interact with a "bot," or character that has been programmed to teach negotiation. They could use a simulation to learn what's socially acceptable in different cultures. The virtual world blends gaming and social networking technologies for educational purposes, says Fouts.

Fouts emphasizes that the school hopes to learn not just how the software can be used for education, but also how virtual worlds and social networks will affect business interactions. This partnership, says Fouts, "will help us support our 21st-century curriculum and teach business leaders the tools and technologies they'll need in the future."



"Even though we're still fairly early in the course, students are beginning to visualize how to use their experience with social networking to advance their ventures," says Hoskinson. "Some are even creating Facebook profiles, using their wikis as entry points to those profiles."

One of Jindrick's teams already has one executive interested in its business. "It's easy for that executive to sign on to the wiki and serve as an advisor and advocate for the students on the team," says Jindrick. "And he hasn't even met them."

Embedding Web 2.0

Business education has long been focused on "experiential learning." When it comes to technology, an additional focus might just be "embedded learning." By embedding technological tools into assignments and projects, professors don't have to use precious classroom time to teach the technology itself. Students gain exposure to and experience with the technology as the class progresses, almost by default.

Plus, they're learning to work within a common organizational system, says Accetta. "I might organize my office one way, and you might organize your office another way. If

we were to walk into each other's offices, we wouldn't know where anything was," he says. "Wikis allow us to compile as much information as possible in a common space, where we both know where to find everything we need. It's a

fascinating tool."

Technology has taken a step beyond PowerPoint, Hoskinson stresses. Web 2.0 adds another layer to the tools business schools must teach to keep students prepared for the workforce. "Once students learn how to use wikis, they'll understand the entrepreneurial process more clearly and move their ideas forward more quickly. The power of this tool is limited only by their exposure to it."

The more proficient students are in Web 2.0 technologies, the more innovative they can be in using them, say Hoskinson, Accetta, and Jindrick. Such familiarity makes it

that much easier for them to launch a new venture, complete a project, or lead a team. For these Eller professors, wikis have become a way to teach entrepreneurship in a knowledge-driven economy.

More information about PBWiki and Wiki Spaces can be found at www.pbwiki.com and www.wikispaces.com.

Is the Paperless Classroom Possible?

ast spring I taught a new elective, "Managing Technology," a course for non-engineers who might someday manage technical people, projects, or products. I decided to teach the course in an almost entirely paperless format: no textbook and no hardcopy papers. Students could take notes directly on their laptops, which our school provides as part of tuition. I used the Blackboard course management system to deliver all my presentations and non-copyrighted readings.

You'll note that I mentioned the course was *almost* entirely paperless—for

You'll note that I mentioned the course was *almost* entirely paperless—for some situations, print still wins out over digital. But the completely paperless classroom is not the goal. Rather, the goal is to take advantage of technologies that truly help faculty cut print costs, ease distribution of materials, and facilitate learning. Moreover, striving to do more work electronically helps meet the needs of a new generation of students who are now entering business school more comfortable than ever with the digital—and increasingly paperless—world.

who step off the paper trail not only save resources and streamline course content, but also prepare students for an increasingly digital business environment.

by Allen H. Kupetz

The Paperless Advantage

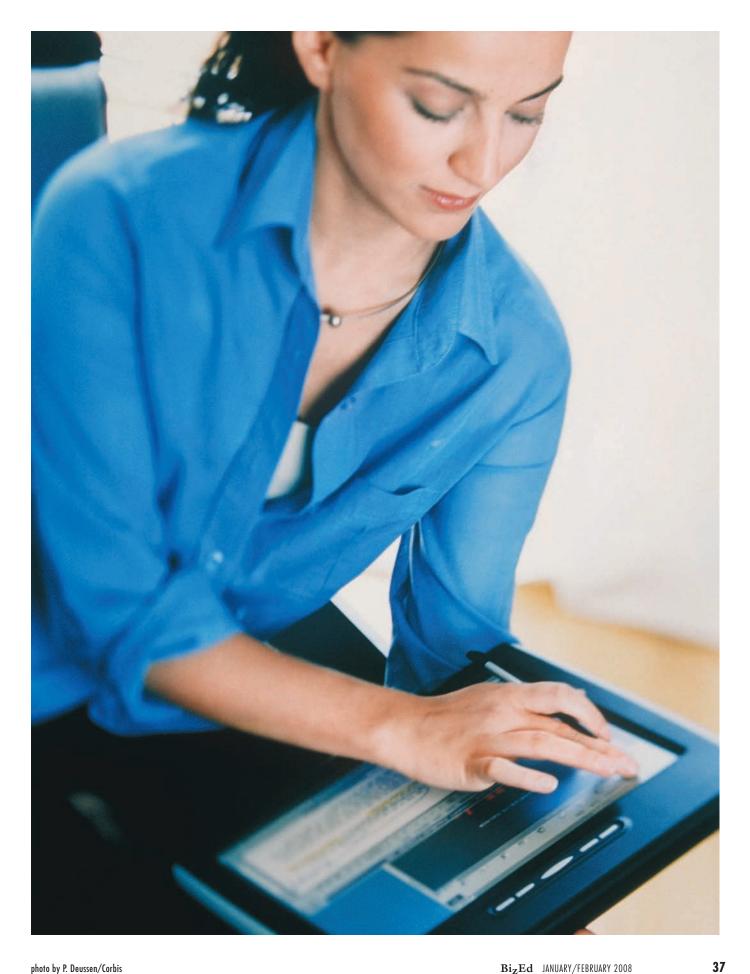
I have shared my approach with some of my colleagues and their typical reply has been, "Why bother going paperless? What are the advantages?" In fact, there are at least three tangible benefits to a paperless classroom. First, business students learn to appreciate what "going paperless" has to offer. The paperless approach encourages students to think about the advantages of digital communications and the cost savings companies with paperless practices might enjoy. Second, when students and faculty depend less on printing, mailing, shipping, buying, and storing paper, they use fewer resources.

Finally, I've found that a paperless classroom allows professors greater flexibility in several ways:

It cuts the cost of cases. For example, many professors still order hardcopy cases, from sources like Harvard Business School Cases (HBSC) and Ivey Publishing, through the campus bookstore. This approach can double the per-case cost for students, with no benefit to anyone but the bookstore itself. Why not go paperless? HBSC allows professors to bundle together all the cases in a course electronically. Then, students can pay HBSC directly and download the cases immediately.

In contrast, Ivey still sends students paper copies, which must therefore be ordered in advance. This inconvenience adds nothing to intellectual property protection since a student can still scan the paper and distribute it digitally anyway. We are teaching the Napster generation. I predict Ivey will go paperless soon as well.

It eliminates the need for printed textbooks. For my core course that required a textbook, I experimented with Zinio (www.zinio.com), a digital publishing company. Zinio can convert printed materials, including textbooks, into a digital format that allows authors to protect their intellectual property through



 $\mathbf{Bi_z}\mathbf{Ed}$ JANUARY/FEBRUARY 2008 photo by P. Deussen/Corbis



a basic digital rights management scheme. The format still allows readers to "turn" the pages, highlight relevant passages, and search for key terms. The biggest advantage is that the downloadable textbook is about half the price of the hardcopy version.

I did find two significant disadvantages to using a digital textbook. First, students can't resell the book at the end of the term. And, second, my students—hardly a scientific sample—said they hated reading the e-book on their laptops and printed it out anyway. Still, before I turned to Zinio, my students complained most about the cost of the textbook. Given that, I believe the advantages outweigh the disadvantages: I'll teach the class next term with no textbook.

