# BizEd

JANUARY/FEBRUARY 2006

## Office Depot's Steve Odland On Succession and Success

## Toward More Intelligent Testing

## What About Wiki?

# BizEd Contents

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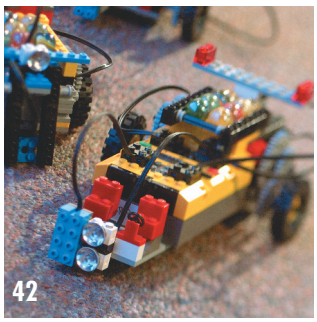

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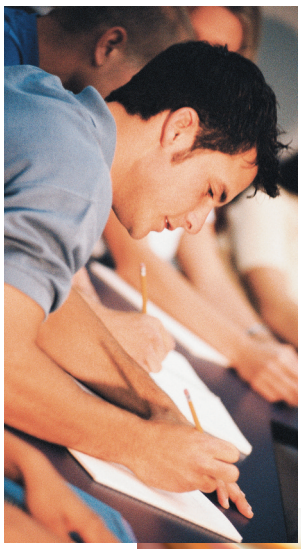
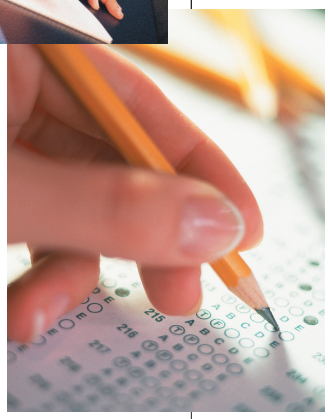
Cover photo: Michael Price

# From the Editors





## Measuring Up

**Driver's license exams, *Cosmo* quizzes, Mensa questionnaires, Sudoku grids. Everywhere you look,** there's another kind of test to measure your competence, assess your personality, or challenge your mind. Sometimes it seems as if the whole world wants to give you a score.

The academic environment, of course, offers tests at every turn—admissions tests, midterms, final exams, and learning assessments. Unlike number puzzles and quizzes in magazines, these tests are serious, and seriously difficult, and sometimes even bright people fail to do well on them. One poor test-taker is psychologist Robert Sternberg, who describes his history in the book *Practical Intelligence*. He used to suffer from so much test anxiety that his grades dropped, he was labeled an average student, and he happily endured "life as a dum-dum" until an astute teacher realized his potential.

Despite this early experience, however, Sternberg is a great believer in tests and their power to predict performance. As he explains in the article "Examining Intelligence," his goal is to broaden and supplement conventional admissions tests so that they measure practical and creative abilities in addition to raw analytical competence—and so that schools are able to identify the very best candidates for their programs.

Students aren't the only ones being tested on an ongoing basis. Faculty must constantly be evaluated as well, although it's tricky to assess how much a professor contributes to the university. Don Osborn of the Ecole Supérieure du Commerce Extérieur, Pole Universitaire de Léonard de Vinci in Paris, has worked out a system to make the process simpler. In "The Faculty Scorecard," he presents a straightforward, easily adaptable tool that allows administrators to measure what professors bring to the classroom and how well they are carrying out the school's mission.

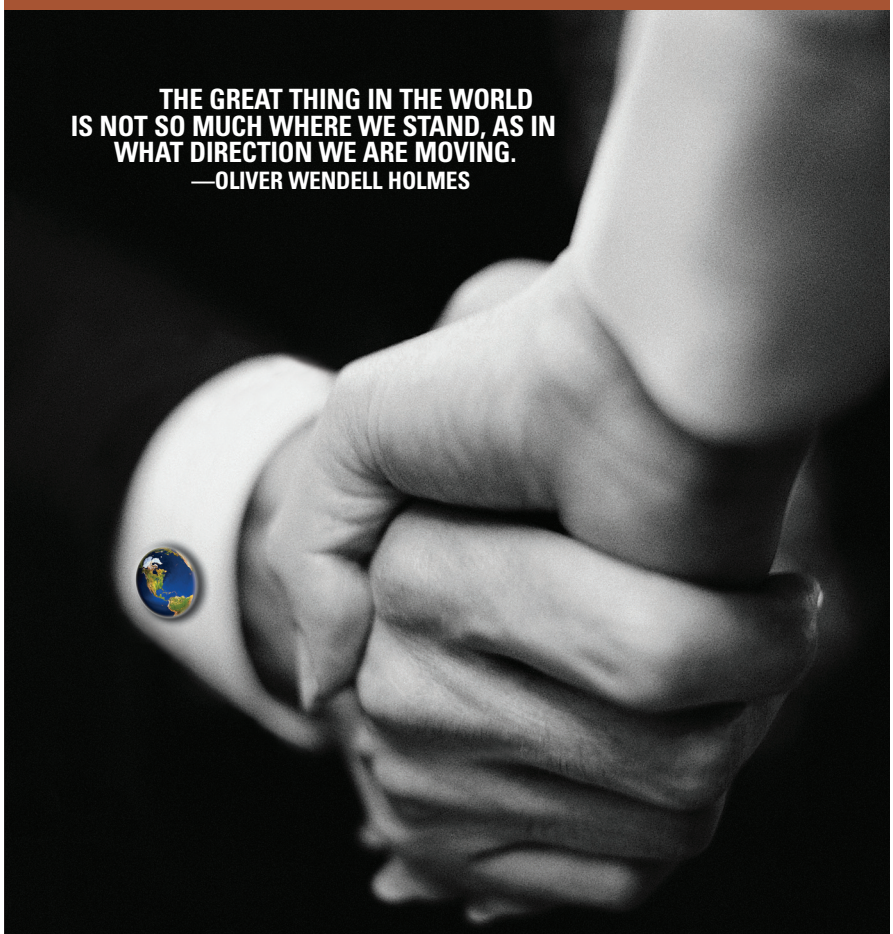
Even those who perform magnificently on scorecards and admissions exams face social and ethical tests every day—in the workplace and in society. One such test that the business school community recently encountered was how to respond to the devastation caused by Hurricane Katrina. Students and faculty passed the exam with flying colors. They organized fund raisers, set up Web sites, and engaged in business competitions that would benefit small business owners wiped out by the storm. A few of those efforts are detailed in the "Headlines" section of this issue.

The truth is, the world will always be rife with tests. Some will be administered by institutions wanting to gauge our brainpower. Some will be conducted by supervisors trying to measure our competence and skills. Some—like hurricanes and other disasters—will be offered completely at random, giving us no time to study in advance, and only our internal ratings systems will let us know if we've failed or if we've passed.

Even people with test anxiety will have chances to ace those real-world exams. They're offered every day.

Sharon Shinn

THE LEADERSHIP LESSON:




DREXEL UNIVERSITY'S
LEBOW COLLEGE OF BUSINESS ACHIEVED
THE FOLLOWING BENCHMARKS IN 2005:

- NEW CENTERS OF EXCELLENCE: The Center for Corporate Governance and the Center for International Business and Economics
- THREE CHAIRED PROFESSORSHIPS: Dr. Ralph Walkling, Stratakis Chair in Corporate Governance and Accountability, Dr. Constantinos Syropoulos, Trustee Professor in International Economics and Dr. John Schaubroeck, Trustee Professor in Leadership
- 38 PERCENT INCREASE IN MBA RECRUITMENT: Outperforming prior years and the national average
- NEW MBA PROGRAMS: LeBow Evening Accelerated Drexel (LEAD) MBA and MBA Anywhere™ and an entrepreneurial concentration and minor

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# Letters

## More Debate on the Effect of Rankings

I read with interest "What Price Rankings?," Andrew J. Policano's article on business school rankings in the September/October issue. While I agree wholeheartedly that rankings have taken on increasing importance and that a ratings system should be an alternative, I wish to put forward one aspect of the debate that I feel may have been neglected.

It can be argued that, in addition to the dramatic impact they create in the media, rankings affect short-term strategic policy among certain participating schools. As a result, the rankings reports are more likely to be snapshots of schools' current situations and standings, which have been honed to meet the immediate needs of the ranking in question. Such stop-start development of a school and its programs, dictated predominantly by the timing of rankings, means an accurate picture of an institution's quality is difficult to obtain.

A ratings system would limit greatly such stop-start strategies, allowing the solid, long-term quality of schools to come to the fore. It would also allow those who wished to enroll in a business education program to judge schools on their true merits.

It appears that one of our challenges is to help the media create an approach that centers less on rankings and more on becoming sources of accurate information. I fully support the AACSB in this aim.

*Jean-Pierre Helfer*
*Dean*
*Audencia Nantes School of Management*
*France*

# Headlines

## Leadership in Times of Crisis

**Business schools are constantly looking for** ways to give students real-world experience, and nothing is more real than a natural disaster. Around the world, business students organized relief efforts for victims of Hurricane Katrina, learning valuable lessons about leadership during crises. Some examples:

■ At San Diego State University in California, students in a graduate business planning class set a goal of raising $1 million for small business owners affected by the hurricane. Professor Michael Cunningham donated $25,000 in seed money and challenged students to turn that into $1 million by year's end.

AP PHOTO/BEN SKLAR

**Volunteer crews rescue a family in Bay St. Louis, Mississippi.**

Dubbed the Katrina Aid & Relief Effort (KARE), the fund will provide business owners grants for expenses not covered by insurance. All money raised will support the Small Business Disaster Relief Fund, which was set up by the Louisiana Association of Business and Industry with the assistance of the Baton Rouge Area Foundation. Grant recipients will be determined by a panel that at one point was receiving more than 100 applications per day. Students planned a telethon, a Mardi Gras party, and various advertising and marketing campaigns to secure donations.

■ The Coles College of Business in Kennesaw, Georgia, launched the Small Business Restoration Initiative, drawing on expertise from the Coles College of Business, the Small Business Development Center, the Cobb Microenterprise Center, and school alumni, faculty, and students. The initiative quickly designed a business disaster Web Site (http://coles.kennesaw.edu/disaster/) to assist business owners struggling to rebuild business documents, contact their former customers, or apply for disaster loans. Accounting, legal, banking, and other professional firms partnered in the initiative.

■ At Emory University's Goizueta Business School in Atlanta, MBA students organized a business competition that netted $70,000 for the American Red Cross Hurricane Relief Effort. The Capstone Leadership Challenge was held during the first week of the full-time MBA program. Twenty teams of ten students each wrote and executed business plans, using $200 in seed money provided by the MBA Program Office.

The team that raised the most money—$19,500—partnered with the Atlanta Braves. During a game, volunteers asked fans for donations to buy care packages of toiletries and school supplies. Major League Baseball matched the funds raised at the game; the students then began seeking donors to match the remaining portion of funds raised.

The relief efforts helped students understand that good corporate citizenship is a critical part of business leadership. "Business leaders face decisions that test their commitment to social responsibility," said Bob Weston, president of Goizueta Business School's Graduate Business Association. "While the experience taught us about the challenges of coordinating resources during difficult times, it also enabled us to witness the impact that leaders can have on a community in need."

## Ethics and Environmentalism Increasing at B-Schools

**More and more business schools are doing a** better job helping students understand the social, environmental, and economic perspectives of doing business in a global economy. That's one of the key findings of Beyond Grey Pinstripes, a biennial report issued by World Resources Institute and the Aspen Institute. Results of the 2005 survey were released last fall at Citigroup in New York.

Of the 91 business schools surveyed on six continents, 54 percent now require a course in ethics, corporate social responsibility, sustainability, or business and society, up from 45 percent in 2003 and 34 percent in 2001. Additionally, the report finds that some leading schools are launching courses on topics such as exploring private-sector approaches for addressing problems in low-income markets. The number of these courses offered has increased dramatically since 2003.

According to the report, the business school that does the best job of integrating social and environmental issues into its MBA curriculum is Stanford University in California. The other schools in the top ten are ESADE in Barcelona, Spain; York University in Toronto, Canada; ITESM in Mexico; University of Notre Dame in Indiana; George

PANELISTS AGREED THAT BOARDS RUN THE RISK OF MISSING BUSINESS OPPORTUNITIES IF THEY ARE SO RISK-AVERSE THAT THEY SPEND ALL THEIR TIME ON GOVERNANCE.

Washington University in Washington, D.C.; the University of Michigan in Ann Arbor; the University of North Carolina in Chapel Hill; Cornell University in Ithaca, New York; and Wake Forest University-Babcock in Winston-Salem, North Carolina. A complete list of ranked schools can be found at www.BeyondGreyPinstripes.org.

In addition to rating leading MBA programs, Beyond Grey Pinstripes identifies Faculty Pioneers who are leading the way in incorporating social and environmental issues into their teaching and research. This year, the six 2005 Faculty Pioneers are: Richard Locke of the Massachusetts Institute of Technology in Cambridge; Sandra Waddock of Boston College; Kellie McElhaney of the University of California in Berkeley; Luis Felipe of the Universidade Federal de Rio Grande do Sul in Brazil; Erica Plambeck of Stanford University; and C.K. Prahalad of University of Michigan.

## Changes in the Boardroom

**What are the new rules of engagement for** CEOs and the boards that oversee them in the era that comes after so many scandals and the passage of the Sarbanes-Oxley Act? More than 150 executives discussed that topic during a panel organized by Drexel University's LeBow College of Business in Philadelphia.

Moderated by Howard Fischer, CEO of Howard Fisher International, the event featured David L. Cohen, executive vice president of Comcast Corporation; Richard C. Ill, president and CEO of Triumph Group Inc.; and Eric Pillmore, senior vice president of Corporate Governance for Tyco International. The event was part of an ongoing CEO forum hosted by LeBow called Inside the Boardroom.

Pillmore, part of a new regime at Tyco, said he and three other top executives report directly to the board in an arrangement for which he knew no precedent. The goal in structuring the company that way, he said, is to be able to identify within 30 days any future misdeeds like those perpetuated by Dennis Kozlowski.

Panelists agreed that boards run the risk of missing business opportunities if they are so risk-averse that they spend all their time on governance and lose sight of strategic developments. Cohen said the Comcast board addresses governance issues, including Sarbanes-Oxley, at the committee level to keep the board from being entirely consumed with the task. Otherwise, he warned, "you could spend 80 percent of your time talking about Sarbanes-Oxley."

Ill said expectations for board members have changed. Board meetings that used to take three or four hours now take more than a day, and one member of his board left when it became obvious he could not dedicate enough time to the task, Ill said.

Cohen noted that good communication is key to fostering strong relations between management and boards. In a good situation, management should view the board as a strategic resource, not a hindrance, Cohen added.

## School of Entrepreneurship Launches in South Africa

British tycoon Richard Branson has helped launch the Branson School of Entrepreneurship, recently opened at the Cida City Campus in Johannesburg, South Africa. According to the Johannesburg News Agency, the school will provide specialized accredited business administration degrees to disadvantaged students.

According to an article in the *British Mail and Guardian*, the school is a collaboration between Branson's Virgin Group and Cida, a private school that educates impoverished students for very little cost. The school will be housed in a building donated by First National Bank and renamed the Nelson Mandela First National Bank Building in honor of South Africa's first black president.

All Cida students will take an entrepreneurship module in their first year and may choose to enter the Branson School of Entrepreneurship in their second year. Students also may take modules on social entrepreneurship.

"Being an entrepreneur is not only about making money," Branson told the Johannesburg press agency. "You can also tackle social problems with an entrepreneurial mind. No one should develop AIDS, no pregnant mother should be passing on HIV to her baby, and millions should not be dying of malaria. These are just some of the issues we will lead the school into discussing."

# Headlines

How can a business school efficiently combine input from a wide variety of constituents to draft the perfect slogan?

## Outreach to Underutilized Firms

**The University of North Carolina at Charlotte** has joined with local governmental offices to help provide business training to historically underutilized businesses (HUBs). The school partnered with the University of North Carolina Office of the President, Carolinas Associated General Contractors, and prime general contractors to offer the HUB Contractor Academy, beginning last fall. The academy's goal is to teach attendees the skills required to successfully manage a competitive business.

As defined by North Carolina state law, HUB firms are primarily owned by women, ethnic minorities, and socio-economically disadvantaged companies. As the number of HUBs continues to grow throughout the state, plans are under way to launch similar academies at UNC Wilmington and Elizabeth City State University.

Participants at the UNC Charlotte academy will have access to management experts in business, accounting, legal, and construction jobs. Classes will be taught by certified public accountants, engineers, attorneys, project managers, and construction professionals. Courses on project management, human resources management, business taxes, public contract requirements, employee labor obligations, financial management, risk management, and blueprint reading will all be offered during the 16-week academy.

## Mission Statement Fits to a T

**Peter Drucker has said that an institution's** mission should fit on a T-shirt, but how can a business school efficiently combine input from a wide variety of constituents to draft the perfect slogan? The Breech School of Business Administration at Drury University in Springfield, Missouri, chose to ask a cross-section of stakeholders to help boil their comprehensive mission statement down to a single phrase. They elected to use the Delphi technique—a group decision-making tool for reaching consensus on ideas that can only be judged subjectively—but modified it to take advantage of today's e-mail technology.

School leaders started with a "seed" mission written by copywriters from a national advertising agency. Breech faculty reviewed the statement and suggested changes. A second version was e-mailed to 35 stakeholders, including the school's advisory board, local chamber of commerce officers, city officials, students from the Students in Free Enterprise team, and faculty. By using e-mail as asynchronous communication, the school avoided "group-think," negativity, and the dominance of one strong personality. These are often pitfalls of large, face-to-face meetings, according to Jim Murrow and Steve Mullins, two associate professors at Breech who prepared a paper about the process.

At 78 words, this second version was obviously still too long for a T-shirt. It also needed more work. Stakeholders suggested that the statement put more emphasis on the school's strategic goals, its focus on building leaders, and the ability of its faculty to give one-on-one attention to students. "The idea was to lead with the mission and follow with the tactics and action items needed to achieve the mission," according to Murrow and Mullins.

Over the next four weeks, five revisions of the mission statement were e-mailed to participants until a final version met with high approval. The resulting statement truly is simple enough to fit on a T-shirt: *"The mission of the Drury University Breech School of Business is to prepare ethical leaders for the global business community."* An extended version of the mission statement expands on how highly engaged faculty offer students one-on-one mentoring and encourage them to embrace diversity, lifelong learning, and good citizenship.