It allows à la carte course planning. With the cheaper cost of digital content, professors already can pick and choose exactly what cases and articles they want to include in a course, in à la carte fashion. What the paperless classroom could mean, however, is that professors could purchase the single chapter of a textbook that's relevant to their classes, rather than the whole book. After all, most professors would rather not purchase the entire book when only a single chapter suited their needs. By allowing these professors to purchase chapters separately, publishers would actually increase their incremental revenue.

Don't scoff. You used to have to buy music a whole CD at a time—now people pay more on iTunes on a per-song basis because they are buying only the songs they want. It will happen in textbook publishing as well. Students will demand it, just like they now insist on e-mail access to professors and PC projectors in the classroom.

Upgrading to Web 2.0

Some professors may be reluctant to make the paperless leap because they are not familiar with wide selection of Web-based, easy-to-use, free applications loosely bundled together under the banner of Web 2.0. Smart use of the newest Web 2.0 resources can take the paperless business classroom to the next level.

The term "Web 2.0" is difficult to define. It encompasses social networking and the broad range of user-generated and user-managed content. Think of Blogger, Facebook, YouTube, and Wikipedia. I encourage my colleagues not

to worry that their students are already much more familiar with these tools than they are. Instead, they should be readying students to use these technologies in the real world, rather than showing off their slide rule skills.

Here's a quick primer on the sites that students already are using. I believe these sites, and others like them, will prove valuable in the classroom and increasingly common in the business world:

Blogger (www.blogger.com) is a free service that allows you or your students to create a web log, or blog, to post ideas online and have others in the class reply. It's great for promoting dialogue; helps those not inclined socially, culturally, or linguistically to raise their hands in class; and can support anonymous posts. While Blackboard has a similar function, I think Blogger's user interface is better and, more important, it will be available to students after graduation.

Facebook (www.facebook.com) and its more professional cousin LinkedIn (www.linkedin.com), to which I belong, is a useful tool to teach about the power of networking and relationships. For younger students, it also allows the professor to remind them that "once posted" equals "always posted"—that is, their pages will be cached and always available for anyone to find. This reminder helps them understand what kind of impact today's poor judgment could have on future employment opportunities.

YouTube (www.youtube.com) allows users to share video content. While the majority of the content has little educational value, there are some constructive uses. After a recent academic conference hosted by the Rollins China Center, we posted the panel discussions on YouTube for easy access. Years ago we might have mailed DVDs that would just sit in the recipients' desk drawers. Now this content is available not only to those who could not attend, but also to people we never knew would be interested. Thus, YouTube can be a valuable tool for information sharing or marketing.

Wikipedia (www.wikipedia.org) is a great idea that I believe isn't quite ready for graduate education. However, it does provide the underlying software to users at no cost under what the Open Source community calls "copyleft." With this free software you can create collaborative works that everyone in the class can edit in real time, with the most current version always available to all students. Note that this does not ensure accuracy—which is the basis of my primary concern with Wikipedia—but it does provide a means to create a consensus.

For almost a year, I've been traveling around the country giving a presentation that I call "The Future of *Less*" to small and medium-sized companies. In the presentation, I

Paperless Ethics

With all of the advantages of the paperless classroom, it does highlight one central problem: The same PDAs, mobile phones, and laptops that facilitate access to and sharing of information also provide students with additional opportunities to cheat. As much as we want our students to maintain a sense of honesty and integrity, some will still try to take advantage of wireless communication to cheat on exams.

In truth, however, we haven't yet discovered a fail-safe way to eliminate cheating in traditional classrooms.

I recently gave a test to my students in my "Managing Technology" course, which covered about 50 vocabulary words and terms that I think managers need to know, such as "disruptive technology," 802.11, and WiMAX. I gave the students a traditional hardcopy test where they filled in the blanks and short answer segments in ink. However, at the end, I asked the following extra-credit question regarding many professors' primary concern when it comes to giving a paperless exam. It was one for which I didn't have the answer:

Given what we have discussed about wireless technology, peer-to-peer communications, Bluetooth, etc., please explain how I could have offered this exam paperlessly, but still have prevented students from using their computers to look up the answer or help other students. This is a technology—not an ethics—question.

Most students responded with similar answers: Don't allow students to connect to the Internet via a cable, and turn off the wireless capability that exists in all our classrooms. Still, those answers did not address all the ways that electronic cheating could occur. They don't solve other student-to-student connectivity opportunities like peer-to-peer 802.11, Bluetooth, and cellular text messaging.

Even though a paperless course may open the door to student-to-student cheating, I still believe such an approach offers too many advantages to ignore. Next term, I will give the exam paperlessly. To deter cheating, I will rely on the same tools that universities have relied on for years: our strict integrity policy; my physical in-class monitoring; and, in the end, my students' sense of academic honor.

describe how the wireless, cashless, and paperless revolutions will impact their businesses, their relationships with customers, and their bottom lines.

For example, I promote Blogger as a human resources tool to encourage internal dialogue—a company might use it to announce to its employees a change in a benefits program. I describe how sites like Facebook and MySpace can be powerful marketing tools; after all, companies like Burger King have more friends on MySpace than anyone else. YouTube is a low-cost way to put promotional videos online without paying millions for airtime on television. And Wikipedia is a useful tool for companies preparing technical manuals because it empowers employees at all levels to make constructive changes.

The corporate audiences seem receptive to the changes these sites promise to make to the business world. Faculty need to realize that most business students are, too.

Become a Paperless Evangelist

In his 1999 essay, "How to Stop Worrying and Learn to Love the Internet," the irreverent author Douglas Adams wrote: "Anything invented after you're 30 is against the natural order of things." As the lone paperless evangelist at my school, I have confronted many faculty who agree with this sentiment. I have been guilty of annoying nearly all of my colleagues as they stand at the copy machine or carry home stacks of papers to grade. As such, I have to be ever-diligent in my paperlessness or face the charge of hypocrisy.

If you would like to pick up the mantle of "paperless

evangelist" at your school, I offer three tips that go beyond the classroom:

- **1.** Employ *feng shui*, the Chinese practice of positioning objects to create harmony, in your office. Get rid of all filing cabinets and freestanding bookcases—I have. If you have either of these, paper will fester and multiply. And your printer? Get rid of it. A paperless professor no longer needs it.
- **2.** Back up your hard drive regularly and store those backups away from your computer. I have external hard drives in my office and at home. Once a week I back up all my files to both. As a result, all my files exist in three places, and I can avoid those Luddites who anxiously await a hard drive meltdown to remind me that their manila folders never crash.
- **3.** Remember that "paperless," in the near term, really just means, "less paper."

The fact is, almost all of you are reading this in the magazine delivered to your office; that's how I read *BizEd*. Too bad, though—there are many URLs in this article that would be but one click away if you were reading this online.

For now, though, paperless doesn't mean no paper. It means simply that technology is giving us new options to reduce or eliminate much of the paper we use today and to enjoy the cost savings that result. Moreover, it gives us the satisfaction of introducing ourselves and our students to the increased portability and accessibility of digitized ideas and to a greener way of doing business.

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Research Re-Examined

AACSB's Impact of
Research Task Force
generates much
dialogue and debate
as it issues a report
that calls for new ways
to measure faculty
scholarship.

by Sharon Shinn

cademic research is one of the key functions of business schools, but its importance sometimes goes unappreciated. On the one hand, the general public often is unaware of the advances that have been made possible because of academic research. On the other hand, members of the academic community sometimes voice criticisms about the relevance of business research in the real world.

Because research is so essential to the part that business schools play in society, AACSB International has recently re-examined the role of research and management education. Last year, the association released a preliminary report that proposed changes to the way business schools and accreditation committees evaluate research. The report calls for schools to align their research outputs with their missions, while finding ways to increase the value of their research to students, practitioners, and society at large.

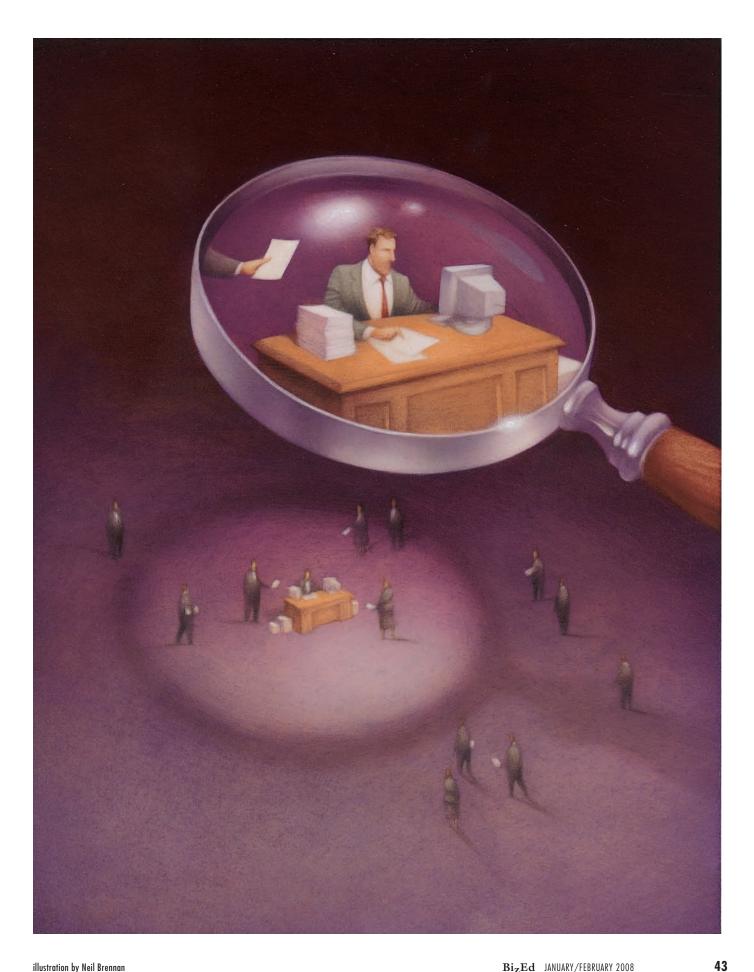
The report, written by members of the Impact of Research Task Force, was released in draft form last August. AACSB invited comments from members before producing a final version, due to be published in late January. If, as expected, its recommendations are implemented by AACSB's Board of Directors, the report eventually could have a profound influence on the way business school research is conducted, measured, and shared with the world.

While many hurdles still lie ahead, they are all surmountable, according to Joseph Alutto, who chaired the task force. Alutto is executive vice president and provost of The Ohio State University in Columbus. Here he offers responses to the concerns of AACSB members who shared their observations about the report.

The Impact of Research

The report's first and most controversial recommendation is that AACSB change accreditation standards to "require schools to demonstrate *the impact* of faculty intellectual contributions to targeted audiences." In essence, the task force suggests that existing guidelines be amended to focus on outcomes, not inputs. Schools would be required not just to keep track of refereed journal articles published by their faculty, but also to demonstrate the impact of all types of scholarship. It wouldn't matter what forms that scholarship took or whether the impact was on practice, theory development, or teaching and learning.

Under this system, schools would tie scholarship more closely to their own missions, a notion that aligns smoothly with AACSB's mission-based accreditation. However, the report acknowledges that it would not be easy to switch to such a model. Schools would need to find ways to gauge the impact of research; they also would have to convince faculty and administrators that various forms of scholarship are equally worthwhile, not only as part of the accreditation process, but as part of the tenure and promotion process.



 $\mathbf{Bi_z}\mathbf{Ed}$ JANUARY/FEBRUARY 2008 illustration by Neil Brennan

"Administrators need to think ahead of time about what information they'll need to demonstrate their faculty's **scholarship** and to show how that scholarship is appropriate for their schools' missions."

-Joseph Alutto, The Ohio State University

While many members applaud the move and are supportive of the recommendation, many also foresee difficulties in implementation. In fact, early readers of the report had a number of questions and concerns, most of which fell into several broad categories:

■ The burden to schools. Many members felt that supplying the data would be difficult and expensive for schools—particularly small schools that focus more on practice and pedagogy. But Alutto believes the burden would not be nearly as onerous as some fear.

"We're not asking for any more information than the schools should normally be collecting," he says. "The reality is, we all have to have mission statements, and those statements all have to include some reference to faculty scholarship. We then have to measure the impact of that scholarship to judge if we're achieving our missions. This is exactly what we tell corporate officials they should do—identify objectives, identify metrics, and then translate them to individual contributions."

Once deans think it through, most of them will realize

What Did the Report Say?

The report prepared by AACSB's Impact of Research Task Force summarized the history of the relationship between business schools and research. It noted that accredited business schools spend an estimated \$320 million every year to support faculty research. Much of that research is published in scholarly journals: AACSB estimates that more than 15,000 English-language business and management articles appear every year, produced by roughly 25,000 academically qualified faculty members.

Clearly, research is a cornerstone in the value proposition of business schools, but there is still dissent about what kind of research should be pursued and how it should be offered to practitioners, students, and society. "A business school cannot separate itself from practice to focus only on theory and still serve its function," write the authors of the report. "On the other hand, it cannot be so focused on practice that it fails to support development insights into principles and theories that serve to increase understanding of practice."

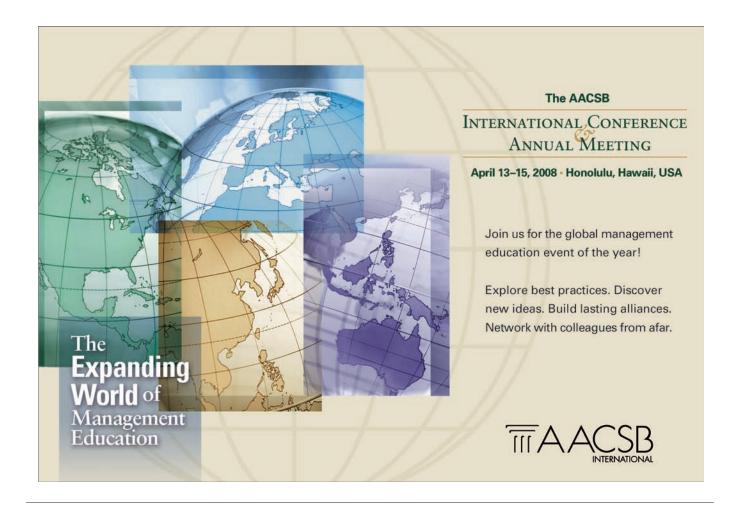
Whether research is conducted with a practical or theoretical aim, the authors note three central problems. First is the transfer of knowledge from the academic community to the business community—since the dense and highly theoretical research papers that appear in scholarly journals aren't widely accessible to the general public. Second is the determination of what qualifies as "high-quality research," a definition hotly debated in the academic community.

The third trouble spot is the fact that the faculty tenure and compensation process tends to give more weight to research that is published in peer-reviewed journals without assigning much importance to work that appears in other media, including trade journals, popular press business books, or software. The same accusation is leveled at accreditation teams, which often judge a school's research output only by the research that appears in those same top journals.