Murrow and Mullins emphasize that the process went so smoothly because the Delphi technique allows successive iterations of a problem until its solution; in their adapted format, e-mail allowed those iterations to be almost instantaneous. Such a technique has "significant advantages of time, inclusiveness, and cost compared with other commonly used techniques for mission creation such as large, off-site gatherings of only key managers together with highly paid management consultants as facilitators," they write.

While the new mission statement has achieved the "vital buy-in of all our stakeholder groups," they realize a challenge is still ahead. "We must widely communicate the mission to all stakeholders and create assessment metrics. We then simply must 'walk the talk.'" The authors can be reached at jmurrow@drury.edu or smullins@drury.edu.

# Headlines

## SHORT TAKES

### NEW APPOINTMENTS

■ **Kenneth M. Lusht** has been named interim dean of the Smeal College of Business at Pennsylvania State University in University Park. Lusht is currently professor of business administration, Zimmerman Homes University Endowed Fellow in Business Administration, and chairman of the Department of Insurance and Real Estate.

■ **Lucy Katz** has been named as the first holder of the Robert C. Wright Chair in Business Law, Ethics and Dispute Resolution at the Charles F. Dolan School of Business at Fairfield University in Connecticut. The chair was named for the chairman and chief executive officer of NBC Universal and vice chairman and executive officer of General Electric Company. This is the third Dolan School of Business chair made possible by an endowment provided to the school by Charles and Helen Dolan.

■ **Stephen B. Tallman** has been named the E. Claiborne Robins Distinguished Professor of Business at the Robins School of Business at the University of Richmond in Virginia. Also at the Robins School, **Joe Ben Hoyle**, an associate professor of accounting, has received the David Meade White Distinguished Fellow designation.

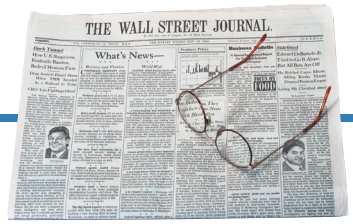
■ **Rajiv D. Banker** has been named the Stanley Merves Chair of Accounting and Information Technology at Temple University's Fox School of Business and Management in Philadelphia. Banker will be the first Fox School professor to hold the chair, which was endowed by Fox alum Stanley Merves, CEO of America Collex.

■ **Eric Bradlow** has been named the inaugural K.P. Chao Professor at the University of Pennsylvania's Wharton School in Philadelphia. The chair is funded by industrialist K.P. Chao, chairman of the board of Novel Enterprises Limited, based in Hong Kong. Bradlow is a professor of marketing and statistics and the academic director of the Wharton Small Business Development Center.

■ **John M. Jordan** has been named executive director of the eBusiness Research Center (eBRC) at Pennsylvania State University's Smeal College of Business in University Park. He succeeds Nirmal Pal, who retired in July.

■ Audencia Nantes School of Management in France has made two new appointments. **Bertrand Venard** is the new research director, and **Christopher Demarco** is the academic director.

■ Former IBM executive **Paul Mugge** has been named the director of the Center for Innovation Management Studies at North Carolina State University's College of Management in Raleigh. Mugge will be responsible for advancing the center's strategic vision and managing its daily operations. He is also the college's first innovation professor and will develop new courses for the college's technology-focused MBA curriculum.




■ Accounting professor **Ron Reed** has been named a *Wall Street Journal* Fellow at the University of Northern Colorado's Kenneth W. Monfort College of Business in Greeley. The fellowship has been established as part of the academic partnership initiative between the *Journal* and the Monfort College. Reed will be responsible for continuous improvement of *The Wall Street Journal* Education Program at Monfort.

■ Two new appointments have been made at the Ohio University College of Business in Athens. **Hugh Sherman**, associate professor and former chair of the management systems department, has been appointed associate dean for strategy and operations. He is also the associate director of the Voinovich Center for Leadership and Public Affairs. In addition, **Nanda Rangan** has been appointed executive director of international operations. Rangan is the O'Bleness Chair of Banking at the school.

■ **Elaine J. Eisenman** has been appointed dean of Babson Executive Education at Babson College in Wellesley, Massachusetts. Eisenman was formerly a senior executive at American Express.

■ Professor of marketing **Delphine Manceau** has been named dean of the master's program of ESCP-EAP European School of Management with locations in Paris, London, Madrid, Berlin, and Turin. She will oversee the curriculum development and internationalization of the school's cross-border double and triple degree program..

## HONORS AND AWARDS

■ **Kevin M. Murphy**, a professor of economics at the University of Chicago Graduate School of Business, has been named a MacArthur Fellow for 2005. He will receive $500,000 over the next five years from the John D. and Catherine T. MacArthur Foundation. Murphy was selected for "revealing economic forces shaping vital social phenomena such as wage inequality, unemployment, addiction, medical research, and economic growth."

■ The Farrell Center for Corporate Innovation and Entrepreneurship at **Pennsylvania State University's** Smeal College of Business has received the NASDAQ 2005 Center of Entrepreneurial Excellence award. NASDAQ and the National Consortium of Entrepreneurship Centers established the award in 2000 to recognize organizations that have made the greatest contributions in the advancement of entrepreneurship through academic and research excellence.

■ The **University of Chicago** Graduate School of Business has been named the outstanding educational institution of 2005 by the National Black MBA Association. The award recognizes Chicago GSB for its efforts in encouraging African Americans to enter the field of business.

■ The Johnson School at **Cornell University** in Ithaca, New York, received the Brillante Award from the National Society of Hispanic MBAs last fall during the 16th Annual NSHMBA Conference and Career Expo. The award recognizes individuals and organizations that reflect NSHMBA's mission to "foster leadership through graduate management education and professional development in order to improve society."

■ **Lynda Y. de la Viña**, dean of The University of Texas at San Antonio College of Business, has been named one of the 100 Most Influential Hispanics by *Hispanic Business* magazine in its October 2005 edition. De la Viña is also the Peter Flawn Professor of Economics and the executive director of the Center for Global Entrepreneurship in the UTSA College of Business.

■ **Alan Greenspan**, chairman of the Federal Bank Reserve, has been awarded the inaugural Truman Medal given by the Henry W. Bloch School of Business and Public Administration at the University of Missouri in Kansas City. The school created this honor in collaboration with the Harry S. Truman Library Institute, the Economic Club of Kansas City, and the Missouri Council on Economic Education to recognize extraordinary achievement in economic policy.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# Headlines

## SHORT TAKES

■ **Howard Thomas** has been made an Inaugural Fellow of the Strategic Management Society, honored for his contributions to the professional and scholarly activities in the field of strategic management. Thomas is the dean of the Warwick Business School at University of Warwick in England.

### GRANTS AND DONATIONS

■ Dr. Phillips Inc. has donated $2.5 million to establish the Dr. P. Phillips School of Real Estate at the **University of Central Florida's** College of Business Administration in Orlando. The gift, combined with state matching funds, will create a $5 million endowment, which will support the Howard Phillips Eminent Scholar Chair in Real Estate, the Dr. P. Phillips Institute for Research and Education in Real Estate, and the Dr. P. Phillips scholarship program for real estate students.

■ **Chapman University** in Orange, California, has used a $10 million gift from Roger C. Hobbs to create the Roger C. Hobbs Institute for Real Estate, Law and Environmental Studies. An additional $3 million from Helen Hoag establishes the C. Larry Hoag Center for Real Estate and Finance, which will be the centerpiece of the Institute. The institute plans interdisciplinary collaboration among three schools at Chapman: the George L. Argyros School of Business and Economics, the School of Law, and the Wilkinson College of Letters and Sciences.

■ **Texas A&M University's** Mays Business School in College Station has received $2 million from alumni to endow faculty chairs in business. Paula and Steve Letbetter committed $1 million to endow a leadership chair in business. L.C. "Chaz" Neely Jr. committed $1 million to establish the Trisha and L.C. "Chaz" Neely Jr. '62 Endowed Chair in Business.

■ The Ontario Trillium Foundation recently approved a grant of $624,900 over 30 months to **Carleton University** in Ottawa on behalf of a consortium of three nonprofit organizations. They are the Community Economic Development Technical Assistance Program, the Ontario Co-operative Association, and the Ontario division of the Canadian Community Economic Development Network. The grant will be used to build the capacity of the social economy sector through technical assistance, knowledge sharing, and case study development.

■ **Portland State University** in Oregon has received $350,000 from the PepsiCo Foundation to create a program called Pathways to the Future. The company also challenged other food industry retailers to make donations, which PepsiCo will match, for a total gift of $500,000. The primary goal of Pathways to the Future, a diversity-focused program housed in PSU's Food Industry Leadership Center, is to prepare minority students for careers within the retail, food, beverage, and consumer products industry.

■ The Wharton School of the **University of Pennsylvania** in Philadelphia announced that it has received a gift to create the Murrel J. Ades Endowed Professorship in honor of Ades, a late Wharton School graduate who would have turned 100 this year. The professorship is endowed by his son, Robert Ades, who is a senior partner at the law firm of Robert A. Ades and Associates in Washington, D.C.

### COLLABORATIONS

■ **Duke University's** Fuqua School of Business in Durham, North Carolina, and **Tsinghua University's** School of Economics and Management in Beijing have signed an agreement for a three-year exchange program. Under the agreement, up to three students from each school will take MBA courses at the other school for one semester.

■ **Babson College** in Wellesley, Massachusetts, and **ESADE Business School** in Barcelona, Spain, have signed a wide-ranging agreement to cooperate on a range of programs at all levels. The schools will exchange students in both directions through off-shore courses, seminars, and joint student consulting projects. In addition, the schools will exchange faculty for sabbatical and temporary assignments, collaborate on research, and establish new partnerships between their executive education programs.

■ **Tsinghua University** of Beijing and **HEC-Paris** have joined with financial services corporation AXA to launch an

initiative that will focus on research, faculty development, and joint education programs. The primary fields will be management, strategy, and finance, with special attention given to the insurance, banking and asset management area.

■ **ESSEC Business School** in Paris recently collaborated on a conference with the Women's Forum for the Economy & Society. A white paper summarizing the conference proceedings is expected to be published shortly. To encourage greater numbers of women to attend executive MBA programs, ESSEC also plans a cycle of conferences to address issues specific to women in business, such as how to network and how to break the glass ceiling.

■ Three schools—**IESE** in Barcelona, Spain; **Harvard University** in Boston, Massachusetts; and **CEIBS** in Shanghai—have joined academic forces to develop the Global CEO Program for China. The program, which runs from February to June, will help CEOs in China prepare for the global economy. The first two modules will be held at CEIBS; one of the next two will be held at IESE and the other at Harvard. Some 20 business cases on China will be produced as a result of the program.

## OTHER NEWS

■ The **Yale University** Graduate School of Arts and Sciences and the Yale School of Management in New Haven, Connecticut, have announced a new joint MBA/Ph.D. degree program. This combined program recognizes the applicability of the Ph.D. degree beyond the university, as well as the increasing need for new doctorates to practice sophisticated management analysis. Students will complete requirements for both degrees in roughly seven years, and the degrees will be awarded simultaneously.

■ The Wharton School of the **University of Pennsylvania** in Philadelphia has announced the creation of the John M. Bendheim Loan Forgiveness Fund for Public Service, which is designed to encourage Wharton MBAs to pursue careers in the public and not-for-profit sectors. Awards from the fund will be used to help cover the cost of the MBA graduates' educational debt obligations. The fund was established by a $2.5 million grant from the Leon Lowenstein Foundation, which is directed by Wharton alumni John Bendheim and his son, Thomas L. Bendheim.

■ The **College of William and Mary** School of Business in Williamsburg, Virginia, has been named the Mason School of Business to honor alumnus Raymond A. "Chip" Mason, who is chairman, president and CEO of Legg Mason Inc. Mason was instrumental in the creation of the School of Business in 1967-68 and has made substantial gifts to the school's faculty, programs, and building campaign, particularly during the school's current $100 million fund-raising effort.

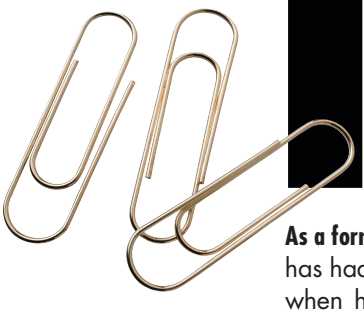
■ **Peter A. Petri**, founding dean of the International Business School at Brandeis University in Waltham, Massachusetts, has announced he will step down next year after 12 years at the school's helm. He plans to return to the school's faculty as a professor at the end of the 2005-06 academic year.

■ A new publication from **Ashridge Business School**, based in the U.K., provides an overview of what corporate social responsibility means for individuals and organizations. *Catalog of CSR Activities: A Broad Overview* divides 147 CSR activities into 32 classes and seven main activities and offers real-life examples of those activities. It can be downloaded as a PDF from www.ashridge.com/acbas.

■ **Towson University** in Maryland has been designated a University Center by the Economic Development Administration, a component of the U.S. Department of Commerce. The designation comes with an award of $100,000. In partnership with TEDCO, Maryland's Technology Development Corporation, Towson University will apply technology transfer programs to help companies located in distressed areas.

■ The **University of Maryland's** Robert H. Smith School of Business in College Park has announced plans for extensive upgrades and renovations on the Smith School facilities. Groundbreaking is slated for this summer and completion is planned for October 2007. The new annex will add approximately 38,000 square feet to the Smith School's existing 200,000 square feet of space.

# Joining the New Team



Office Depot's **Steve Odland** personifies the company's slogan, "taking care of business," as he works to transform the company from the outside in.

**by Tricia Bisoux**

**As a former executive with companies such as Quaker Oats, Sara Lee, and AutoZone, Steve Odland** has had plenty of experience adapting to new corporate cultures. Since March 2005, when he became the CEO of Office Depot, he has quickly acclimated to another, bringing a fresh viewpoint to a company looking for a new direction.

That new direction has come quickly for the company, which is based in Delray Beach, Florida, and has 47,000 employees working in 23 countries worldwide. In the last nine months, Odland has cut costs drastically at the office supply giant, closing 27 stores and halting the U.S. operations of its Viking Office Products brand, which the company acquired in 1998. He reassigned the company's chief financial officer, Charles F. Brown, as president of international operations. Odland then hired Patricia McKay as the first female CFO in Office Depot's history. He has piloted a new store design and plans to further develop Office Depot's global presence, providing the supplies to fuel burgeoning enterprise in Asia, Latin America, and the Middle East.

Coming into a company from the outside can be one of a new CEO's biggest challenges, says Odland. "You know you need to make a transformation, to change the organization's performance," he says. "At the same time, you don't want to foul up everything that's great about the company." It's a balancing act that requires trying to reshape a culture while simultaneously trying to fit into it, he explains.

Odland received his BBA from the University of Notre Dame's Mendoza College of Business in Indiana and his MBA from Northwestern University's Kellogg School of Management in Evanston, Illinois. Since graduating from business school and rising through the corporate ranks, Odland has become one of business's most vocal CEOs. As a member of the advisory council for The Business Roundtable's Institute for Corporate Ethics, Odland is especially passionate about developing a core ethical infrastructure in business while keeping intact the sense of risk, reward, competition, and innovation that makes business great. He also is a prominent advocate of the Roundtable's S.E.E. Change Initiative, designed to encourage companies to embrace sustainable business practices. At the core of S.E.E. Change, which stands for "Society, the Environment, and the Economy," is a belief that sustainable growth and environmental awareness are good not just for the world, but for a company's financial health.

"We believe in 'doing well by doing good' and are committed to environmental stewardship and conservation of natural resources," Odland says in an official statement. "Our commitment to S.E.E. Change is consistent with our environmental strategy, which is values-based and market-driven, and can be summed up in three words: responsible, transparent, and accountable."

Odland knows he has expectations to live up to and obligations to fulfill—just as business students do as they face their futures, he says. CEOs and business students alike must be poised for rapid change, prepared to innovate, and passionate about the advancement of business. Moreover, at a time when some people have lost their trust in business, both CEOs and business school graduates must actively advocate for the positive impact business has on the global economy.

Steve Odland (left) accepts a jersey from a representative of the Florida Panthers professional hockey team.

photo courtesy Office Depot

When it comes to earnings, I think management teams need to have a bit of **humility** about results. We've seen it over and over again. When things are going well, everybody's **brilliant**. When things aren't going well, everybody's **stupid**.

**Many experts are discussing the pros and cons of hiring a CEO from the outside versus hiring from within. What would you say are the central challenges—and advantages—of entering the CEO's position from outside a company's ranks?**

I do think it's much preferable to hire CEOs—and frankly as much leadership as possible—from inside a company. Those who have been part of building a company over a long period of time already understand its history, culture, and people. They know the resources, and they typically know the right opportunities for that company better than anyone on the outside. When boards look outside for CEOs, they typically do so because they are looking for a transformation, and their internal succession plan just doesn't have anyone they feel is ready. Companies really do need to do a great job of succession planning so that they'll have people ready when the time comes.

My strategy has been to try to merge. I think of it as if I were merging onto a freeway. I've tried to get up to speed and move into the culture with as little disruption as possible. Some CEOs may think, "I can go in and transform the culture," but it's not like that. It's you, and then it's 47,000 people and the long history of the company. Before I took the job, I made sure I could fit into this culture and be successful.

That said, there are certainly advantages to coming in from the outside. Someone from the outside sees everything with fresh eyes. He can add value by looking at the company in a completely different way.

**You've worked in a variety of corporate cultures. Most business students expect to work in several different corporate cultures over their careers. What do they need to know to make these transitions effectively?**

Corporate cultures differ in many ways. They operate at different levels of formality. They use different means of communication—some want to see information in writing, some are meeting-oriented, some want to use e-mail. Some companies focus on strategy, while others focus on execution. Some companies are cautious, while others are risk-oriented. There are probably dozens of variables.

Business students need to think about their own DNA, and they must learn that they can't change DNA. If they're fundamentally entrepreneurs, for example, they'll want to move fast and make decisions on little data. They shouldn't work in a culture where in-depth analysis is required to make a decision.