Determining that it is "critical that business schools find ways to continuously enhance the value and visibility of scholarship and research," the task force has developed seven recommendations for AACSB to pursue:

- **1.** Extend and augment accreditation guidelines to require schools to demonstrate the impact of faculty intellectual contributions to targeted audiences.
- **2.** Encourage and support efforts to create incentives for greater diversity in institutional missions and faculty intellectual contributions.
- **3.** Support studies examining the link between scholarly inquiry and education in degree and nondegree programs.
- **4.** Develop an awards program to recognize and publicize high-impact research by faculty.
- **5.** Develop mechanisms to strengthen interaction between academics and practicing managers in the production of knowledge in the areas of greatest interest.
- **6.** Study the community of business and management journals and make recommendations designed to highlight the impact of faculty research.
- **7.** Identify and disseminate information about best practices for creating links between academic research and practice.

To download a copy of the report and find additional information, visit www.aacsb.edu/research.



that their schools "already have much of the information in hand," Alutto believes. "And it isn't that difficult to collect the rest. It does mean administrators need to think ahead of time about what information they'll need to demonstrate their faculty's scholarship and to show how that scholarship is appropriate for their schools' missions. This recommendation is all about alignment."

■ Measuring results. Members who read the early draft also worried about how difficult it would be to actually measure the impact of research. They pointed out that it is nearly impossible to quantify the long-term effect of research on teaching and management practice, and it is equally difficult to gauge impact if research leads a practitioner *not* to follow a certain course.

The authors of the report anticipated this worry when they wrote, "Clearly, AACSB must take the lead in helping schools develop useful and appropriate measures of impact, as well as systems for collecting and maintaining the data."

Alutto adds, "If we're serious about schools identifying specific missions and then aligning faculty scholarship with those missions, then we must expect accreditation review teams to make judgments based on that set of objectives as well as on other metrics for measuring institutional and individual performance. This approach gets to the heart of the mission-based accreditation process."

■ Training requirements. Members pointed out that school

administrators weren't the only ones who would have to learn to judge the impact of research accurately. Accreditation review teams would also need to be trained to make those judgments. Alutto concedes that retraining will be required if this recommendation is accepted, but he believes many teams will welcome the chance to weigh diverse forms of scholarship instead of limiting their review to research published in top-tier journals.

For instance, he says, accreditation teams might visit an urban school that does an excellent job working with the regional community; there, they'll expect to find faculty research focused on local economic development. "It's very frustrating for the accreditation review team when the administrators have to pretend that they have this broader function of developing new theories when that's not really their strength," he says. "The new approach would allow those schools to define their comparative advantage and then remain accountable in terms of how well they fulfill that mission."

Institutional acceptance. Some members had questions regarding the buy-in of university officials. Even if business school deans embrace a new approach to measuring impact, will university administrators be as easy to convince? Will they agree that business schools should be allowed to weigh contributions to practice and pedagogy as much as they would weigh other kinds of intellectual contributions?

A commitment to **research** will continue to define management education in the years to come.

Alutto believes that top administrators at certain universities will be much quicker to accept the proposed recommendations than others. "Administrators at large institutions among the top 30 schools already recognize that there's a mix of scholarship," he says. "They know that some faculty are committed to top-tier research publications, while others provide research that has an impact on practice. For these institu-

tions, this approach is really nothing more than a verification of what's already happening. At other institutions, acceptance of these recommendations will take some education on what the purpose of a business school really is."

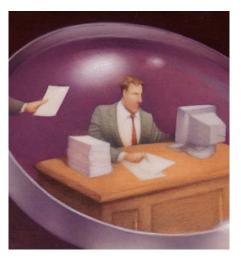
That's where AACSB comes in, he adds. "We believe that AACSB *must* be more active in accurately portraying the role of a business school in a university setting. Presidents of universities have to learn to say, 'What is the mission of my business school? If it's teaching, we ought to be rewarding scholarship that supports that mission. If it's to work closely with regional firms, then the scholarship of the faculty should be consistent with that.' That's the point AACSB will need to make as it plays this advocacy role."

Diversity of Scholarship

The other six recommendations listed in the initial report have not been nearly as controversial as the first one. Nonetheless, the second recommendation, which encourages schools to reward more diverse approaches to scholarship, is regarded by some business school leaders as unrealistic. These respondents consider it virtually impossible to overcome the powerful incentives created by tenure and promotion committees, academic job markets, and journal editors.

Again, the authors of the report anticipated this concern, and they admit that changing the incentive structure will be challenging. They note that AACSB will have to support such efforts by helping to develop these new models or advocating for them with university administration.

Several of the report's other recommendations address the divide between practical and theoretical research—that is, between research with an obvious application in the business world and purer research that is not designed to have an immediate impact on practice. While the authors of the report argue for both rigor and relevance, it's clear they believe there needs to be more communication between academics and practitioners—and more ways to publicize the value of research.



One of the task force's recommendations encourages schools and executives to work together to identify research areas of the greatest common interest. Another promotes the idea that AACSB should work with existing journals, or perhaps create new knowledge portals, to more widely disseminate faculty research and "translate" it for practitioners. And to make sure vibrant new research is getting the

attention it deserves, the task force makes two recommendations: that AACSB develop an awards program to recognize high-impact research, and that the association disseminate information on best practices regarding the links between research and practice.

It's not yet clear how some of these recommendations might become reality. For instance, Alutto notes that AACSB might consider allying with some of the major research journals to find ways to translate and publish scholarly research in more accessible terms. Nonetheless, the intent of the task force members is plain: They want business school research of all kinds to be more diverse, more visible, and more accessible. And they want business schools to work with AACSB to promote these goals.

Facing the Challenges

It's clear that there are significant challenges and changes ahead in the way business schools conduct, measure, and share research. "Yes, these recommendations mean changes for business schools," says Alutto. "Yes, they mean that not all schools would be required to fit one mold. But we gave up the one-mold approach years ago with the mission-based accreditation process."

The plan to tie research requirements to a school's mission is a strategy that will be successful for institutions both inside and outside the U.S., Alutto believes. "Schools that are embedded in very different sociopolitical settings have clear differences in mission," he says. "This approach allows us to focus on the quality of impact that faculty scholarship is having, regardless of where the school is located."

Schools and individual faculty alike are known by their research and honored for their contributions to the world's expanded pool of knowledge. There is no question that a commitment to research will continue to define management education in the years to come. But how management educators define research could have a profound effect on the future of business schools—and their place in the world.

Research

The Power and Pitfalls of Positive Thinking

People who are optimistic are more likely than others to display prudent financial behaviors, according to research from two professors of finance at Duke University's Fuqua School of Business in Durham, North Carolina. But those who are *too* optimistic may hinder their prospects, by being too short-sighted in

their planning.

In their paper "Optimism and Economic Choice," published in the October 2007 issue of the Journal of Financial Economics, Manju Puri and David Robinson compare optimists and extreme optimists to gain insight into how psychology affects economic and lifestyle choices. The researchers drew on data from the Federal Reserve Board's Survey of Consumer Finance (SCF), a triennial assessment of U.S. families' financial and demographic information. Although the SCF did not include questions about respondents' level of optimism, it did ask how long they expected to live. The survey also collected the same type of demographic and health-related information that actuaries use to calculate life expectancy.

Puri and Robinson combined these data to determine participants' statistical life expectancies. Then, they compared respondents' statistical and self-reported life expectancies. They categorized anyone who expected to live longer than the data predicted as an optimist. They categorized those who expected to live an average of 20 years longer than the data



predicted—the top 5 percent of optimists—as "extreme optimists."