**Since you were brought on board at Office Depot, you've made many changes, including the pilot testing of a new store design called the Millennium2 (M2). Its success is still unknown, but if business students were studying this strategy today, what do you think they would learn about choosing a new direction for a company like Office Depot?**

We have 1,000 stores today, the prototype of which was designed 20 years ago. We're trying to modernize it to make sure we're doing everything we can to stimulate shopping in today's environment. The M2 prototype has a different layout, different signage, different fixtures, and different ways of presenting product, which we think will stimulate higher sales.

What students can learn from M2 is, first, how to test, experiment, and improve on the return of an idea before rolling it out in 1,000 stores; and second, how to differentiate a company like Office Depot from its competitors. To be successful, we need to stay consistent with our past, but we also have to take steps to keep the concept fresh.

**Second-quarter earnings for Office Depot jumped 26 percent last year, but you warned stockholders to keep their expectations in check. You've also told Wall Street that the company won't be announcing its projected earnings in the future. What were your reasons behind both statements?**

When it comes to earnings, I think management teams need to have a bit of humility about results. We've seen it over and over again. When things are going well, everybody's brilliant. When things aren't going well, everybody's stupid. In fact, neither case is true. We were just trying to express that we had a great quarter, but that we were lucky in some areas.

It's interesting how little we understand about why things go well for a company. Most analysis is conducted on things that fail; but when things go well, people just assume it's because of great management. In fact, management doesn't change its quality from one quarter to another. We need to communicate, internally and externally, why things worked—whether it's the competitive situation or we just got lucky. It's important that people understand that.

In addition, companies have traditionally given the numbers for their projected earnings and sales. We don't do that, and I think that policy leads to better corporate governance. Once those projections are made, too many people are chasing the numbers they've promised. If the CEO has said, "We're going to increase revenue by 15 percent," and the company comes up

## In fact, neither case is true.

short, management often turns up the heat. That can cause people to behave badly and do the wrong things. In our case, we tell the Street that we will do our best every day to optimize our shareholder value and do it in the right way. Then, the numbers will be what they're going to be.

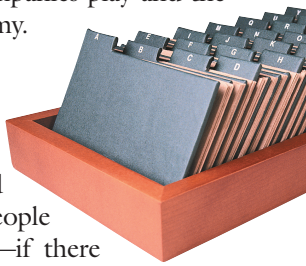
**In your roles as chairman for The Business Roundtable's Corporate Governance Task Force and as a member of its Institute for Corporate Ethics, what do you think are the most important issues you have to tackle?**
Today, we're still seeing the backlash from corporate scandals, with people calling for more and more regulation. I think some of these improvements in corporate governance are good, and I've supported them in my role on The Business Roundtable. On the other hand, we have to make sure we don't slay the goose that laid the golden egg. There are about 15,000 public companies in the U.S. alone, and the scandals over the last few years have involved only a handful. It's unfortunate that a few bad apples have spoiled the reputations of everyone.

Society is becoming so litigious—here in Florida there are radio commercials from attorneys' offices saying, "If you've lost $1,000 in the stock market, call us today, and we'll sue for you." It's tough for a company to create wealth if it's constantly in fear of being sued. Take the drug industry. Merck lost its first round in the case about Vioxx last year. Every drug has its risks, but the Federal Drug Administration was set up to view the evidence and weigh the risks. If every FDA-approved drug is still subject to litigation, and a company like Merck risks losing a $256 million jury trial when an individual is affected, there will be no new drugs. There will be no advances in medicine. These are the unintended consequences to rampant regulations and judgments.

Business students need to understand how important it is that we all self-govern. We must keep the public's trust in our system. We need to make sure that good people prevail and bad people are not allowed to bring about these scandals.

**Not all students will work on Wall Street, but many will be executives in publicly traded companies. What skills do business students need to navigate the responsibilities of working for a listed company?**
At the risk of stating the obvious, I think it's very important for business students to understand why there are publicly traded companies. If all companies were private, wealth would be concentrated in very few hands. We would be at the discretion and whim of the very few people who owned private companies. Public companies allow broad ownership of the private sector by the general population.

So many people keep saying, "We want the government to do something for us." But that statement illustrates a lack of understanding of economics. Government is funded by the private sector, which makes up 85 percent of the economy. All wealth—whether it's in pension plans, Social Security funding, or other retirement accounts—is created by the private sector. The ability to invest in the private sector through public companies brings capital into the marketplace and allows wealth to be created. Business students may not understand that context of the roles these companies play and the roles they will play in fueling our economy.



**What's the danger if they fail to understand that context?**
They won't understand how important it is that companies be allowed to succeed and fail. The simple fact is that if some people didn't lose money in the marketplace—if there weren't the possibility that stocks go down—there would be no opportunity for anyone to make any money in the stock market. For wealth to be created, wealth must also be lost. Companies must go bankrupt; there must be winners and losers. It's that balance that drives the dynamic of competition. It's that balance that drives companies to innovate, to create new things, new inventions, and new technologies.

Business students need to understand this world and the nature of wealth generation. They need to understand why business is so important. Then, they need to be more than just businesspeople. They need to be advocates of free enterprise.

**How would you advise business students to prepare for their careers?**
Business school—both undergraduate and graduate—provides a foundation, but business students will need to build the structure on top of it. On-the-job experience is required, so that you understand where your best fit is from an industry and cultural standpoint. People can be highly successful in one company, if they're a cultural fit. They can be very unsuccessful in another company in the same industry if they're not.

Students can follow many different paths in business, but they need to find careers at which they can be exceptional. They can be good at many types of work, but it's essential that they find what really excites them. Business is a marathon. They'll have to get up every morning and go to work from the beginning of their careers until they retire. They need to make sure they're inspired by it.

# Examining Intelligence

Individuals can exhibit three types of intelligence: analytical, creative, and practical. Conventional college entrance exams identify students with analytical intelligence, but supplemental tests measure all three types—and help predict who will succeed in school and at work.

**by Robert J. Sternberg**

When I took an introduction to psychology course as an undergraduate, I got a "C." The course required straight memorization, and that's not the way I learn. I dropped out of psychology, switched to math, did worse, and switched back to psychology. I now have been in the field of psychology for 30 years. I have been President of the American Psychological Association; director of Yale University's Center for the Psychology of Abilities, Competencies, and Expertise; and am now dean of the School of Arts and Sciences at Tufts. I have never, in these various jobs, had to memorize a book or a lecture.

In fact, many otherwise gifted students are not memory-based learners, and yet our educational system is set up to recognize and reward individuals who excel at skills such as rote memorization. It also rewards students who are strong in analyzing and critiquing arguments. I call that ability analytical intelligence.

Analytical intelligence is essential for success in the workplace—it enables individuals to evaluate, explain, critique, and analyze the world around them. Yet people also need creative intelligence so they can create, invent, discover, explore, and imagine. They need practical intelligence so they can implement, contextualize, use, and apply. Put another way, there are three types of intelligence—analytical, practical, and creative—and they all work together.

### Intelligence and Diversity

Each individual presents a different profile of the three types of intelligence, typically displaying stronger talents in one area than another. The best workers, however, draw on all three. Their creative skills help them generate new ideas, while their analytical skills let them evaluate whether an idea is a good one. Their practical skills help them persuade others that an idea is valuable and figure out ways to implement it. In business, knowing how to create and persuade are at least as important as, and arguably more important than, knowing how to evaluate.

Traditional education and, in particular, traditional tests, focus a spotlight on only one kind of intelligence and one kind of person. This causes the educational system to overlook diverse people who possess diverse kinds of intelligence. Not only does coursework demand that students possess analytical skills such as memorizing and critiquing, but popular

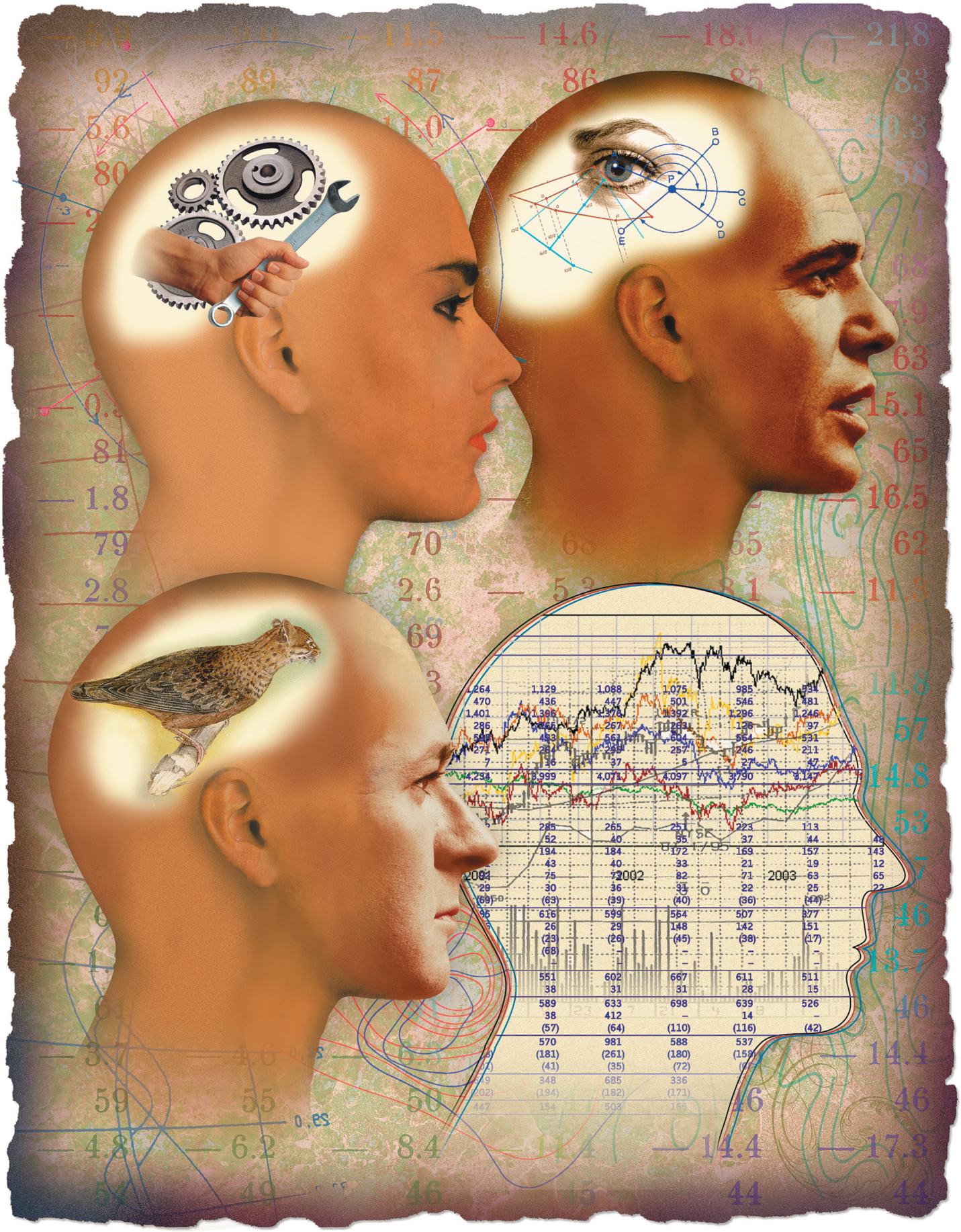



illustration by J. W. Stewart

One major advantage of exams that test for **multiple aspects** of intelligence is that they significantly reduce the ethnic-group differences displayed on tests such as the SAT, ACT, GMAT, and similar assessment tools.

admissions policies favor students with those skills. In fact, conventional exams *only* test for analytical intelligence.

Schools that rely primarily on tests such as the SAT and GMAT to determine who will be admitted to their programs are likely to end up with a very traditional student body—and leave out many outstanding candidates. This is *not* to say the tests are bad; rather, it is to say they are limited in what they measure. I believe that schools need to consider other measures that will identify students with practical and creative intelligence as well. These additional measures would be designed to *supplement* conventional tests, not to replace them.

In collaboration with other researchers and institutions, I have devised tests that will assess all three types of intelligence, providing a more comprehensive picture of what students have to offer. One is designed specifically as a college admissions test, the other as a business school admissions test. Using such tools, schools will be able to admit a diverse and potentially highly successful group of students into their programs.

### A New Kind of Test

The first test, the Rainbow Project Assessment, was developed in collaboration with the College Board and gives scores for analytical, creative, and practical thinking. It has been administered to roughly a thousand high school and college students of widely varying levels of skills, socioeconomic levels, and scholastic attainments.

In tests that we've administered so far, there has been excellent correlation between how well students scored on the test and how well they performed in school. Adding our measures of creative and practical skills to the SAT test roughly doubled accurate prediction of freshman-year performance. It also very substantially reduced differences in scores between ethnic groups.

I developed the business school admissions test under contract with the University of Michigan Business School (now the Ross Business School) in collaboration with Jennifer Hedlund, Jeanne Wilt, Kristina Nebel, and Susan Ashford.

## Exam Update

Curious as to what kind of exam tests for practical and creative intelligence? Here's a quick overview of two of the assessment models developed by Robert J. Sternberg and collaborators.

**The University of Michigan Business School Test** presents students with case scenarios accompanied by relevant materials such as memos, case records, and correspondence. Drawing on the source material presented, students must answer a set of questions that will address their skills in specific areas. Test questions below are drawn from an article by Jennifer Hedlund, Jeanne M. Wilt, Kristina R. Nebel, Susan J. Ashford, and Robert J. Sternberg, scheduled for publication in *Learning and Individual Differences*.

■ ***Problem identification and rationale.*** What do you see as the main problem in this situation? Why do you consider it to be the main problem? What additional problems need to be addressed?

■ ***Solution generation and rationale.*** What would you do to address the main problem you have identified? What alternative courses of action did you consider? Why did you choose your particular course of action?

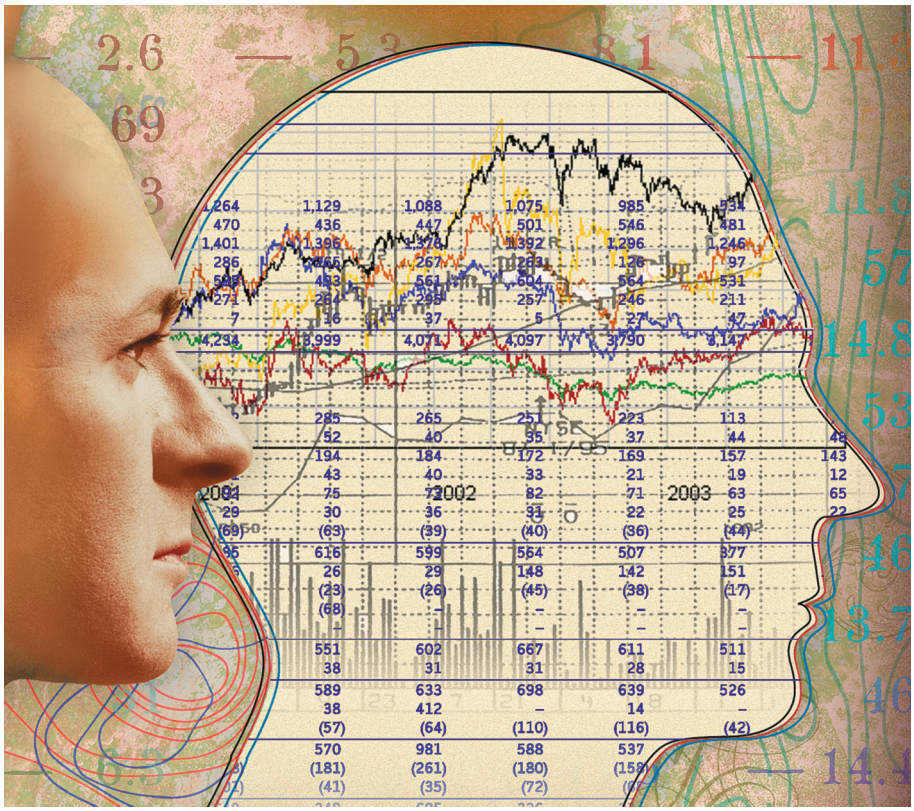
■ ***Information processing.*** What information did you focus on to develop a response to the situation? How did you use the information to arrive at a response to the situation? Did you draw on any personal experiences in developing a response to the situation? If so, please explain. What additional information or resources would you need to address this problem?

■ ***Outcome monitoring and obstacle recognition.*** What outcome do you hope will result from the course of action you have chosen? What obstacles, if any, do you anticipate to obtaining this outcome?

The **Rainbow Project Assessment**, which was developed in collaboration with The College Board and administered to roughly 1,000 high school and college students, consists of several parts. A section of multiple choice questions assesses analytical, creative, and practical abilities with verbal, figural, and numerical items.

A section of practical performance items presents students with everyday life dilemmas and asks them to rate how they would respond in each one. For instance, the "College Life Questionnaire" outlines 15 college-related situations, such as dealing with a difficult roommate, and offers several options for how the student might respond. Students are asked to indicate which responses are characteristic of them, and which are good or bad choices.

A section of creative performance items offers students three chances to show creativity. In one, they compose captions for cartoons. In another, they write two stories, selecting from titles such as "A Fifth Chance," "2983," "Beyond the Edge," and "The Octopus's Sneakers." In the third, they dictate oral stories into a cassette recorder, incorporating images they choose from a selection presented by the testers.



Known as the University of Michigan Business School Test, it measures practical skills in handling specific situations. It presents students with two types of questions: Case Scenario Problems (CSPs) and Situational Judgment Problems (SJPs).

The former are rather lengthy case scenarios of problems managers might encounter in business. In these problems, the participant takes on various roles—human-resource manager, management consultant, director of research and development, financial consultant, project manager—in different firms. Students have to solve the complex problems using available memos, e-mails, case records, and other material. The SJPs are shorter and draw on less information, but they also require students to use given information to devise appropriate solutions.

The Business School Assessment, added to the GMAT, substantially increased the predictive power of the testing. In addition, our business school measure predicted grades on an independent project at the University of Michigan Business School, whereas the GMAT did not. Moreover, it was a better predictor of positive involvement in extracurricular activities.