The researchers found that optimists have certain behaviors in common: They work longer hours, invest in individual stock, save more money, pay their credit card balances on time, and plan to retire at a later age. Extreme optimists,

on the other hand, work significantly fewer hours and save less money; they also are more likely to be day traders, less likely to pay their credit card balances regularly, and are more likely to smoke.

"The differences between optimists and extreme optimists are remarkable," says Puri. "They suggest that overoptimism, like overconfidence, may in fact lead to behaviors that are unwise."

The researchers hope their findings will help individuals understand or even overcome personality characteristics that can negatively affect important financial decisions. "Doctors tell us that one or two glasses of red wine a day can be really healthy, but no one tells you to drink the whole bottle," says Robinson. "It's the same with optimism. A little bit is beneficial, but too much can lead to bad economic choices."

FOCUS ON FACULTY

Unlocking the Power of Information

Eller professor Sudha Ram aims to improve the functionality, accessibility, and reliability of data.

Information is everywhere—billions of

pieces of information are being sent, processed, modified, stored, and created as you read this sentence. But where did it come from? Who created it? Where is it going? How will it be used? And, most

important, how reliable is it? How organizations answer these questions may be essential to their success, says Sudha Ram, the McClelland Professor of Management Information Systems at the University of Arizona's Eller College of Management in Tucson.

To help organizations tap their archived information and turn it into knowledge that will allow their leaders to make the best decisions, Ram is working on research she calls "tracking the digital DNA of objects." This "digital DNA," she

says, will help people navigate the mountains of data that the world generates on the Internet and in databases around the world.

Ram calls her model "W-7," which refers to seven W's that Ram has identified as crucial to an effective information





management model: who, what, when, where, how, which, and why. By tagging each piece of information with as many of the seven W's as possible, a company can better separate good information from bad. "It's my model of provenance for information," says Ram. "Now that we're in the information age, we need the ability to track information's history to make sure we know where it came from."

Using her model, Ram wants to design a technological system that not only stores data, but weights its reliability. With such a system in place, companies can improve their "semantic interoperability"—an established concept that refers to how well a company can access and use its information—in three primary ways. First, they can know the origins of each informational object. Second, they can judge the quality of the data with accuracy. And, finally and most important, they can

put that information to use.

Right now, Ram is working with Raytheon Missile Systems, headquartered in Arizona, to help it shorten its R&D cycle. For instance, when the company designs a new missile and something goes wrong in a test, it is working with Ram to find ways to track information about what materials were used, what tests were previously done, and who was involved. Through such tracking, Ram explains, Raytheon hopes to go from concept to completion of new missile designs much more quickly.

In addition, she is working with Wikipedia to track vandalism to entries on its site. As a rule, changes made by identified users tend to be more accurate than changes made by anonymous users. Ram says that by tracking changes back to users' IP addresses, the W-7 model can detect—and in some

cases even predict—vandalism to the site. She foresees a time when Wikipedia can use the W-7 model to give each of its entries a "reliability rating," so that users have a better idea of how much credence to give the information.

Ram sees applications for the W-7 model in many venues—to help governments track intelligence on terrorism, for example. As she has conducted her research, Ram says she has been surprised at how many of the seven W's many companies already have recorded. They simply have no means to utilize them.

"I hope that more businesses will invest in the effort required to track this information, because over time it can become a very rich source of knowledge," says Ram. Once organizations have control over their information, she adds, "they'll be able to use it in ways they never anticipated."

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Business Professors Make Great Execs

A study in a recent issue of Academy of

Management Perspectives debunks the belief that business professors "wouldn't make it in real-world business." Research by Bin Jiang and Patrick Murphy, assistant professors of management at DePaul University in Chicago, Illinois, shows that business professors actually have an advantage in the CEO's chair.

For their paper "Do Business School Professors Make Good Managers?" Jiang and Murphy studied more than 200 business academics who became executive managers, analyzing data from the Dun & Bradstreet Million Dollar Database. The D&B database compiles information on North American public and private companies with more than 20 employees or more than \$1 million in annual revenues.

They found that the companies of these professors-turned-executives actually did significantly better than identical firms with no former academics in their top ranks. Firms with former business professors at top-level positions had a mean productivity index, or revenues divided by employees, of approximately 217,000. The index for firms without academics at the top was only about 178,000. The researchers also found that the bigger the companies, the more reliable the results.

In an interesting twist, companies with business academics in penultimate leadership positions such as vice president did better than those companies with academics acting as CEOs or board members. In addition, company performance was better when academics made their career change early in their careers.



These findings suggest that "recency of expertise and greater knowledge of current scholarship make for better performance as an executive in a specific business area," the authors write.

The authors believe that this research may put an end to the stereotype of business professors as "all theory and no practice," with expertise that has little relevance to real-world business. Write Jiang and Murphy, "We are hopeful that our findings will reduce some doubt about the practical legitimacy of business school professors."

I Lower Pay Reflects Bias Against Women Execs

Social bias may play a large role in the

compensation of women executives, according to a recent study, "The Gender Pay Gap in the Board Room: Are Women Executives Underpaid?" The study was conducted by three professors of accounting and information management: Rajiv Banker of Temple

University's Fox School of Business in Philadelphia, Pennsylvania; Mark Anderson of the University of Texas at Dallas; and Rong Huang of the City University of New York.

Rajiv Bank

For the study, the researchers examined major North American

corporations—particularly their top five positions of leader-ship. They then compared the compensation of the men and women in those positions. They wanted to discover whether and why women in these positions were paid less than their male counterparts, says Banker.

"There are two major theories as to why women are paid less," says Banker. "The human capital theory says that people are paid for the value they create for the organization, and that women create less." The theory holds that women might create less value for many reasons—they might take more time off to take care of families, for example, or be excluded from social networks that would help them attract more clients.

The other explanation is social bias theory, says Banker. According to that theory, he explains, "people who are underrepresented are more likely to be underpaid."

The researchers developed a model to compare each executive's compensation with the value that he or she created for the company. They found that women at the top

actually add greater value, per dollar of pay, than men in equivalent positions. This finding lends credence to the social bias theory, says Banker.

The researchers also found that the less women were represented in an

industry, the lower their salaries were likely to be. In industries such as utilities, oil and gas, and coal extraction, where few women reach top ranks, there existed a larger discrepancy in compensation for men and women executives in equivalent positions.



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For the latest information, including registration details, please visit www.aacsb.edu/conferences. **b.**



UPCOMING & ONGOING



STUDY OF IT DIVERSITY

Four professors have received a grant of more than \$448,000 from the National Science Foundation to study the underrepresentation of women and minorities in IT. The researchers include K.D. Joshi, an associate professor at the Washington State University College of Business in Pullman, and Eileen Trauth, Lynette Kvasny, and Jan Mahar of Pennsylvania State University's

Information Science and Technology School in University Park. For their study, "Exploration of the Effects of Race, Ethnicity, and Socio-economic Class on Gender Stereotyping of STEM Disciplines," the team will investigate the impact of the messages society conveys about gender roles, as well as on the way people perceive and respond to these messages. The researchers hope that the results of their study will help to increase the number of women and minorities who enter science and technology enterprise management (STEM) fields.

NEUROSCIENCE & BUSINESS

Aston Business School in Birmingham, England, has launched what it calls the first research center devoted to psychology and business. The Organizational Cognitive Neuroscience Center (OCNC) will use cognitive neuroscience

techniques to develop research on subjects such as "toxic manager syndrome," the effect of candidates' attractiveness on hiring practices, and the ways people process advertising. "Our aim is to advance theoretical understanding of the cognitive processes that underlie human behavior in markets and organizations," says Carl Senior of Aston University's School of Life and Health Sciences. Researchers at the OCNC hope then to develop applications that will benefit both managers and society.