We have not worked with business schools other than the University of Michigan, but we have developed an admissions test for Choate-Rosemary Hall, a private high school. The results were rather spectacular, as our test greatly enhanced predictive validity over the Secondary School Admission Test (SSAT) taken alone.

## Ethnic Equalizer

One major advantage of exams that test for multiple aspects of intelligence is that they significantly reduce the ethnic-group differences displayed on tests such as the SAT, ACT, GMAT, and similar assessment tools. People growing up in different kinds of environments face different kinds of challenges. Those from white middle- to upper-middle-class backgrounds generally have the luxury of developing higher levels of abstract analytical skills. These are important skills for school and work.

Children who grow up under more challenging circumstances—for example, in poor homes or in homes where English is not spoken—*must* develop creative and practical skills in order to survive. An extreme example is street children, who are found in much of Latin America and some of Africa. These children literally die if they do not acquire practical and creative skills at a sufficient level.

An assessment method that measures the full range of intelligence better reflects abilities that have been developed through different forms of socialization. In our research on five continents, and even within the United States, we have found very different patterns of abilities across countries and cultures. On the Rainbow Assessment, for example, American Indians scored lower than whites on analytical measures, but higher on some creative measures, such as oral storytelling.

## Obstacles to Testing

Tests that measure broad abilities have many benefits, yet they have not yet been widely embraced. In fact, many institutions see potential drawbacks. One is that the tests require additional time for students to take, since they are designed to supplement existing tests. The Rainbow Assessment and the University of Michigan Business School test require about the same amount of time as the SAT and the GMAT, respectively.

Another potential drawback may be that new tests require new systems of evaluation. Some of the items on these supplemental tests can be objectively graded, and some are graded by trained raters. Others are graded by distance measures, meaning the student's answers are compared to expert or prototypical responses. Obviously, the graders must be trained, but that is also true for those grading the essay portion of the new SAT.

Some admissions experts might protest that they don't have the resources to administer longer tests that require more personnel to evaluate. So we must ask ourselves: Do we want to get the very best students? Do we want to offer broader opportunities to students who merit them and who are not now being given such opportunities? If we do, then perhaps we need to spend a little more time and money. If

My hope is that that, in the future, college and university admissions tests will more comprehensively assess the full range of skills that are important for success, both in **school** and in **life**.

three additional hours of testing time can ensure greater accuracy and equity in the admissions process, the time cost seems insignificant when compared to the thousands of hours a student will spend attending college or business school.

Concern about time and money is not the only obstacle preventing universities from implementing new assessments such as ours. Inevitably, it is difficult to bring about any change to an entrenched system that not only seems to work, but also provides a steady income flow to the organizations that embrace it. In addition, schools may resist implementing broader tests for other reasons:

- **Unfamiliarity.** Some people have a fear of innovation in general. Others distrust the new tests because they have yet to prove themselves fully.
- **Pseudo-quantitative precision.** When people see numbers coming from a test, they tend to think the numbers are highly valid, whether or not they are.
- **Culpability.** People in admissions may fear they will be blamed if they admit someone who did poorly on a conventional test and that person then does not succeed.
- **Similarity.** Currently, many people who are promoted to successively higher positions in the school pyramid are those who excel in analytical skills, as opposed to creative or practical ones. Conventional tests control admission not only to elite schools, but also to the job opportunities that are open to graduates of these schools. People who succeed under any system tend to value the existing system because it got them where they are. Additionally, people who are not creative often do not themselves particularly value creativity.
- **Publication.** Scores on conventional tests are widely published and instrumental in determining business school rankings. Institutions have become obsessive about keeping their conventional test scores high so as to raise their ratings.
- **Expectancy effects.** Whenever a specific trait is valued, it tends to create self-fulfilling prophecies. Individuals who excel at that trait are expected to succeed, and often they do. If they don't excel in that trait, they are expected not to succeed, and often they don't. I hope times change, but we are not currently living through the most progressive era in U.S. history—quite the contrary.

### The Benefits of Testing

I emphasize that the tests we have devised are *not* intended to be used by themselves. They are supplements to, rather than replacements for, conventional tests. It is important to measure conventional analytical skills in addition to the creative and practical ones.

Although some schools have stopped requiring SAT tests as part of the admissions process, I am not an advocate of eliminating tests altogether. Tests were created to solve a problem. Before they were devised to aid in the process, admissions depended very heavily on social status, parental wealth, whether the student had attended a prestigious independent school, and so forth. Other current measures are equally ambiguous. Letters of recommendations are often inflated and not always truthful. Grades can mean very different things at different schools, as can involvement in extracurricular activities. Without tests, we might end up falling back on more traditional criteria or depend too heavily on unreliable measures.

We live in times in which there is great emphasis on how much students know rather than on whether they can use what they know in a reflective and constructive way. Current educational policies risk developing people who know a lot but do not think critically, wisely, or well with the knowledge they have. Over the years, U.S. business has seen more than its share of such people in power—at Enron, WorldCom, Tyco, Arthur Andersen, and Adelphia, to name a few—not to mention in government. To break this cycle, and balance what students know with what they can do, we should not give fewer tests. Instead, we should devise better, more comprehensive ones that enable everyone to show their patterns of strengths.

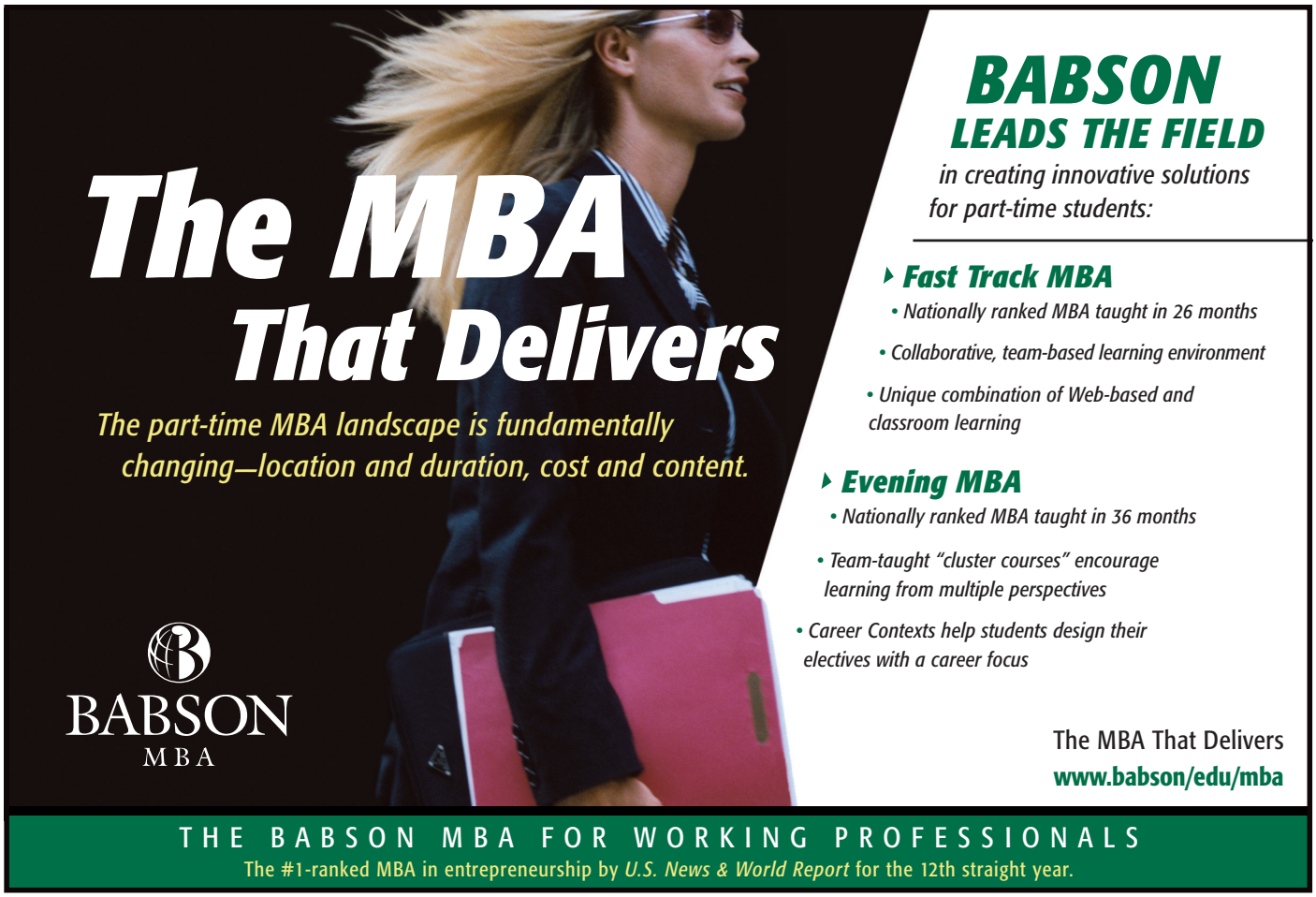
## For More Information

**About the Rainbow Project:** Articles describing this test and the data have been published in *The Educational Psychologist,* in *Change Magazine,* and in *Choosing Students,* a book edited by Wayne J. Camara and Ernest W. Kimmel.

**About the University of Michigan Business School Test:** An article describing this test and the data can be found in *The Educational Psychologist;* a much more detailed article is scheduled to appear in the journal *Learning and Individual Differences.*

**About the correlations between conventional intelligence tests and multiple-intelligence tests:** Data can be found in the book *Practical Intelligence in Everyday Life,* by Robert Sternberg and collaborators, as well as in many published refereed articles.

**About Tacit Knowledge tests and their correlations with leadership ratings:** These are described in an article published in the journal *Leadership Quarterly.* The study and the results represent a collaboration with Jennifer Hedlund, George B. Forsythe, Joseph Horvath, Wendy Williams, and Scott Snook.




## Real-World Results

Is it possible to look at scores from our new tests or others like them and predict which students will turn into Dennis Kozlowski or Bernard Ebbers? Maybe not, and we have not followed students into the working world to determine how well their success has been predicted by the admissions tests that I have helped develop. However, we have done a number of studies of correlations between our measures of practical intelligence and measures of job performance in careers such as business manager, army officer, professor, and elementary school teacher.

Our tests for military leadership, commissioned by the U.S. Army Research Institute, successfully predicted 360-degree ratings of leadership. For the most part, the majority of our tests predict real-world success at about the same level as conventional intelligence tests, but show modest correlations with such tests. Thus, the best prediction is obtained when institutions combine conventional tests with ours, rather than using just one or the other.

Over the years, I have had scores of requests from companies that wanted to measure employees with our tests. Most often they wanted to use the Tacit Knowledge Inventory for Managers and the Tacit Knowledge Inventory for Sales, both of which were developed with Richard K. Wagner. The original work on the sales test was commissioned by an organization that did telemarketing. We have made the tests available, but we have not tracked how companies used them. Nonetheless, theories of broad abilities clearly have value in the corporate world as well as in the admissions office.

## Looking Ahead

By understanding how creative, practical, and analytical intelligence work, corporations can hire the most qualified candidates and schools can admit students with the greatest potential. Nonetheless, the current college admissions system is well established, and it will only change if people want it to change. If people are willing to settle for incomplete tests, we will continue to make judgments based on incomplete tests. We will lose the chance to maximize academic excellence and diversity simultaneously.

While existing exams do a reasonably good job of testing for analytical intelligence, I believe the system has to change. I am doing what I can constructively to change the system—not to do away with what we have, but rather, to expand it. My hope is that that, in the future, college and university admissions tests will more comprehensively assess the full range of skills that are important for success, both in school and in life.

Robert J. Sternberg is dean of the School of Arts and Sciences at Tufts University in Medford, Massachusetts. He is also professor of psychology and Director of the PACE (Psychology of Abilities, Competencies and Expertise) Center, which will come to Tufts in 2006.

# The Wiki Factor

Do your business students know how to "wiki"? Wiki software, an emerging trend in online technology, has enabled a new brand of collective, large-scale collaboration—and it may change how businesses keep up with the pace of innovation.

By Philip Evans

**To say that technology has enabled greater communication and collaboration** within groups of all types is nothing new. But I have been struck by the *level* of collaboration now occurring in online environments—the result, in large part, of something called a "wiki." Wiki software, the latest player in the collaborative technology game, harnesses any group's collaborative energy and takes it to the next level.

The wiki concept emerged when programmer Ward Cunningham wanted to create the simplest collaboration platform possible: a Web page that nobody would own and that anyone could edit. Among the many wiki-based projects on the Web today, the most prominent may be Wikipedia.org, an online encyclopedia. The Wikipedia has no formal oversight and no managing editor. It allows readers to make whatever changes or additions they wish to the document.

I've heard some argue that such a process should produce nothing better than graffiti; but somehow it works. The Wikipedia has become one of the Internet's most widely used—and trusted—informational resources. The English language version of the Wikipedia now carries more than 800,000 articles; but versions are published in 205 languages, with a total of 2.6 million articles published worldwide.

How could the Wikipedia become an online informational powerhouse when it has no professional editors and none of the traditional "command-and-control" hierarchies that so many businesses emphasize? Simply put, it succeeds because, under the right circumstances, spontaneous and largely unsupervised collaboration gets the job done, even on a large scale.

I find technologically enhanced collaboration so compelling that Bob Wolf, a manager at Boston Consulting Group, and I coauthored an article about it titled "Collaboration Rules" in the July-August 2005 *Harvard Business Review*. With global competition driving the speed and importance of innovation, we have found that companies are exploring ways to encourage greater collaboration among employees, suppliers, and customers. Wiki is one mechanism that makes that possible—and it's a tool business students and faculty should know how to leverage.

photo illustration by Colin Anderson/Getty

"In higher education, student input and responses are often wasted. At the end of the semester, we often throw away much of their work. By **creating** their own textbook, my students produced something they could feel proud of and leave behind as a resource for the next group of students."

—Richard Watson, University of Georgia, Terry College of Business

## A Professor Puts Wiki to Work

The wiki movement may not have caught on yet among academics at large, but one professor at the University of Georgia's Terry College of Business in Athens isn't sure why. Richard Watson, the J. Rex Fuqua Distinguished Chair for Internet Strategy and director of the school's Center for Information Systems Leadership, recently charged the 15 students in his course in XML, a computer language used to build Web pages, to create their own textbook. Watson used wiki software, which allows users to post Web pages that other users can modify. By collaborating to write their own wiki textbook, says Watson, students learned the material more thoroughly than they would have using a traditional resource.

Watson admits that, at first, writing the wiki textbook took a great deal of effort—not because of the technology, but because of the planning involved. Each student wrote a chapter, which comprised 40 percent of his or her overall grade. In addition, students served as the editors for the chapters that directly preceded their own to ensure continuity. Watson read each chapter in draft form and discussed it with the student author and editor.

Now that the book has been written, Watson has much less work to do. He and his newest group of students are reviewing and updating each chapter. He also has assigned one student to teach and develop support material for each chapter.

The collaboratively written textbook has been a wonderful teaching tool, says Watson. Rather than accepting information passively from a standard textbook, students learned the material more thoroughly and with more enthusiasm by creating their own. Moreover, they were able to leave behind their input for future courses. "In higher education, student input and responses are often wasted. At the end of the semester, we often throw away much of their work," says Watson. "By creating their own textbook, my students produced something they could feel proud of and leave behind as a resource for the next group of students."

### Surprising Reluctance

Given these advantages, Watson has been very surprised at his colleagues' reluctance to use his textbook and the wiki format. "Other professors have said that it's a wonderful idea, but no one has picked it up for their own courses," says Watson. Their fear, he notes, is that a student-created textbook in a wiki format is less rigorous and accurate than a conventional textbook.

That fear may take a while to overcome, even though large numbers of users already trust the wiki system. "Wiki documents are meant to be self-correcting," Watson explains. "Every change made is logged. I can go back and restore any page to an earlier version. Or if students tell me there's a mistake, I'll simply tell them to fix it."

Watson regularly promotes the book to his colleagues and invites them to use it for their own students. As a wiki document, the textbook is open to revision by users around the world. In fact, Watson is working with students at Sudan University in Shanghai to translate the book into Chinese and is anticipating an Italian version soon.

### Adopting Wiki

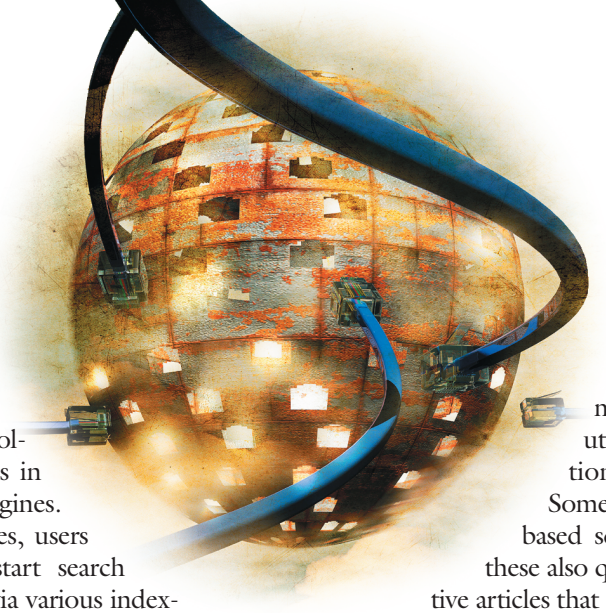
Watson encourages professors in all disciplines to experiment with the wiki format as a way to engage students in a given topic. Those who would like to give wiki a try can visit sites such as Wikimedia.org, JotSpot.com, or WikiSpaces.com to be guided through the creation of their first pages. Setup is simple and takes only a few minutes, says Watson.

Watson also offers a few recommendations for integrating a wiki project into the business classroom:

- **Choose the course carefully.** Full-time students are often more enthusiastic than part-timers about the work a wiki-based project entails. "I suggested this collaborative method to a class of IBM consultants, but they rejected the idea. They thought it would take too much time," says Watson.
- **Take the role of designer, rather than professor.** The professor needs to have a clear plan for what kind of information the book must contain and how the individual chapters will flow together.
- **Expect some missteps.** In the beginning, there will be errors in the text or glitches in the system. The beauty of the collaborative process, says Watson, is that students can watch how these areas work themselves out over time and learn how the collective efforts of a group can come together successfully.

"For faculty, creating a wiki project is a blend of academic research, teaching, and practical management issues. For students, it is motivating because their class projects live beyond the semester," says Watson. "All of my students have included the fact that they've written a chapter of this book on their vitae."

The XML textbook that Richard Watson's students created can be found at en.wikibooks.org/wiki/XML. Faculty with questions about creating a wiki textbook can contact Watson at rwatson@terry.uga.edu.



### Before There Was Wiki...

The idea of technologically aided collaborative innovation has its origins in the development of online search engines. During the Internet's nascent stages, users relied on a variety of small, upstart search engines that organized Web pages via various indexing techniques. The most popular engine, Yahoo!, worked by indexing Web pages much as librarians catalog books in a library—through the old-fashioned "brute force" solution. Each Web page was reviewed and indexed by human eyes, a process so arduous that Yahoo! was able to organize only a small percentage of the Internet's total content.

The launch of Google in 1998 changed everything. Its central innovation, the PageRank system, tapped into the collective intelligence of the network itself. By ranking pages according to how many other sites linked to those pages, Google allowed user behavior to determine a Web page's importance. Google's success illustrates the value of knowledge embedded in large networks of users, and how millions of independent decisions can add up, not to chaos, but to coherence.

Today, we see many examples of innovative collaborative technologies in similar forms—including wiki pages, the "blogosphere," open source software such as Linux, and some of the more sophisticated online multiplayer virtual reality games. These technologies achieve order and effectiveness without traditional command-and-control mechanisms. More important, they point to something new for business.

### Matters of Trust

Wiki-style collaborative efforts work within communities of users because they establish systems of trust and reputation. People act differently when their behaviors are visible than they do when their behaviors are anonymous. They behave differently among people with whom they continually interact than they do with those they will never see again. In collaborative networks, users develop relationships and collaborate continuously; as a result, they are motivated to behave themselves.

Technology can strengthen this behavior by aggregating and displaying people's past behaviors. We see this phenomenon in eBay's feedback system, in which the reputations of buyers and sellers are scored by other buyers and sellers. They lose or gain points based on their actions within the community. Most people in the eBay community act honorably to receive positive feedback and win the trust of other users.

Of course, no collaborative system is perfect. In the Wikipedia, for example, people sometimes try to wreck articles by deleting material or inserting obscenities, but such defacements stay posted for only a few minutes, on average, before better-intentioned users put them to rights. Sometimes there are ideological or ego-based squabbles between contributors, but these also quickly give way to generally informative articles that accommodate varying points of view.

The editor of *Encyclopaedia Britannica* has criticized the Wikipedia for posting articles that revert to a consensual mean, representative of merely average scholarship. That may sometimes be the case; but compared with *Britannica*, Wikipedia is more comprehensive and more up-to-date—and, most important, it's *free*. And while *Britannica* is a frozen monument to past scholarship, the Wikipedia is living, growing, and rapidly improving.

### Collaboration, More Broadly

It's not surprising that collaborative networks have been possible mainly in environments with no history of command and control, like Google, eBay, and the Wikipedia. The question is how older, more traditional companies can take advantage of this new model.

Toyota Motors, a company Bob Wolf and I discuss in "Collaboration Rules," has dropped some of the restrictive protocols among its management, employees, and suppliers. Toyota's employees openly share knowledge both internally and externally. Engineers identify the process improvements they make and put each improvement in writing; they then distribute those lessons very broadly, internally to other engineers and externally to suppliers. The result has been much in the style of a wiki, where innovation happens as a matter of course, rather than as a matter of force.

By turning to collaborative mechanisms, Toyota is able to reach deeply into its supplier base to redouble its innovation and accelerate its reaction to crises. It has rapidly developed a widely disseminated, collectively owned pool of common knowledge, which drives innovation at a speed few other corporate systems can match.

As companies like Toyota have found, the scale and complexity of organizations and supply chains have grown beyond the capabilities of typical command-and-control, top-down hierarchies. Collaborative technologies allow companies to find new ways to tap the creative energy within three important stakeholder groups—customers, suppliers, and employees. Companies are discovering that they can achieve more fluid collaboration among disparate groups of people, but only by changing the rules by which their customers, suppliers, and employees interact.

Business educators need to learn and teach what "**wiki**" may mean to business, not just as a phenomenon, but as a skill.

### Bringing It to B-School

As important as it promises to be for business, the wiki phenomenon, by and large, has not yet made it to the business school classroom, either as a topic or a teaching method. As a topic, it has failed to mesh with traditional business school curricula. As a method, it has failed to capture the imagination of business faculty who don't yet view it as a means to teach innovative thinking. Collaborative creativity, however, promises to become a key business skill in coming years. Business schools that incorporate these atypical, yet leading-edge, business models into their curricula will be at the forefront of a growing trend.

Business schools can offer immense value to their students and faculty by explaining the simple technologies that make collaborative networks possible. Students need to understand how these principles have led to the success of eBay and Wikipedia. They need to analyze why open source and wiki software work and whether they contradict the established principles outlined in conventional cases.

Instead of teaching the unconventional topic of wiki conventionally—by merely studying Wikipedia or other such collaborations—business faculty may want to experiment with the technology themselves. They could post a question as a wiki page, for example, and have the class write their answer collectively. In this way, students can see that their collective answer may be even better and more accurate than what any one of them could have produced on their own.

Today's business students will not just manage business innovations of the future—in many cases, they will drive them. They must learn the skills of the future, not necessarily the skills of today. Collaborative networks will doubtless be a significant force in the next decade. Business educators need to learn and teach what "wiki" may mean to business, not just as a phenomenon, but as a skill.

Philip Evans is senior vice president of the Boston Consulting Group in Boston, Massachusetts, and the author of *Blown to Bits: How the New Economics of Information Transforms Strategy*.

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# Perfect Storm

Three prevailing winds in business education may be converging to create a perfect storm—one that threatens the financial security of many U.S. business schools.

by D. Michael Fields

In the real-life story that inspired the film "The Perfect Storm," a commercial fishing vessel is placed in catastrophic danger when three significant, yet unrelated, meteorological events converge at sea. This scenario is eerily reminiscent of what we see happening in management education. U.S. business schools are facing some troublesome trends on three different fronts: the doctoral shortage, endowment inflation, and state funding decreases. Each presents its own substantial administrative challenges, but together they are forming management education's own "perfect storm."

The consequences of the storm may be positive or negative, depending on how school administrators choose to react. But the result of its onslaught may have many colleges re-examining, or completely revising, their primary missions.

**Front No. 1: The Doctoral Shortage**

AACSB International has been warning of the impending shortage of doctoral business faculty for several years. In 2002, its Management Education Task Force issued an ominous report, "Management Education at Risk," and in 2003, its Doctoral Faculty Commission (DFC) issued its findings in "Sustaining Scholarship in Business Schools."

The DFC found that the number of business doctoral degrees conferred in the U.S. during the second half of the 1990s declined considerably in comparison to those conferred in the first half. It projected that the shortage would only worsen. In coming years, demand for management education will increase just as supply will be decreasing due to shifting demographics, curricular changes, and financial cutbacks at business schools throughout the country.

Although the total number of U.S. doctorates conferred in all subjects has decreased 5 percent since 1998, most areas—such as the humanities and life sciences—have experienced a recovery in recent years, according to the National Opinion Research Center. Since the early 1990s, however, the number of doctorates conferred in business decreased more than 19 percent. It has fallen to 1,035 business doctoral degrees conferred in 2003 from 1,281 in 1993.

If the trend continues, and most believe it will, management education will be faced with even greater shortages of doctorally qualified faculty. The DFC predicts that the supply of business Ph.D.s will trail demand by 1,142 in 2007 and 2,419 in 2012. If more things go right than wrong, the DFC notes that the shortage could be as few as 21 in 2007 and 334 in 2012. But in a worst-

illustration by Neil Brennan

**These challenges threaten to curtail the freedom deans have historically exercised to protect the integrity of their schools. Their hands will be tied with budget cuts, limited endowments, and an inability to attract and retain talented faculty.**

case scenario, the shortfall may reach as many as 3,043 in 2007 and as many as 5,689 in 2012.

The problem is exacerbated by the fact that 20 percent to 25 percent of new business doctorates are known to choose careers outside business education, according to the National Science Foundation. In addition, because the career choices of approximately 15 percent of new business doctorates are unknown, the percentage of them eschewing business education could be even higher. Many schools have tried to reverse this trend by offering higher starting salaries to new doctorates; but so far, the percentage of doctorates choosing other careers has not declined, according to AACSB International.

Deans from other disciplines who are competing for limited institutional resources—and who aren't facing a doctoral crisis themselves—may view the idea of a business doctoral shortage with some skepticism. To dispel their doubt, business school deans must gather the evidence and educate top university administration about the validity of the shortage.

Furthermore, spiking salaries for doctorally qualified new hires has created a new problem: salary inversion. In AACSB International's 2005 Salary Survey, the mean salaries for doctorally qualified new hires exceeded the mean salaries for associate professors in all five disciplines listed. Soon, it may not be uncommon for an associate professor with ten years of experience and a solid record of teaching, research, and service to earn $10,000 less than a new hire just brought on board. Some AACSB-accredited institutions may already be experiencing full salary inversion, in which starting salaries for doctorally qualified new hires exceed those of the highest paid full professor. Not surprisingly, such a discrepancy promises to cause tremendous morale problems among existing faculty—as well as for the dean.

### Front No. 2: Big Money

The size of donor gifts to many higher education institutions has been steadily escalating. The December 20, 2004, issue of *BusinessWeek* addressed this trend in an article, "Rich College, Poor College," which noted that 22 colleges and universities have announced capital campaigns of $1 billion or more.

Business schools have been able to attract substantial gifts as well. GMAC's *Selections* recently studied the naming gifts that business schools received between 1998 and 2003. Of this group, 13 schools received between $25 million and $62 million. Since November 2001, *BizEd* has reported gifts of $20 million or more to six additional schools. The largest was $100 million awarded by Stephen M. Ross to what is now the University of Michigan's Ross School of Business. The publication also reported 11 gifts or grants ranging from $5 million to $17 million, and 37 gifts or grants ranging from $1 million to $5 million.

Of 387 AACSB-accredited schools that responded to a 2002–2003 survey by AACSB Knowledge Services, almost 10 percent had endowments exceeding $50 million. Sixty percent, however, had endowments of $5 million or less.

To be fair, the scope of funding across colleges of business is not as clear-cut as *BusinessWeek*'s title suggests. It's less a dichotomy than a continuum, which comprises richer schools, poorer schools, and all schools in between. Even so, those well-funded schools in the top 10 percent will be better positioned to protect their faculty with endowed chairs and professorships. They have more resources to develop or enhance areas of specialization and support student scholarships.

Schools at the other end of the continuum—that 60 percent—will face substantial difficulties. They will have limited capacity to attract and keep competent faculty, develop or maintain areas of competence, or offer innovative student programs. It is over these schools that the storm clouds are darkest.

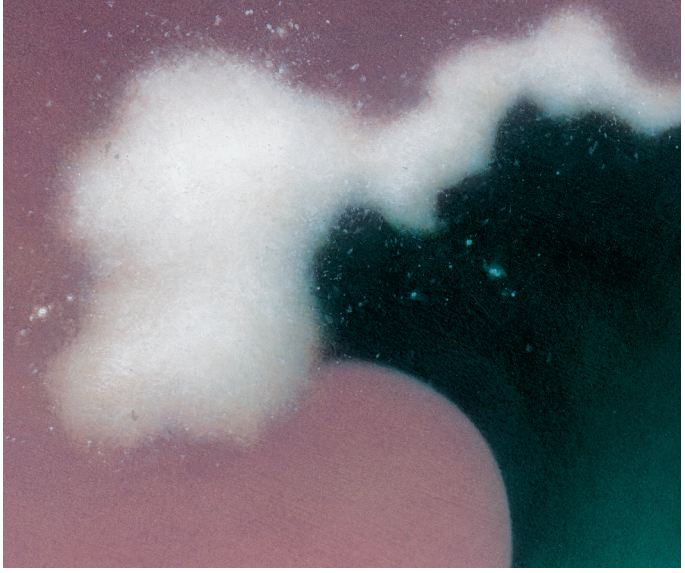
### Front No. 3: Reduced Funding

Schools are facing a lower level of support from their principal funding sources. Public schools, for example, are receiving less money from their state governments. Anecdotal evidence suggests that even private schools are feeling the pinch, as the funding they receive from various partners begins to decline.

*The Chronicle of Higher Education* recently published an article under the headline, "State Spending on Colleges Drops for the First Time in 11 Years." It reported that 23 states approved spending plans for higher education for the 2003–2004 fiscal year. Each of these plans allocated less funding than in the previous year. Thirteen states made similar cuts in 2002–2003, and five states did so in 2001–2002. This trend has led some administrators to suggest, somewhat tongue-in-cheek, that the term "state-supported higher education" should be revised to "state-assisted" or simply "state-located."

Current political winds do not promise to blow in any additional support in the form of tax increases. Many state legislators have imposed limits on boosting revenue through tax increases, and the funds that are available are often spent on K–12 education. So, not only is the size of the pie not increasing to match inflation, but the size of the slice allocated to higher education is getting smaller.

Some might argue that these events should be handled by simple "belt tightening" among higher education institutions. But when this belt tightening must happen just as schools are struggling to keep up with their better-funded



counterparts and offer competitive salaries to top faculty, the negative effect may be staggering.

## Weathering the Storm

Any one of these three forces could pose serious problems for business school administrators. Together, they promise to present a full financial firestorm of challenge. Although business schools are likely to survive the storm, these challenges threaten to curtail the freedom deans have historically exercised to protect the integrity of their schools. Their hands will be tied with budget cuts, limited endowments, and an inability to attract and retain talented faculty.

Of most concern is that these factors may make it increasingly difficult for schools to maintain the research component of their missions. Once business schools lose their research leaders, they may have difficulty hiring worthy replacements. At that point, they may be left with only one option: to revise their missions to reflect a much smaller research component. If these schools are unable to maintain an adequate percentage of academically qualified faculty, they may also be unable to meet AACSB accreditation requirements.

Just as the fishermen in "The Perfect Storm" were unable to steer clear of the danger, it is likely that many business schools will be unable to disperse these ominous clouds before they unleash their full force. Business schools are, in fact, already engulfed by the storm. To withstand it successfully, many schools will have to make fundamental changes:

**Become better fund-raisers.** To say that schools must raise more money may seem an oversimplification. Schools now in the greatest need are those that previously have had the least success in securing external funds. Even those schools most adept at fund raising require six to 24 months to gain a major gift commitment; even then, only one in three qualified prospects ultimately provides a major gift. Furthermore, no school's problems are solved with a single major gift. A dean often requires a series of substantial gifts to have sufficient operating leverage.

Nonetheless, effective fund raising will be an absolute necessity, one that deans can expect to consume an increasingly higher percentage of their time. Schools that have historically been poor fund-raisers must strengthen their networks, develop better relationships with alumni, and further improve their fund-raising potential.

**Allocate faculty salaries more fairly.** Deans who are able to secure funding and bring new faculty into their business schools still must correct the problem of salary inversion. Money to enhance faculty salaries will be available only in increments over relatively long periods of time. Deans will have to rank faculty and allocate salary enhancements over several semesters, if not years. These maneuvers will require a great deal of administrative acumen to actually improve, rather than diminish, faculty morale.

Such attention is better than the alternative. After all, salary inversion is a double-edged sword. Deans may choose to pay more for new hires than they do for their established faculty. But as these new faculty develop well-defined streams of research, other schools will be more likely to recruit them, often by offering substantial salary increases. A mid-level school that has made good hires, nurtured and supported young faculty, and established a presence in a particular area of research could have its faculty gutted in one recruiting season.

**Keep an eye on research.** In the end, fund raising and faculty salary management are the two most effective ways for schools to protect an important element of their missions—their research. Faculty at schools that neglect these two areas will likely see their research productivity decline. Business schools must maintain sufficient levels of scholarship. Only then can they retain their best faculty members, reputations, and accreditation status.

## Change for the Better

A perfect storm, by definition, is a convergence of independent events that form an environment never experienced before. The unprecedented storm that now engulfs U.S. business schools could last for a decade or longer. Regardless of its duration, it will change permanently the funding, faculty, and research focus for many of the nation's business schools.

As marketing guru Theodore Leavitt has suggested, the goal of firms facing a dynamic environment is to "survive gallantly." Such gallantry may be difficult for business schools to achieve, especially when faced with such strong simultaneously challenging winds of change. But the schools that acclimate well to the storm are sure to emerge stronger for it.

D. Michael Fields is an associate dean at Missouri State University's College of Business Administration in Springfield, Missouri. To read the AACSB International Management Education Task Force's report or the Doctoral Faculty Commission's report, "Sustaining Scholarship in Business Schools," visit www.aacsb.edu/publications/.

# The Faculty Scorecard

Every business school needs talented professors whose skills suit the school's mission. A Faculty Scorecard helps administrators evaluate the faculty's strengths and weaknesses—and determine where they could improve.

**by D.A. Osborn**

At the end of her first semester as the business school's new marketing instructor, Professor Trudeau received glowing evaluations from students. They praised her practical knowledge and experience and noted how much they enjoyed the marketing professionals she brought to class as guest speakers. Because she had previously been a product manager in a large international group, her examples were drawn from real-world situations. She also had a vast network of corporate contacts. Students seemed to appreciate this glimpse into the reality of corporate life.

Some of Professor Trudeau's colleagues were less enthusiastic about her. Because she had never published research in a recognized journal, they felt that there was little academic justification for retaining her. Nonetheless, because the school placed a high level of importance on the quality of course delivery, her contract was renewed.