CENTER FOR SUSTAINABILITY

The ESC Rennes School of Business in France has opened its new Centre for Responsible Business. The center will explore three areas of research, including sustainable development; ethics, leadership, and corporate social responsibility; and the management of diversity.

Technology

'We Are Smarter' Wiki Hits Print

What would happen if thousands of busi-

ness minds from around the world collaborated online to co-author a business book? That's what the coordinators of the "We Are Smarter Than Me" project wanted to discover in late 2006 when they invited business leaders to contribute their ideas to an online wiki-produced book, which would be written and edited by users. Inspired by the success of the user-generated online encyclopedia Wikipedia, the project has now produced its first book, We Are Smarter Than Me: How

to Unleash the Power of Crowds in Your Business.

Although it has yet to be fully edited, the eightchapter book discusses everything from "crowdsourcing," a trend in which companies assign projects to a large online community, to generating word-of-mouth buzz on Web sites.

The book highlights examples of crowdpower like Prosper. com, a site that enables

entrepreneurs to access capital from groups of individuals rather than single investors or financial institutions. As the beneficiary of this "community as financier," one entrepreneur received a \$9,500 loan financed by 77 different people.

The "We Are Smarter" wiki project was started by Pearson Publishing in London; MIT's Sloan School of Business in Cambridge, Massachusetts; Jon Spector, a vice dean and director of executive education at The Wharton School at the University of Pennsylvania in Philadelphia; and Barry Libert, a former consultant of McKinsey & Co. and CEO of Shared Insights Inc., a community education and management company in Woburn, Massachusetts.

Libert and Spector, who are listed as co-authors of the book, note that there were quite a few difficulties in making it a reality. They had to sort out copyright issues regarding who owns the content generated on a wiki. They also had to keep track of contributors, respond to questions, and oversee converting the online wiki into a traditional printed format.

Even so, they are pleased with

the final result. "The quality of the contributions by bloggers, podcasters, members, and event attendees was staggering," says Libert.

The second book, on social networking, is already under way at the Web site www.wearesmarter. org. Libert hopes that companies that already are implementing social networks to communicate with stakeholders

will contribute to the project.

The "We Are Smarter" project itself is an experiment in social networking, says Libert. "It is our intent to build the largest social network of business readers and contributors," he notes. These contributors, he adds, will create "an ever-growing body of great content about how communities are going to change the way businesses operate in today's highly connected world."



Brandeis and IBM Test 'Serious Games'

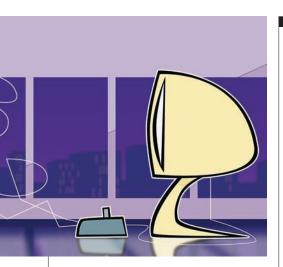
IBM is now working with professors at

Brandeis International Business School in Waltham, Massachusetts, to test the use of a new category of video games called "serious games." The term refers to computer and video games used to educate and train students in the classroom.

Business schools are turning to serious games to help their students learn business concepts, in the same way that airline pilots learn to fly using flight simulators. In an era where many young college students have grown up playing video games, many corporations and universities see serious games as an effective way to teach this generation new skills.

IBM recently introduced a new serious game, Innov8, which includes interactive, three-dimensional simulations designed to help university students and young professionals hone their business and IT skills. Brandeis International Business School has been chosen to run a pilot test of Innov8 in its course "Technology Strategy." Professors in the course will use Innov8 simula-

THE PROFILE, WHICH INCLUDED A PHOTO OF POPE AND HER FAMILY AND AN OUTLINE OF HER ACADEMIC BIOGRAPHY, HELPED HER CONNECT WITH HER STUDENTS BEFORE SHE ARRIVED.



tions to teach students to understand the business processes in technology firms and manage knowledge across global companies.

Serious gaming is quickly becoming an "exciting way to develop the skills that are required as business and IT become more closely aligned," says Sandy Carter, a vice president with IBM. "Innov8 was designed to address this specific skills shortage while also helping business schools realize the benefits of using serious games as a powerful tool for teaching."

Students Meet Professors Through Podcasts

Starting last fall, DePaul University's College of Commerce in Chicago, Illinois, began posting podcast profiles of its professors on Apple's iTunes. Students can download the digital introductions, which run between two and five minutes, to their iPods, cell phones, and personal computers.

The college began to produce the faculty podcasts as a way to introduce professors to students in DePaul's overseas MBA programs in the Czech Republic, Bahrain, and Taiwan. Because professors were often in these countries to teach two- to three-week modules, they had very little time for interaction with students. The podcasts helped international students quickly feel at ease with their Chicago professors.

Kelly Pope, an assistant accounting professor, was pleased with the impression her iTunes introduction made on her students. The profile, which included a photo of Pope and her family and an outline of her academic biography, helped her connect with her students before she arrived.

"When I arrived in class in Taiwan, I was greeted with a warm welcome from my class. The podcast gave students the opportunity to get to know me," she says. As a result, they didn't feel uncomfortable asking personal questions, she adds. Her digital profile helped her "merge the gap" between cultures.

James Moore, director of distance learning for the College of Commerce, has been working with faculty members to turn their biographies and selected content into podcasts. Eventually, he plans to post profiles of all 100 members of the school's faculty on the iTunes site.

When so many students are attuned to the visual nature of digital communications, the podcast profiles offer professors a way to reach these students directly, even before the first class, Moore says.

"Podcasts provide a direct and more reliable view of a professor's teaching style than anonymous comments posted on professor rating Web sites," Moore says. "The technology allows professors to engage their audience and build trust."

TOOLS OF THE TRADE

New Exam Tests Business Skills

The launch of the Capstone Competency Exam gives professors a new tool to evaluate student learning.

Management Simulations Inc. (MSI) of Northfield, Illinois, recently launched Comp-XM, the Capstone Competency Exam. The technology-based platform provides a learning simulation to test the business acumen and decisionmaking skills of undergraduate and graduate students.

Used in conjunction with MSI's Capstone Business Simulation, Comp-XM evaluates students in two phases. In Phase 1, students play MSI's Capstone Business Simulation to become familiar with its content. In this phase, students can play the game no more than two times.

In Phase 2, the examination begins. In the test simulation, students run fictional companies that are in competition with four computer-generated companies. The test includes five rounds, each of which begins with a short set of questions about current market conditions. Each round lasts about two hours; the entire exam can be taken over ten hours or spread out over several days.

Because each student makes different decisions, each student's testing experience will be different. After each round, Comp-XM tabulates the results and prepares reports on each student's performance for the professor.

"Assurance of learning or outcomes assessment is an issue that has consumed the time and attention of professors, chairs, and deans," says Dan Smith, MSI's president and founder. "The Capstone and Comp-XM technologies provide an engaging, standardized platform for individual evaluation."

Your Turn

By Rakesh Khurana and Herbert Gintis

I What Is the Purpose of Business?

If we were to ask physicians to name the central purpose of their profession, it's likely they all would answer, "To save lives." If we asked scientists the same question, they would probably respond, "To make new discoveries." And if we asked educators, they would say, "To teach the next generation."

But what would happen if we asked the same question of executives, entrepreneurs, managers, stockbrokers, consultants, and others whose careers fall under the aegis of "business"? It's likely that there would be no consensus among them about the purpose for their profession. Some might believe their purpose is to maximize shareholder profit; some might cite a service to community; others might emphasize their personal goals and interests. We believe that, unlike other professionals, managers simply do not have the same overarching understanding of why they do what they do.