One way administrators traditionally have judged how much value professors add to the school is by looking at their research output. After all, high-quality research improves the classroom, adds depth to executive education programs, strengthens ties to the corporate community, improves national and international partnerships, and enhances the reputation of the school. However, many schools also recognize that there are other important ways to gauge a professor's worth, such as classroom excellence and corporate connections.

Professor Trudeau's school viewed her as a true asset, one who added value to the school and would be costly to replace. By retaining her, they were turning one of the students' favorite teachers into a human asset—and a source of competitive advantage.

Major corporations constantly look for ways to measure and develop human capital. Schools that would like to follow that example often lack the tools for measuring how their professors add worth to their institutions. Corporate models for evaluating human assets tend to center around value for money. They measure factors such as customer satisfaction, employee cost, replacement cost, and benefits to society. However, these models do not translate well to the university environment, where the "customer" may be interpreted as the student, the student's family, the student's future employer, or even society in general.

One way schools can determine how well they are satisfying their customers and meeting their overall missions is by quantifying the contributions

illustration by David Cutler

of their faculty through a Faculty Appraisal Scorecard. I developed this tool after reviewing the Kaplan & Norton Balanced Scorecard, studying the EFQM model of Business Excellence, considering the work developed by Andrew Mayo at London Business School, and working on the link between people and performance at the University of Bath in the U.K. Easy to use and adaptable to any school, the Faculty Scorecard can help deans and administrators determine how much value professors add to their institutions.

## How to Measure

The Faculty Appraisal Scorecard is loosely based on a corporate model in which the organization identifies key factors that relate to its missions and goals. The factors are then weighted according to their strategic importance, and employees are appraised on each factor. The employee's final score is determined when each factor is multiplied by the individual asset multiplier, or the weighting coefficient. The idea can be adapted for the academic environment, where value is based on teaching competence, research competence, managerial competence, a variety of interpersonal skills, and other factors that might be unique to a particular school.

Time is also a relevant factor in the academic world. Professors ideally will add value to a school commensurately over a period of years, so a relative increase in value over this period must be considered. Administrators must carefully consider what factors will be important to them in the long term, so they can make comparisons over time. However, the weighting of these factors might change if the school's priorities change.

Faculty also need to be measured against a desired standard of performance. There should be no neutral position where they "neither add nor subtract value." If professors perform below the standard, they become liabilities for the school by subtracting value. Any scale that measures human value in the school should take this standard into account.

The Faculty Appraisal Scorecard can be customized so that any school can measure the factors that administrators consider most critical. Each school must decide for itself what performance factors to measure, how to weight them, and how well professors are meeting the school's strategic mission. The number of appraisal factors should be kept to a minimum, however. Too many factors will draw individuals toward the mean and make differentiation among professors more difficult.

## Sample Scorecard

The fictional school that employs Professor Trudeau might evaluate its professors on six appraisal factors, weighted to give the highest importance to research, innovation, and corporate networking. Administrators at this school might also consider how well the professors fit with the organizational culture, though they consider this factor less important. Therefore, the school's appraisal factors, and their weighting coefficients, are as follows:

**Quality of course delivery (0.15)**—There are many ways to appraise course quality, but this school's administrators look at how students evaluate a professor's performance in terms of knowledge acquisition, achieving course objectives, teaching clearly, and using high-quality resources.

**Number and quality of publications (0.20)**—A school's research can be measured through the number of articles its professors have published in recognized academic journals, as well as the number of working papers and academic presentations that are under way. Another important benchmark may well be the level of international funding a research project attains.

**External corporate contacts (0.25)**—Does the professor have close ties to the business community? Does he or she work with corporations on applied research in the discipline? This category measures talent for corporate networking.

**Interpersonal skills (0.10)**—Can the professor communicate effectively with students, administrative staff, peers, parents, corporate partners, and trustees? This is the area where the professor will be judged on ability to listen, give advice, make presentations, and negotiate.

**Transversal skills (0.10)**—These skills require professors to think outside the box and to cross-reference in their teaching. An ideal objective would be for professors of different specializations to share knowledge, create courses together, or carry out joint research. A professor also should be able to help students improve their general skills in making presen-

**FACULTY APPRAISAL SCORECARD**

| Appraisal Factor | Score | Weighting coefficient | Weighted score |
|---|---|---|---|
| Quality of course delivery | 1.5 | 0.15 | 0.225 |
| Number and quality of publications | 0 | 0.20 | 0 |
| External corporate contacts | 2 | 0.25 | 0.50 |
| Interpersonal skills | 1 | 0.10 | 0.10 |
| Transversal skills | 1 | 0.10 | 0.10 |
| Creativity and innovation | 1.5 | 0.20 | 0.30 |
| **Overall coefficient** | | | **1.225** |

**A sample scorecard for Professor Trudeau.**

A strong faculty, rich in human capital, can be a school's best resource—but **managing** that resource requires administrators to understand its value.

tations, managing projects, conducting their own research, and working efficiently in teams.

**Creativity and innovation (0.20)**—Although creativity and innovation are among the factors used to assess quality in research, here they are used to determine how the professor's creativity directly benefits the school. How does he or she use innovation to enhance learning in the individual course, to meet overall objectives in the program, and to improve strategic reflection in the school? For instance, a professor might be innovative in a course by adding an e-learning component and innovative in a program by creating a new academic specialization. Projects in alignment with the strategic objectives of the school will be appraised positively in this area.

## Filling in the Blanks

For each appraisal factor, a professor can receive a score of between 0 and 2, rising in increments of half a point. This scale allows for just enough differentiation between scores to enable deans to evaluate their faculty. However, administrators can choose to measure in other intervals—increments of 0.2, for example. Obviously, the school should determine in advance what standards it will use to measure its faculty's performance and maintain these standards over time.

If a professor receives high marks from students for how the course is delivered, he or she might receive a score of 1.5 on course delivery. If no research has been conducted over the period appraised, the professor would receive a "0" on that factor. Ultimately, the score will be multiplied by the overall weighting coefficient to determine the final measure of the professor's performance.

The chart on the previous page shows a sample scorecard filled out for Professor Trudeau. Because she does well in some areas that the school values, such as maintaining corporate contacts, her overall score is above average despite the fact that she fares poorly in the category of conducting research.

If administrators want to determine what intellectual value Professor Trudeau adds to the school, at the end of the pay period they will multiply her overall coefficient—which is 1.225—by the cost of her employment. For example, assume the employment cost of Professor Trudeau is $100,000 during this pay period. Her value to the school will be $100,000 x 1.225, or $122,500. If school administrators want to compare her value to her cost, they should subtract her cost from her value. In this case, her value is $122,500 - $100,000, or $22,500.

Some schools might use this figure to determine whether the professor is adding or subtracting value over the course of her career. As long as the appraisal factors remain constant, the Faculty Appraisal Scorecard will allow the school to make comparisons over time.

## Scorecard Benefits

Faculty Appraisal Scorecards may be completed during annual appraisals, at the end of academic years or course semesters, or at any other time that seems appropriate for the school. It is nevertheless important to ensure that the appraisal system remains consistent so that administrators can make long-term comparisons of a professor's performance. Depending on the needs of the school, administrators can decide whether they want faculty to continue to develop in their strongest areas or work to improve in their weakest areas.

Not only can the Appraisal Scorecard measure the progress of individual professors, it also can measure how well whole departments are meeting the school's strategic mission. The scorecard will help deans pinpoint their future objectives and work toward achieving them by asking professors to gain strengths in those areas. By helping schools meet their overall missions, the Faculty Appraisal Scorecard gives them an edge in a competitive market.

It's essential, however, to avoid using appraisals to rank one professor against another, since a school's strategic objective should not be to produce a staff of professors who are equally skilled in everything. Instead, its aim should be to develop a faculty with diverse expertise who can bounce ideas off each other and share their knowledge as they improve their skills. In this way, they will be adding value both to the school and to their colleagues.

It's true that the Faculty Appraisal Scorecard favors a top-down approach. The school's administrators determine which factors are important and how the professor is to be appraised according to each one. Nonetheless, the scorecard can become a tool for professors as well, because it offers them recognition for their work and helps them identify areas in which they should seek improvement.

In the highly competitive field of management education, it's important that governors and administrators know where their assets lie and what their greatest strengths are. A strong faculty, rich in human capital, can be a school's best resource—but managing that resource requires administrators to understand its value. A Faculty Appraisal Scorecard is just one tool deans can use to keep their schools competitive, productive, and focused on their missions.

D. A. Osborn is professor and head of the Management and Strategy Department of the Ecole Supérieure du Commerce Extérieur, Pole Universitaire de Léonard de Vinci in Paris, France.

# Driving Innovation

In this high-pressure business simulation, students learn new product development by competing against other teams to design and market a self-parking model car.

by Keith Goffin and Rick Mitchell

New MBAs often join the workforce to find themselves managing some form of new product development. Not only do they need a theoretical understanding of the issues involved, they need specific skills in making design decisions, achieving effective cross-functional teamwork, and meeting tough deadlines. On the job, it might be months or even years before a manager finishes a complete project cycle and gains useful experience in new product development (NPD). How can some of that learning be distilled—and accelerated—in the classroom?

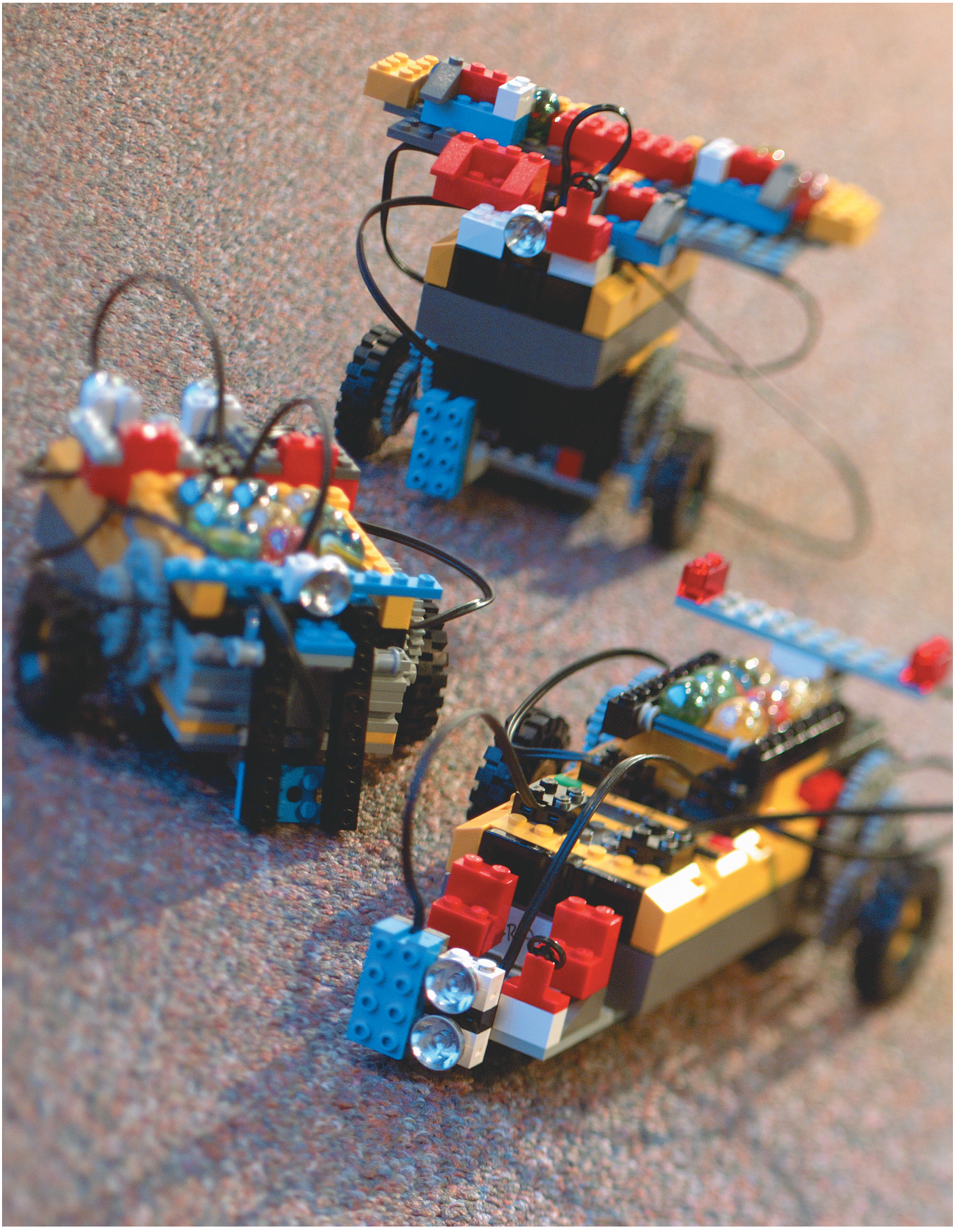
At Cranfield University in England, we have developed a business simulation technique that allows students to experience the new product development cycle over the course of a day. The Cranfield CityCar simulation was designed three years ago, based on research we did to discover what R&D managers explicitly and implicitly believe they have learned from their own NPD projects.

During the first half of the simulation, students develop their product and bring it to market. In the second half, participants analyze and discuss their results, then hear short presentations on the theories and practices of new product development. The Cranfield CityCar project essentially offers on-the-job training in a controlled atmosphere and compressed timeframe, and it works equally well for MBA students and business executives.

### Teams Under Pressure

In the CityCar simulation, five or more teams of six people each approach the problem of launching a new product—a car made of Lego pieces and controlled by complex software. Each team assumes it is a startup financed by venture capital, which means it has limited financial resources. Within a tight timeframe, the team members must perform research and development to identify customer needs, design the car, program it, test it, and market it. They also must prepare a manufacturing strategy and a sales plan. And they must do all this in just three hours.

At the beginning of the simulation, each member of each team is assigned one of six roles. These roles cover the functional disciplines: marketing, R&D for hardware, R&D for software, manufacturing, finance, and general management. A two-page briefing sheet helps each team member understand his or her role. For example, the marketing person is



photos by Lee P. Thomas

**MBA students at University of Kentucky's Gatton College of Business and Economics in Lexington participate in the CityCar simulation as part of the school's New Product Development Module. The simulation is run by representatives of Cranfield School of Management.**

responsible for collecting and analyzing market data. To maximize the learning opportunity, team members are encouraged to take positions with which they are unfamiliar. Someone with marketing skills might become responsible for software, while a finance expert might manage marketing activities.

Those who take on the engineering responsibilities must design the car and master the software. They use Lego RCX software and an RCX "robot brick" that can be quickly learned and programmed with a laptop. They must produce a car that can drive forward, reverse into defined spaces, and recognize road markings. Each CityCar also needs to park automatically, thereby meeting the demands of customers who live in cities where parking is always a problem. Additionally, the product must be aesthetically appealing to succeed in the competitive market.

While some students are working on design, the team members in management roles must ascertain customer needs. These students make sure the product matches these needs while meeting the financial targets their backers demand. All teams are given some preliminary market information and—if they have the budget for it—they also can "buy" market research reports. These managers must decide realistically what the team can achieve before making any promises, so they must make difficult choices about product features, pricing, and time-saving measures. Concurrently, the marketing personnel must put together a coherent presentation and product demonstration that will convince customers this is the car to buy.

The pressure is high, not only because the timeframe is so short, but also because each group is competing directly with other teams. This competitive environment introduces a large element of risk to the project.

## The Market and Its Lessons

When the three hours are up, the teams take their products to market by introducing them at the Geneva Car Show. There, each team has five minutes to present its product to the customers and the press. Team members describe the car's benefits, name its price, and demonstrate its features. They also get their first chance to see how successful their competitors have been at designing cars of their own. The performance of the cars is judged by "guest customers," who critically compare the products offered by the various teams and then make their purchasing decisions.

Typically, teams display a wide range of performance levels. Top teams accurately assess market needs and develop a car in time for the Geneva Show. Other teams are less successful in meeting marketing needs or solving the many technical problems associated with the product—a situation that accurately reflects many of the issues faced in real product development. Some teams fail to even make a profit, as they have insufficient margins or do not receive enough orders at the Geneva show. Therefore, just as in real life, many product launches in the CityCar project end in failure.

While the Geneva Show is fun for the teams, it also is directly responsible for teaching them specific lessons, all of which are covered again during the debriefing sessions that come next. After the hectic pace of the new product launch, we slow down to allow teams a few hours of reflective learning time.

All teams—even those "winners" who made a profit—now analyze what they did well and what they would do differently if they were developing a new product in the future. When the CityCar simulation is conducted for MBA students, a number of learning points must be covered, since few students have experience of the complete NPD cycle. When such a simulation is conducted for corporations, the teams are encouraged to examine the similarities between the simulation and the difficulties with product development at their own companies.

After each team has had a chance for reflection, we hold a plenary session to collate ideas from all participants. Here, we have several learning objectives. We want participants to understand the role of communication, the process of decision making on product features, and the necessity of trade-offs between price and design. We also want team members to learn how to analyze risk, which is an inevitable part of

Since the simulation was developed, it has been administered to more than **2,000** individuals—top executives at major corporations in addition to MBA students in Europe and the U.S.

innovation management. When participants discuss the approaches adopted by different groups during the simulation, they can perceive what impact such approaches have on any new product development.

This period of analysis mimics the so-called "post-product reviews" that major companies hold after they have developed new products. Such reviews allow manufacturers to extrapolate lessons they can apply when they develop new products. In fact, there is a whole body of emerging literature on how to use post-product reviews in R&D. One key factor that is often stressed is the importance of having a good moderator to lead the discussions and make sure all team members contribute their observations. In team discussions after the CityCar simulation, we also believe a good moderator is crucial for promoting student learning, so this role is discussed and assigned to one of the participants in each of the teams.

## Optimizing NPD

The CityCar simulation is not complete without the teaching element, which follows the period of discussion and analysis. At this point, we present theories and best practices used in NPD, drawing much of our material from our recently published textbook, *Innovation Management*. We cover the following topics:

- How to set clear project goals and use appropriate tools, including the Work Breakdown Structure. This process requires a manager to list all the tasks associated with a project, the relationship between them, the time it will take to complete them, and who will be responsible for doing them.
- How to foster communication and quickly achieve effective teamwork.
- How to manage risk in relatively simple ways.
- How to focus on real customer needs by identifying the "voice of the customer." Students are introduced to the Kano model product for evaluating product features, which explores how specific features lead to customer satisfaction.
- How to manage and improve the NPD process itself.

The simulation has just given students a "live" chance to experience the challenges of new product development. These teaching sessions help them see clearly how to apply key tools, techniques, and best practices in their own companies.

## Tailored to the Audience

Since the simulation was developed, it has been administered to more than 2,000 individuals—top executives at major corporations in addition to MBA students in Europe and the U.S. Executives find the simulation useful because it helps them focus on research and development while improving communication between functional areas. In addition, the simulation encourages organizations to move away from a strict focus on product innovation—what is sometimes called product myopia—and take a broader view of innovation. It also emphasizes the need to constantly evolve product offerings.

Depending on the needs of the audience, the emphasis of the simulation can be changed. In a typical simulation, the key learning points are employing cross-functional teamwork, identifying breakthrough customer needs, and managing risk. In other situations, we might introduce surprises, such as major changes in the market or the availability of resources. At times, corporations might want the simulation to contain a stronger focus on understanding the market or making cross-functional decisions.

The simulation has been extremely successful in its current form. However, we must practice what we preach and not forget that product features need to adapt with time. Therefore, we are currently working on an improved and updated version of the simulation. We must keep in mind the lessons we teach our students: Any product brought to market must meet a budget, adhere to time constraints, and evolve to match customers' ever-changing needs. Z

Keith Goffin is Professor of Innovation and New Product Development at Cranfield School of Management in the U.K. Rick Mitchell is a Visiting Professor at Cranfield who also teaches at Cambridge University. Their book *Innovation Management: Strategy and Implementation Using the Pentathlon Framework* was published by Palgrave in 2005.

# Technology

## i.P.O.C. ('iPods on Campus')

**This year at Purdue University in West** Lafayette, Indiana, iPods and other brands of MP3 players will play more than music. Students in all disciplines will be using the devices to replay class lectures via "podcasting," in which audio files are delivered over the Internet. Apple's iPod joins other portable technologies such as cell phones and PDAs in the effort to make education more accessible in a world where students often expect information to be available 24/7.

Purdue students also can sign up for another popular technology, RSS feeds, which allow them to subscribe to have information sent directly to their computers. "Once students have this set up, they don't have to revisit the Web site to get the content," says Michael Gay, manager of Broadcast Networks & Services for Information Technology at Purdue. "The most recent lectures of the courses they've subscribed to will be downloaded to their computers—and possibly to their media players—automatically."

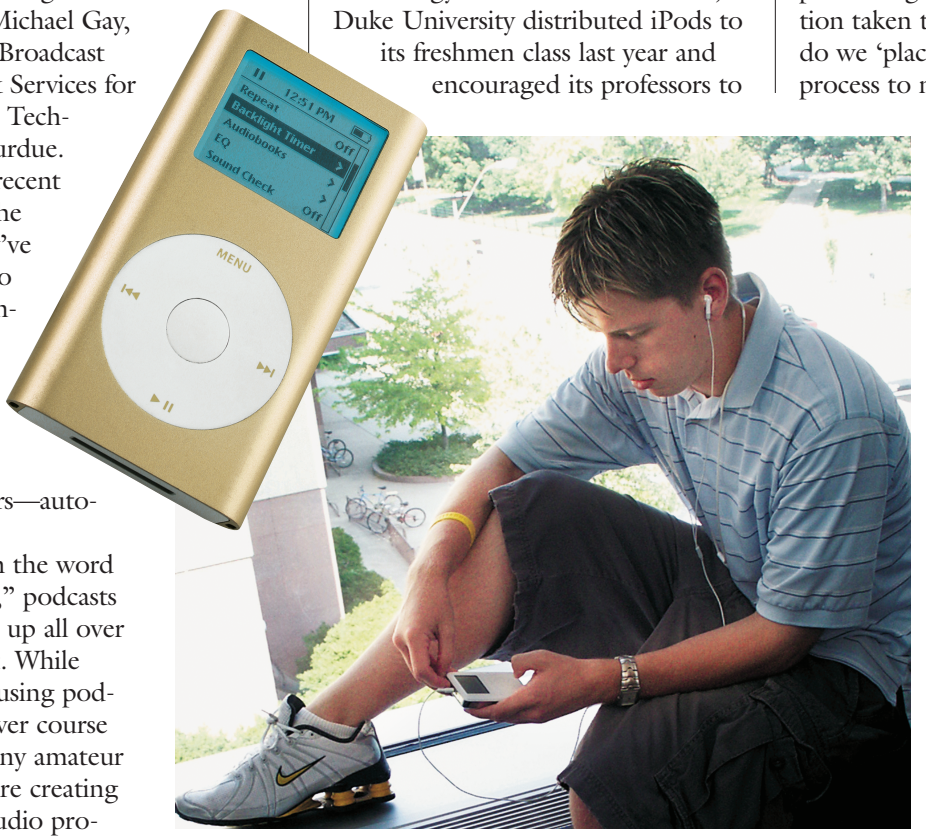
A play on the word "broadcasts," podcasts are popping up all over the Internet. While schools are using podcasts to deliver course content, many amateur podcasters are creating their own audio programs using the technology. Apple now allows users to download favorite podcasts directly to their iPods for free, via its iTunes Web site.

The fact that the term "podcasting" is catching hold in the public vernacular, despite the fact that other MP3 players are on the market, has not gone unnoticed at Microsoft's Seattle headquarters, the *New York Times* recently reported. The term "podcast" is verboten among Microsoft employees, who prefer using the more generic term "blogcast" instead.

In the last year, many colleges have begun experimenting with the technology. In addition to Purdue, Duke University distributed iPods to its freshmen class last year and encouraged its professors to create content for the devices. Butte College, a community college in Oroville, California, recently launched the "Butte College Chronicles," a weekly podcast hosted by full-time philosophy professor Dan Barnett. The school uses the podcast to circulate information about new courses, faculty and administrators, career services, and other student programs.

**DATABIT**

**In the quarter ending September 24, Apple sold 6.45 million iPods—three times the number sold during the same quarter last year. Still, that's only 5 percent more than the number sold in the previous quarter, indicating that sales of the popular device may be slowing down.**




Peter Fader, professor of marketing at The Wharton School at the University of Pennsylvania in Philadelphia, believes podcasting is a natural fit for higher education. "From an educational perspective, podcasting represents distance education taken to the next step. Not only do we 'place shift' the learning process to make it more convenient for the student, but we allow the ultimate degree of 'time shifting' as well," says Fader. Students are so devoted to the iPod, Fader adds, that, in the future, business schools may be pushed toward podcasting because of student demand.

Although Fader himself is not an iPod user, he admits that the technology, as a conduit for educational content, is compelling. Using an iPod, students would theoretically be able to tap into an information stream just by turning on the device and choosing a file. The

iPod's portability also makes the content even more accessible and "listenable" than content accessed via a laptop or PDA.

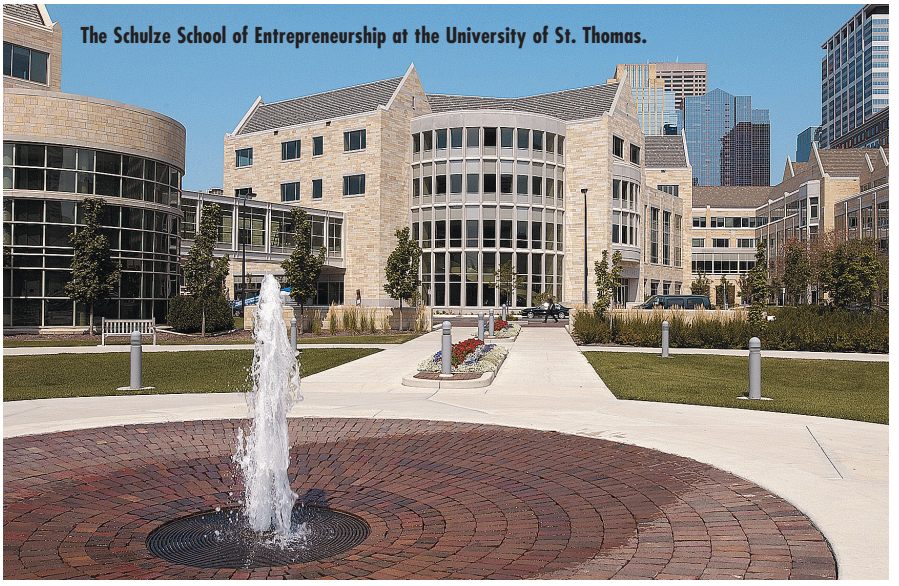
The iPod, he adds, is one more device in a host of competing technologies, including cell phones, handhelds, and satellite radio. But will podcasting change b-school content at all? Not likely, Fader notes. "Same message, different channel," he says.

## Sun Chooses St. Thomas

**In the midst of celebrating its new $22 mil-**lion facility in the heart of downtown Minneapolis, the University of St. Thomas' College of Business received another piece of good news. Sun Microsystems has named the college a Sun Center of Excellence (COE). St. Thomas is one of the first business schools in the U.S. to earn the global designation.

Its new 84,000-square-foot downtown facility, the Schulze School of Entrepreneurship, will house the Sun Center of Excellence for Entrepreneurship Application for Innovative Information Technologies. The COE will explore the use of technologies such as open source, stateless computing, identity management software, radio frequency identification (RFID), and voice-over-Internet-protocol (VOIP). The Schulze School of Entrepreneurship and the Sun-St. Thomas partnership are designed to accelerate technology transfer and business venture activities in the Minneapolis-St. Paul region. They also will augment the technological teaching options for business schools worldwide, says Christopher Puto, dean of the College of Business.

The COE will include on-site technical advising from Sun, more than 80 Sun Ray ultra-thin clients, and a new computer lab in Schulze Hall. In conjunction with the launch of the COE, the college also is introducing a new Department of Decision Sciences, which will teach and develop new technological approaches to managerial practice.



The Schulze School of Entrepreneurship at the University of St. Thomas.

## NEWSBYTES

### BRANDING BY BLOGGING

Last fall, Santa Clara University launched blogSCU, a series of student Web logs posted at www.scu.edu/blogscu. Five freshmen, including one business major, post weekly blogs designed to promote the school and give prospective students a sense of the "freshman experience." Eventually, the school hopes to expand its blogSCU initiative, providing RSS feeds and podcasts that students can listen to via their computers or MP3 players.

### NEW E-SIGNS AT UMICH

The Ross School of Business at the University of Michigan in Ann Arbor recently incorporated new electronic paper-based dynamic messaging into its wireless network. The system, which uses Gyricon SignSync software, allows staff to create, schedule, and wirelessly transmit timely information to electronic signs throughout the school.

### CYBERSECURITY GIFT

Towson University in Maryland recently received a $250,000 gift from Internet Security Systems to support the development of its Security and Information Assurance Laboratory. The lab will work in conjunction with the Maryland Alliance for Information Security Assurance to provide hands-on training to students and work with the state of Maryland to advance information assurance services and research.

## Training Teachers to Teach

**Intel and the Haas School of Business at the** University of California Berkeley have partnered to help faculty in emerging technology hotbeds teach entrepreneurship more effectively. Intel and Haas have created a new course, "Technology Entrepreneurship—Theory to Practice."

The course will be taught by faculty from the school's Lester Center for Entrepreneurship and Innovation. The course, which began in August, will be held at five global venues in Brazil, China, India, Mexico and Russia through December 2006. Attending the program will be 15 to 25 faculty members from several colleges and universities in those regions.

"By providing the know-how to teach budding entrepreneurs how to commercialize new technologies and innovations, this program has the ability to kick-start economic engines whose potential has lain dormant until now," says Jerome Engel, executive director of the Lester Center. Engel also leads the new program.

**DATABIT**

**Research firm IDC predicts PC sales in the Asia Pacific region to increase by more than 12 percent in 2006, to more than 44.9 million units. Notebook sales in the region have also been sizzling, increasing by 35.7 percent in 2005 alone.**

"Technology Entrepreneurship" will offer a teaching curriculum, classroom exercises, and other tools that university professors need to teach the basics of entrepreneurship to engineers and scientists. Professors who complete the program can then go and share what they've learned with the rest of their school's faculty. The goal, says Engel, is to create innovative businesspeople in these emerging markets who have cross-disciplinary skills, technical expertise, and the ability to seize market opportunities.

TOOLS OF THE TRADE

## ETS Launches Revised ICT Literacy Assessment

This month, the Educational Testing Service will make available a revised version of its Information and Communication Technology (ICT) Literacy Assessment. The previous version had been available in 2005. The revised, advanced level assessment, which colleges and universities pilot tested last fall, is designed for rising juniors and seniors entering upper-level coursework.

A simulation-based testing program, the ICT Literacy Assessment is 75 minutes long and comprises 14 four-minute and one 15-minute task. The assessment measures seven skills—the abilities to define, access, manage, integrate, evaluate, create, and communicate information. Test takers are asked to perform tasks such as extracting information from a database, developing a spreadsheet, and composing an e-mail based on research findings.

The test was created in response to a growing outcry for more technologically proficient college graduates, explains Theresa Egan, project manager with ETS. The organization worked with seven universities in 2003 and 2004 to design an assessment that would enable colleges to evaluate students' technological proficiency and ensure their readiness for the workforce or advanced education.

Today's students are comfortable using technology for entertainment, but they aren't as comfortable using it for academic and business purposes, says Egan. "It's shocking that some freshmen have never attached a file to an e-mail. Many don't know how to do an effective Web search or make judgments as to whether information online is authoritative or an advertisement," she says. Educators have long assumed that, because students have grown up with technology, they also have these basic skills. That, very often, is not the case, Egan emphasizes.

The advanced version of the ICT Literacy Assessment provides institutions with score data files that they can aggregate according to their own analysis needs. It also provides students with scores that compare their individual performances to other test takers' performances, as well as a description of their proficiency in each of the seven skill sets. The goal, says Egan, is to ensure that students have the technological skills they need to be effective employees in the modern workplace.

For more information and a free online demonstration, visit www.ets.org/ictliteracy.

# Research

*This new department expands BizEd's coverage of research in management education. Our focus will be on current, ongoing, and upcoming studies in business schools around the world.*

Mansour Javidan

## Charting the 'Global Mindset'

**Faculty at Thunderbird University's Garvin** School of International Management in Glendale, Arizona, are working to help organizations define and leverage the "global mindset." Their research, the Global Mindset Project, will focus on pinpointing what it takes to be successful in today's global business environment.

"Some executives and managers are very successful working with other groups, countries, and cultures, and some are not," says Mansour Javidan, director of the Garvin Center for Cultures and Languages of International Management and a principal researcher on the project. "We want to answer the question, 'What distinguishes those executives who can work well with people from other cultures from those who cannot?'"

Researchers began exploring this question by interviewing nearly 50 of their colleagues on campus, as well as Thunderbird alumni in 20 cities throughout Asia, Europe, and the U.S. Each person was asked how he or she defined the term "global mindset."

The school also recently held a conference that brought together academics with an interest in global issues. After discussion and debate, the conference reached a consensus regarding what the term "global mindset" means. These academics defined the term as "a confluence of attributes that enable an individual to influence individuals, groups, and organizations in different social cultural systems."

In coming months, researchers will conduct a large-scale survey of managers and executives working in international settings. Their objective is to develop a profile and assessment tool that measures an individual's global mindset. The school plans to use this tool to test its own students upon matriculation and graduation. The assessment will also be made available to any organizations that want to be able to measure their students' or employees' global knowledge and sensitivities, says Javidan.

As companies develop global alliances, the importance of such a tool is significant, Javidan adds. "Last August, I was in Seoul to teach a group of Korean executives with LGE, a large Korean electronics company. Their No. 1 priority was to be one of the top three companies globally in their industry," he says. "To accomplish that goal, they agreed that they needed executives who understand how to succeed in different global systems. That's the essence of the global mindset—executives who understand global issues and can make decisions based on that understanding."

Preliminary research from the Global Mindset Project will be available early this year.

## Culture Clashes: Good for M&As

**Although culture clashes between people from** different countries may be uncomfortable, they may actually be positive in the long term when it comes to cross-border mergers and acquisitions. A new study from Georgia Tech's College of Management in Atlanta, Georgia, finds that, contrary to conventional wisdom, cross-border M&As actually tend to be most successful in the long term.

The study, "Mars-Venus Marriages: Culture and Cross-Border M&A," was conducted by Georgia Tech finance professors Rajesh Chakrabarti and Narayanan Jayaraman and doctoral student Swastika Mukherjee. "Mergers and acquisitions involving firms from countries with dissimilar cultures, on average, do better than those between firms from countries with similar cultures," they write.

The study examined 405 cross-border M&As from 1991 to 2000, which involved companies from 34 countries targeting firms in 37 countries. Researchers focused on corporate performance 30 to 36 months after the union took place. The study measured national cultural differences such as language, religion, and legal and corporate governance systems. It also used measures developed by Geert Hofstede in his book on international management, *Culture's Consequences: International Differences in Work-Related Values.*

Researchers found that greater cultural disparity can increase the chances of success for M&As because it affects the interaction in the following ways:

- It lowers the likelihood of acqui-

sitions motivated by hubris in unfamiliar or distant environments.

- It grants greater autonomy to acquired firms in distant locations.
- It encourages better screening, contracting, and due diligence during the deal-making process.
- It results in diverse organizational strengths and performance-enhancing synergy.

The study also found evidence that acquisitions go better when acquiring companies are from countries with stronger corporate governance systems than the target firms.

For more information, contact Narayanan Jayaraman at narayanan.jayaraman@mgt.gatech.edu or Rajesh Chakrabarti at rajesh.chakrabarti@mgt.gatech.edu.

## Learning from Social Entrepreneurs

**When corporations enter new markets, they** often take a standard approach—find a demand for their offering and set the price that customers are willing to pay. That approach, however, is not well-suited to markets in developing countries, say researchers Johanna Mair and Christian Seelos, professors at the University of Navarra's IESE Business School in Barcelona, Spain.