That's not the way it was at the onset of management education. In fact, when Joseph Wharton founded The Wharton School at the University of Pennsylvania in Philadelphia in 1881, he believed the school's guiding purpose was to graduate students who would "serve the community skillfully as well as faithfully in offices of trust" and "aid in maintaining sound financial morality."

Over the last century, however, business schools have placed less emphasis on a socially driven objective. Even as business schools incorporate topics such as eth-

ics, corporate social responsibility, and selfassessment into their curricula, they have yet to adopt a universal sense of purpose for the role of business in today's society. We believe that, to return to the path that the founders of management education envisioned, business schools must create an identity and sense of shared purpose for the profession they represent.

Business students pursue business degrees for a variety of reasons. They may view business schools as places where they can increase their social networks or earn valuable credentials. They may view their business educations as stepping stones to successful, lucrative careers.

We do not disagree that a successful business is one designed to make money, or that successful business graduates should be prepared to add value to an enterprise. Still, they must also be able to define "value" in terms that go beyond the monetary. Too often, students learn to view the corporation solely in terms of profit generation, not in terms of service to its community. Worse yet, in their ethics courses, students will say they know the difference between right and wrong, but they don't view "doing right" as essential to business success. They learn about scandal-inspired measures such as the Sarbanes-Oxley Act and often believe that brute-force legislation is the only way to compel human beings to do the right thing.

Business schools have added courses on ethics and corporate





social responsibility, in part, to lead students in a different direction. Educators are experimenting with more courses, more research, and more centers devoted to ethical leadership. But many are uncertain whether these initiatives will actually make their students more honest—or whether they'll make the corporate scandals of the past less likely to occur in the future.

This uncertainty erodes their sense of purpose. When business schools produce graduates who are unsure of the primary objective of business in society, how can society know exactly what role business schools play in the world?

Business schools can alleviate this uncertainty by offering students a larger vision of what business can, and should, accomplish for the world. We believe that business schools can be considered as important to a strong society as science is to progress or as doctors are to good health.

Those who think that students wouldn't want to follow a socially driven mission in their business careers should take a cue from game theory. Game theory experiments show that most of our students are neither comprehensively selfish nor selflessly altruistic, but instead care about character virtues such as honesty and fairness. They would embrace a socially driven central objective for business.

For example, in an experiment called "the public goods game,"

IF SOMEONE ASKS OUR STUDENTS TO PINPOINT BUSINESS'S TRUE MISSION, WE WANT THEM TO HAVE A COMPELLING ANSWER.

first conducted by Ernst Fehr and Simon Gächter, ten players are each given ten \$1 bills. The players are told that they must choose how much of their \$10 to place in a common fund. Whatever they place in the fund will be multiplied by five and divided among all players. In this case, every player has an incentive to contribute as little as possible, but hope that others contribute as much as possible. Fehr and Gächter discovered that most players begin by contributing about half of their money; by the tenth round, they contribute almost nothing. When one or two players inevitably place little or no money in the fund, more trusting players get angry. In the next round, the only way they can retaliate against the cheapskates is to put in no money at all.

In a variation, players are informed how much every other player contributes to the common fund and have the opportunity to punish selfish players directly, at cost to themselves. If all players were driven by selfish motives, they would have no incentive to punish because it would cost them money. However, cooperative participants punish the selfish. They want everyone to work in the best interests of the group, and they're willing to lose money to bring about that result.

In yet another version, players are allowed to discuss their intentions beforehand and make promises about how much they will contribute. Studies show that when players are allowed to make promises, they all make more money than they do in experiments where no promises are made. The majority of people don't like to lie—if they say, "I promise to contribute X amount,"

they generally do. The more commitments players are allowed to express, the higher the level of cooperation in the game as a whole.

In many ways, these experiments offer business schools a foundation on which to build a central vision for the business profession. Fehr and Gächter show that, when left to their own devices, most people will set up a system of reciprocity and moralistic punishment. Business schools that understand this side of human nature can publicly elicit students' commitment to a central purpose for enterprise. They can actively encourage them to work together toward a common goal, for the benefit of the common good.

In 1925, Wallace B. Donham, Harvard Business School's second dean, spoke at Stanford University's School of Business on the topic "The Social Significance of Business." Donham noted that the world's problems would not be solved through governmental or police intervention, but "from within on a higher ethical plane." The primary objective of business schools, said Donham, "should be the multiplication of men who will handle their current business problems in socially constructive ways."

Over the last 25 years, business schools have lost this fundamental emphasis on the socially motivated manager. Rather than acting primarily as "schools of management," they have become schools for brokers, bankers, consultants, inventors, and entrepreneurs. The MBA itself, once a degree with a clear role and distinct boundaries, has become an umbrella term for advanced business education. There is no universally understood role, no explicit focus on, or discussion about, what an

MBA means to the profession or to society as a whole.

Fortunately, a few business schools have returned to the "socially constructive" objectives set out by Joseph Wharton, Wallace Donham, and other founders of business education. They have adopted a more values-centered model in their curricula, offering students a clearer direction in their education and sense of purpose after they graduate. Still, too many other schools have yet to define for their students a common central mission.

If someone asks our students to pinpoint business's true mission, we want them to have a compelling answer. Business faculty must begin a dialogue to come to an agreement about what the moral responsibility of the corporation truly is. As educators, we can return the profession to the principles on which management education was founded. After all, human beings have the capacity to surmount incredible challenges and accomplish extraordinary goals, given the right institutional conditions. Business schools are uniquely positioned to put those conditions in place—and to graduate students who have an overarching sense of purpose in their careers.

Rakesh Khurana is an associate professor of organizational behavior at Harvard Business School in Boston, Massachusetts. Herb Gintis is a professor of economics at the Central European University in Budapest, Hungary, and a member of external faculty at the Santa Fe Institute in New Mexico. Both are part of "Free Enterprise: Values in Action," a multidisciplinary effort organized by the Gruter Institute for Law and Behavioral Research in California to explore the role of values in free enterprise.

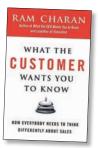
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Bookshelf

It is not uncommon today for critics to ask

if business schools have lost their way, but Harvard's Rakesh Khurana poses the question against such a vivid, detailed, and compulsively researched historical background that it becomes more provocative than ever. In *From Higher Aims to Hired Hands*, he examines the social and political contexts that led to the rise of business schools around the turn of the 20th century and that





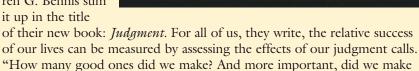
NOEL M. TICHY

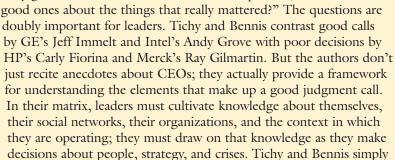
WARREN G. BENNIS

have shaped their evolution ever since. Once conceived as institutions that would legitimize a new professional class, business schools have transformed themselves twice—first in response to post-war reforms that called for business schools to be more intellectual; then in response to the economic crises of the last 30 years that gave rise to the notion of maximizing shareholder value. "Business schools have evolved over the century and a quarter of their existence into their own intellectual and institutional antithesis," Khurana writes. Along the way, he believes, they have found themselves fairly detached from moral or values-based education. According to Khurana, if business schools "are to continue to play any role in the education of managers that could not be filled equally well by corporate training programs or for-profit, purely vocational business schools, they belong in the forefront of the discussions...

What really distinguishes

an excellent leader from an ineffective or downright bad one? Leadership gurus Noel M. Tichy and Warren G. Bennis sum





do not buy the common argument that successful leaders make decisions based on "one of those important but ineffable qualities" like instinct. They work to develop good judgment—and they use good judgment to succeed. (Portfolio, \$26.95)

about the shape that capitalism should take in the 21st century." He admits he does not have an easy solution, but the questions he raises are sure to inspire those connected to management education to consider them. (Princeton University Press, \$35)

When you think of a terrific salesperson,

you visualize someone affable, outgoing, and driven, who will use a combination of charm and industry analysis to convince customers to buy. Not a good picture any more, says international consultant Ram Charan in *What the Customer Wants You to Know.* In today's complex and transparent business environment, he says, the sales force must

partner with customers to help them achieve their own goals, such as faster turnover or higher revenue. This approach calls for a whole shift in mindset for the salesforce—and the company as a whole. Salespeople must compile and analyze data about their top customers, then develop what are essentially business plans for each client that identify goals and the strategies for achieving them. At the same time, they must rally teams of support people in their own organizations from areas such as finance, legal, and manufacturing. Charan calls this approach "value creation selling," and he does a convincing job of selling his argument as the only way to stay in business in the 21st century. (Portfolio, \$21.95)

VISIONARY BUSINESS LEADERS "HAVE THE PREDISPOSITION AND THE CAPACITY TO HOLD TWO DIAMETRICALLY OPPOSING IDEAS IN THEIR HEADS. AND THEN, WITHOUT PANICKING OR SIMPLY SETTLING FOR ONE ALTERNATIVE OR THE OTHER, THEY'RE ABLE TO PRODUCE A SYNTHESIS THAT IS SUPERIOR TO EITHER OPPOSING IDEA." — The Opposable Mind

■ Most businesspeople, faced with complex

choices, tend to approach decisions on an either/or basis. But such oversimplification is a mistake that truly visionary business leaders avoid, suggests Roger Martin in *The Opposable Mind*. These leaders "have the predisposition and the capacity to hold two diametrically opposing ideas in their heads," writes Martin, dean of the University of Toronto's Rotman School of Management. "And then, without panicking or

"And then, without panickir simply settling for one alternative or the other, they're able to produce a synthesis that is superior to either opposing idea." Throughout the book Martin presents case studies of CEOs who have imaginatively and holistically solved huge problems, including A.G. Lafley of Pro

including A.G. Lafley of Procter & Gamble and Isadore Sharp of the Four Seasons Hotels. Martin breaks down the discrete steps most people take to decide on a course of action; then, he offers a roadmap for anyone who wants to develop a more integrative way of thinking. Just reading the book is an exercise in expanding the mind and looking at problems in a new way. (Harvard Business School Press, \$26.95)

Is management theory obsolete? Gary

Hamel thinks so, and he says so bluntly in his fascinating book, *The Future of Management*. Treating the basic principles of management like any other product that was invented in the last century, Hamel posits that it's an ancient, creaking system that must radically reinvent itself if it's going to cope with modern challenges. But the very fact that accepted management theory is so

widespread and entrenched makes the essential innovation stupefyingly difficult. "If you've spent any time inside large organizations, you know that expecting them to be nimble, restlessly innovative, or highly engaging places to work…is like expecting a dog to do the tango," Hamel writes. Yet that's exactly what he thinks is required. He believes that "the three most formidable challenges that confront companies in this new century" include accel-



THE Opposable MIND

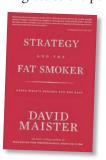


erating the pace of strategic renewal; making innovation everyone's job; and creating a highly engaging work environment. Hamel writes with such clarity and intelligence that his conclusions become not just persuasive, but urgent. (Harvard Business School Press, \$26.95)

You might think your organization is

prepared for any contingency, but *Managing the Unexpected* will strip away any complacency. Authors Karl E. Weick and Kathleen M. Sutcliffe, both of the University of Michigan, examine high reliability organizations, or HROs, to draw lessons for less stress-intensive companies. These HROs include hospital emergency rooms, naval aircraft carriers, and other enterprises where the stakes are astronomical, the parameters are always changing, and the success rate is astonishingly high. Weick and Sutcliffe attribute that

phenomenal success rate to the state of mindfulness that prevails at these organizations, a realization that anything could go wrong at any time. According to the authors, HROs are obsessed with tracking and learning from failure; reluctant to oversimplify any situation for fear of overlooking information; sensitive to operations, especially in the current situation; committed to bouncing back from errors; and willing to let authority migrate to the person with the most



pertinent experience. All business leaders must prepare for some degree of chaos, and this book is an excellent tool for showing them how. (Jossey-Bass, \$27.95)

All individuals — and all organizations —

know what they need to do to get healthy and upgrade performance. It's just that, most of the time, they're unwilling to invest the necessary effort. "Improving the quality of the analysis is not where the problem lies," writes David Maister in Strategy and the Fat Smoker. "The necessary outcome of strategic planning is not analytical insight, but resolve." Maister, who used to be a fat smoker himself, knows that a heart attack or a financial crisis is usually the urgent motivation that finally gets people or institutions to take action. Even so, no strategic plan can be implemented without the buy-in of all the players, from top management to low-level workers. Maister writes in a frank and refreshing style about what it really takes to implement a new strategy—and reap the rewards. (Spangle Press, \$29.95) **Z**

Spotlight

Field Lessons

By re-enacting a pivotal Civil War battle, EMBA students tap their potential for leadership.

Fought between April 29 and May 3 in 1863, the Battle of Chancellorsville, Virginia, was a pivotal event of the American Civil War. Outnumbered, General Robert E. Lee and his 60,000 Confederate soldiers withstood the attack of Major General Joseph Hooker and 115,000 soldiers of the Army of the Potomac. Lee's troops won the battle, sending Hooker's army into retreat.

For the last six years, William Miller and Randy Barker, professors at Virginia Commonwealth University's School of Business in Richmond, have made the Battle of Chancellorsville the basis of an annual daylong field trip that requires incoming EMBA students to examine the decisions Lee and Hooker made during the battle. "We send students immediately into issues of leadership, communication, and team building," says Barker.

Before the trip, which occurs in August before classes begin, students are divided into three teams: the North team wears blue; the South team wears gray; and the judging team, which will determine the winner of the afternoon's exercise, wears green. Students spend the morning taking bus and walking tours of battle sites with a guide from the National Park Service.

In the afternoon, the North and South teams use what they've learned to devise new strategies that they think would have resulted in better outcomes for their



"CHANCELLORSVILLE SENDS
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TEAM BUILDING."

-Randy Barker

sides. At the end of the day, both sides make presentations about how they would have approached the battle, and judges declare one team the winner based on the strength of its strategy.

Different teams tackle the task in different ways, says Miller, executive director for the school's Fast Track EMBA program. Some work as large groups; others divide into smaller squads. Some question the generals' decisions, while others justify their actions. Often, Miller and Barker remove each team's leader midway through the afternoon, mirroring the loss Lee experienced when his second in command, Stonewall Jackson, was fatally injured during battle. This unexpected twist forces other students to step in to fill the leadership gap.

Before their first class, students complete a paper in which they reflect on their experience at Chancellorsville. In the end, students emerge with a better understanding of the leadership challenges Hooker and Lee faced—and their own leadership potential, says Barker. "Some learn how much to push their own leadership on the group, while others realize they shouldn't stand on the sidelines," he says.

Barker and Miller wanted to create an exercise that would utilize local resources, integrate course concepts, and provide students with an experience they could take back to their jobs. "With Chancellorsville," says Barker, "we're able to accomplish these objectives in a way that's fun, engaging, and enlightening."