"Markets that comprise people with incomes below $1,500 per year are not easily tapped," explains Mair. "The ability to pay is limited for those at the base of the economic pyramid. Companies seeking opportunities in these markets may first need to take an intermediate step by joining forces with social entrepreneurs who understand the needs and conditions in developing countries."

Mair and Seelos are engaged in ongoing research that analyzes the impact of collaborations between social entrepreneurs and businesses driven strictly by profit. They presented their most recent work recently at a conference, "Social Entrepreneurs as Competitors and Partners in Global Markets," held at IESE in collaboration with the European Academy of Business in Society (EABIS). For the last four years, Mair and Seelos have examined social entrepreneurial initiatives that combine social and economic value creation. "Over time, we've moved on to investigate the intersection between companies and social entrepreneurs," says Mair.

Johanna Mair

Christian Seelos

In their current research, Mair and Seelos are looking primarily at three models of collaboration:

- **The integrated model.** When lens manufacturer Aurolab and Aravind Eye Hospital collaborated to treat cataract patients in India at an affordable price, the venture was financially successful. The integrated eye care project delivered treatment to 2 million patients, including 220,000 sight-restoring operations, and achieved a 60 percent profit margin, even though 47 percent of patients were unable to pay.
- **The symbiotic model.** Telenor and Grameen Bank collaborated to sell mobile telephone service to people in Bangladesh who lack the financial resources to purchase the service. The two organizations created a microloan program in 1997, GrameenPhone, and had 4 million customers by August 2004.
- **The complementary model.** Non-profit WasteConcern and agricultural company MAP Agro collaborated to solve the waste collection problem in Dhaka, Bangladesh. WasteConcern created a door-to-door collection service, set up local composting plants, and trained residents to operate the plants. MAP Agro, in turn, purchased the compost from the plants to use as fertilizer. The collaboration reduced methane emissions and the need for chemical fertilizers, mitigated waste accumulation in the city, and produced 160,000 new jobs.

Mair and Seelos have found that such collaborations between socially minded and profit-driven organizations can be profitable and maximize opportunities in underdeveloped markets. Moreover, they say, these collaborations can do more to solve social problems, such as environmental damage and poverty, than conventional companies can do alone.

The two professors are currently working on a one-year project on collaborations between corporations and social entrepreneurs, which is sponsored by EABIS. "There aren't yet many best practices in this area—we hope that our research will help foster best practices further," says Mair. "We believe there is a huge opportunity for businesses that view social entrepreneurs as potential resources." By partnering with social entrepreneurs, she adds, corporations not only stake a claim in a developing market's economic potential—they also help create it.

# Your Turn

by Larry Pulley

## An Rx for the Ailing MBA

**Walk into any business school today and it's** easy to hear the gnashing of teeth as deans, administrators, and faculty bemoan the fact that thousands of prospective students who once lined up outside their doors have vanished. How dare they do such a thing when we thought we were doing such a great job?

The number of applications to traditional full-time programs decreased at 78 percent of business schools in the 2002–2003 and 2003–2004 academic years, according to the Graduate Management Admissions Council. In fact, business schools have become their own best business case study focused on an institution's failure to anticipate complex economic forces.

Business schools are facing the academic counterpart of what Ford and General Motors are facing—the public doesn't like their products as much as it used to. American students, who once flocked to MBA programs, now say it's too expensive to pay tuition while forgoing salaries. And foreign students, who once had to come to the United States for business education, can now attend schools in their home countries that have improved significantly, mostly by copying the American model. Corporations say they can hire young talent with a bachelor's degree at a fraction of the salary of an MBA graduate.

So, what's the answer? First of all, get over it. Business schools are responsible for their own problems. To quote the long-ago comic-page character Pogo, "We have met the enemy and they are us."

Additionally, just as GM and Ford must do, business schools must redesign their products and convince prospective customers that they offer something different, attractive, and valuable. This may already be happening. Over the next three years, about 300 business

Larry Pulley

TO QUOTE THE LONG-AGO COMIC-PAGE CHARACTER POGO, "WE HAVE MET THE ENEMY AND THEY ARE US."

schools are expected either to add academic programs or substantially revise their curricula, according to a 2004 survey by AACSB International. In addition, more than 50 business schools already have made significant revisions. These changes, they hope, will turn things around.

Time will tell whether some, most, or all of these schools will find the correct answer. However, necessity remains the mother of invention. If business schools are serious about change, I recommend the following five-step process for them to follow. These steps represent the five central criteria that I believe will be required to stanch an enrollment drain and ensure success over the next five years.

**Step 1: Give business what it wants.** The American business school evolved from being a trade school to being an institution that mirrored the model of traditional arts and sciences education. Some top-tier schools have morphed into bastions of theoretical research. Research is necessary, but what business schools have lost in the process is the value of teaching students how to apply complex theories to day-to-day operational business issues. At the College of William and Mary, we have talked to scores of businesses and alumni, and no one has told us to stop providing quality technical knowledge about business functions. But many have told us that what they need us to do is to help students translate that knowledge into business leadership.

**Step 2: Blend business faculty with business leaders.** Business professors are smart and highly knowledgeable. Most are excellent teachers, and many provide consulting services to businesses. However, few have substantial experience in the day-to-day running of a business. Schools must offer more hands-on lessons from those who have "been there, done that." If business schools are going to be successful at accelerating their students' business readiness, they must supplement the traditional

classroom experience with business laboratories that create opportunities both on and off campus. In these environments, faculty, students, and executives can work collaboratively on real-world, real-time business problems.

**Step 3: Fulfill graduates' career expectations.** Students come to business schools to be put on a superior career trajectory and be made ready for the realities of business. Business schools have made significant efforts to spruce up their career placement operations, but they haven't gone far enough. Career placement is still, in essence, an add-on enterprise, not part of the "fabric." Business schools must do a better job of weaving employers into the educational process. They must offer more opportunities for their students to work shoulder-to-shoulder with their future employers.

**Step 4: Study and improve on the competition.** Business schools in Europe, China, and India have gotten good enough to siphon off market share that once belonged exclusively to the United States. This is old news to thousands of American corporations who found themselves in that same situation years ago. What did those corporations that survived do? They competed with innovations in their product offerings. American business schools must do the same. They must offer "products" with which the schools overseas cannot compete. American business schools still command the advantage in talent and money, so they must leverage that now—not five years from now when overseas schools begin to attract American students in greater numbers.

**Step 5: Stop trying to compete with the top 10 or 15 business schools—dare to be different.** Love'em or hate'em, the rankings of business schools in popular publications have led to a business school beauty contest. Contestants fall all over themselves trying to play up and manipulate the criteria dictated by the media who conduct the rankings in a "me too" effort to beat out other schools, all of which are doing the same thing. Big mistake. Stop trying to beat the top schools at their own game. It will not happen. The top business schools are untouchable in terms of money, prestige, and talent. Instead, each business school should find the things that it can do well and do them better than any other institution.

Next year will continue to be bleak for most business schools. It will be a struggle to fill seats as schools in the top echelon of the market dig deeper into their wait lists of prospective students to fill programs that they expanded during the '90s MBA boom. In the process, these top-tier schools essentially will win students who otherwise would have attended second-tier schools, which will in turn struggle to find qualified students of their own. In five years, though, those schools that seize the opportunity to change in the right ways and offer innovative curricula and experiences for students will thrive.

The MBA is in jeopardy, and it provides a case study for strategy, intervention, and problem-solving. With the right prescription, however, this case study can have a positive outcome. Z

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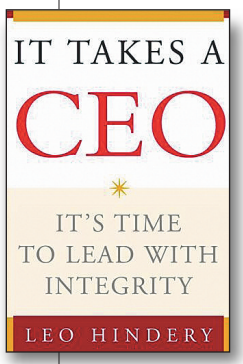
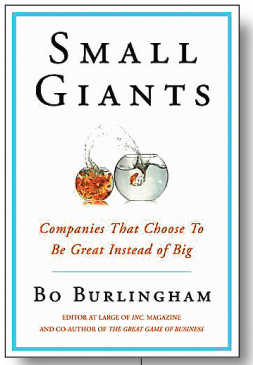
# Bookshelf

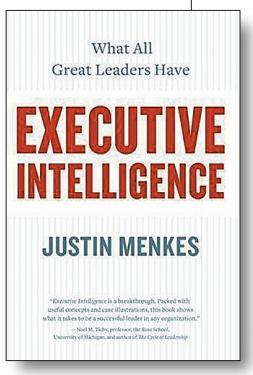
**Can chief executive officers of major corporations** take on the great challenges of health care, unemployment, media regulation, and international trade? Leo Hindery thinks so. In *It Takes a CEO,* he lays out his premise that top executives need to take more responsibility for the world at large—in addition to taking more responsibility for any of their actions that have sweeping consequences. He writes, "The CEO's job touches on three constituencies: employees, shareholders, and community. ... And when you get to the size of a Fortune 1000 company, your community is arguably the nation." Using blunt language and naming names, Hindery decries lax behavior by CEOs—both those under indictment and those under the radar—and issues a call for higher ethical standards and more attention to improving the world. He lists the 19 characteristics any CEO should possess, including grace, courage, a sense of fair play, and a hatred of bigotry. Despite the truly alarming trends he spotlights, Hindery's book is stirring and full of hope that corporate leaders can make a real difference in the world. (Free Press, $24)



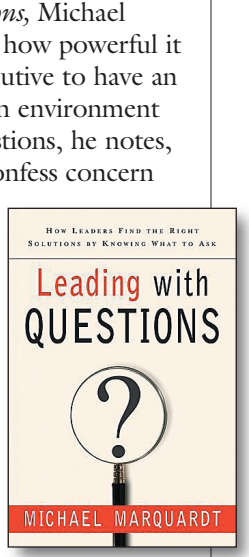

**"Grow or die" is considered an indisputable** maxim of business, but some entrepreneurs have rejected it as the governing system of their business careers. Instead, they focus on more intangible measures of success: an intimate relationship with customers, a happy and productive workforce, and personal satisfaction. In *Small Giants,* Bo Burlingham profiles 14 "companies that choose to be great instead of big." Companies like Clif Bar, Anchor Brewing, Union Square Hospitality Group, and Righteous Babe Records have resisted the pressure to expand rapidly, offer IPOs, or generally take their companies to the much-vaunted "next level." Instead, they've retained most of the control of their enterprises and found creative ways to grow their businesses. Burlingham's book isn't all happy endings and blissful contentment; most of the people he showcases have had to make hard decisions, and a few have tasted failure along the way. But the stories told and the lessons learned are valuable ones for anyone interested in starting a business and making it a success—by a personal definition. (Portfolio, $24.95)




**Like modern-day alchemists, today's star** executives take common, base elements and turn them into something wonderful and new. They're not using magic, says Justin Menkes. They're exhibiting *Executive Intelligence,* or a type of critical thinking that allows them to accomplish tasks, work closely with others, and adapt their own behavior as the situation demands. Menkes draws commentary from a wide variety of sources, ranging from psychologist Robert Sternberg to Avon CEO Andrea Jung, as he presents the hallmarks of brilliant executive leaders. A chapter late in the book offers a series of mock interview questions with executive candidates and dissects which answers display executive intelligence and which do not. As Menkes and various other sources make clear, today's successful corporation cannot survive by relying solely on the genius of one or two top individuals. Whole teams of gifted people are required to make an enterprise successful, and Menkes gives the blueprint for finding them. (Collins, $27.95)

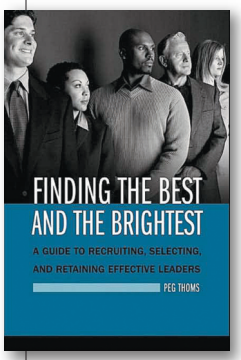



**Are you the kind of leader who asks questions?** If you are, do you even know what kinds of questions to ask? In *Leading with Questions,* Michael Marquardt describes how powerful it can be for a top executive to have an inquiring mind. In an environment that encourages questions, he notes, no one is afraid to confess concern about potential problems, and thus those problems don't turn into disasters. No one is afraid to confess ignorance about a particular method, and thus everyone is continually allowed to learn. "A questioning culture is a culture in which responsibility is shared. And when responsibility is shared, ideas are shared, problems are shared...and ownership of results is shared," he writes. Marquardt knows that not everyone is comfortable posing questions, so he offers a primer on how to ask them, how to time them, how to listen to the answers, and how to follow up. He also provides lists of questions that can



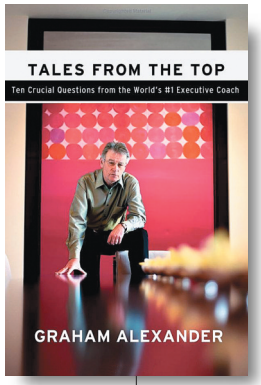
be used in specific situations. What more could a reader ask? (Jossey-Bass, $27.95)

**Finding a great employee is tough. Finding a** great CEO is even tougher. In *Finding the Best and the Brightest,* Pennsylvania State management professor Peg Thoms presents the best way to identify, recruit, and select candidates for top positions. It's essential for those doing the hiring to thoughtfully outline what traits and skills they require in a specific position and then conduct a series of structured interviews with a small pool of candidates.



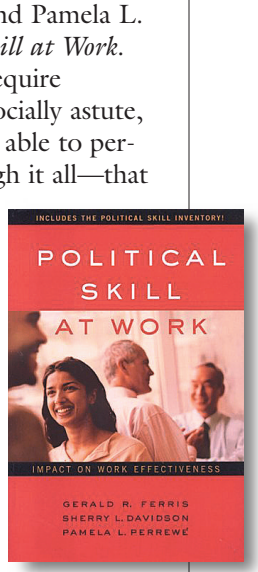

Thoms makes the point that there is no one leader who will be good in all situations, and she reiterates this by building the book around leadership vacancies in six organizations: a fishing club, a Fortune 500 company, a high school, a historical society, a Rust Belt city, and an urban hospital. While the president of the Sunshine Fishing Club will need to be honest, optimistic, friendly, and devoted to fishing, the historical society's director of PR must have high energy, excellent writing skills, and strong interpersonal skills. Thoms offers guidelines for conducting the interview—and for determining which candidates are the very best. (Praeger Publications, $34.95)

**What would you do if you were** braver? That's one of the questions executive coach Graham Alexander has asked top CEOs who were stressed, overworked, or feeling trapped in their current jobs. It's only one of dozens of questions that he poses throughout the slim, thought-provoking *Tales from the Top,* his account of more than 25 years of executive coaching. The book challenges CEOs to take hard looks at themselves, honestly evaluate what they have and what they want, and admit some of their deepest fears and insecurities. While many of his questions and suggestions are likely to induce some uncomfortable squirming for anyone who tries to answer or comply, the overall tone of the book is positive. Alexander believes any executive can improve his position—and his life—even if he has to make difficult choices to do so. (Nelson Business, $22.99)




**If you've always wanted to sit down and** hear great marketers and business gurus trade battle stories, *The Big Moo* is for you. Seth Godin edits a collection of quick, provocative essays by 33 authors, including Tom Peters, Guy Kawasaki, Malcolm Gladwell, and Dan Pink. None of the contributions has a byline; each one needles the reader to think harder or think differently. One essay is nothing but questions: "What if we could charge ten times as much for this? What if we had to charge one-tenth as much?" Another consists of an iconoclast's debate with nay-sayers: "They say I'm extreme. I say I'm a realist. ... They say, 'Improve and maintain.' I say, 'Destroy and reimagine.'" The title refers to Godin's earlier book, *Purple Cow*—the product or invention that sets a company apart. As he says in his introduction, "A big moo is the extreme purple cow, the remarkable innovation that completely changes the game." Spend some time with these authors, and you'll feel as if you can corral a whole herd. (Portfolio, $19.95)

**"The work environments of today are** ambiguous and subject to constant change," write Gerald R. Ferris, Sherry L. Davidson, and Pamela L. Perrewé in *Political Skill at Work.* These environments require "employees who are socially astute, flexible, adaptable and able to perform effectively through it all—that is, people who are politically skilled." Political skill is not the weaselly ability to manipulate people to achieve self-serving ends. Rather, they say, it is the ability to understand others and influence them in ways that benefit the organization. Political skill comprises four key attributes: social astuteness, interpersonal influence, networking ability, and apparent sincerity. The authors—two business professors at Florida State University and one research scientist at New York University—explain how managers can cultivate political skill and how they can use it. Readers will quickly agree with the authors that "real political skill is a positive force." (Davis-Black Publishing, $32.95)



# Spotlight

Kuwait-based interns from Mays Business School and their co-workers gather at Camp Udairi in Kuwait.

## Condition Critical

Mays business students work with Halliburton to experience the business of war.

**Business may be business, but the stakes** are much higher when it comes to managing the intricacies of procurement, transport, and accounting in the midst of a war. That's the lesson that 12 undergraduates from Texas A&M University's Mays School of Business in College Station learned last summer, when they embarked on a labor-intensive internship with Halliburton subsidiary KBR in Kuwait, Jordan, and the United Arab Emirates. It was the first such collaboration between Halliburton and the Mays School.

"This isn't your typical 8-to-5, weekends-off internship," says Graham Gilkerson, a senior accounting major at Mays. Gilkerson audited employee records and oversaw accruals and inventories for KBR subcontractors in Kuwait City. This internship required the ability to "deal with conditions that are out of your hands," he says.

As the U.S. military's supplier of logistical and life support services to operations in countries such as Iraq and Afghanistan, KBR supplies U.S. troops and coalition forces with everything they need with the exception of weapons. It builds base camps and transports materials such as food, fuel, mail, laundry, and air transportation. In addition, KBR employees must cope with sandstorms, oppressive heat, and the realities of insurgency violence.

"THIS ISN'T YOUR TYPICAL 8-5, WEEKENDS-OFF INTERNSHIP."

Many of the interns spent two and a half months working 60- and 80-hour workweeks in the capitals of Kuwait City and Dubai. Gilkerson, who studied Arabic with a tutor last year, sees his experience as a first step to an international career. "It gives me the desire not only to look at what businesses are doing in international settings, but what effect they have on the people there."

For Halliburton, the internships aren't just a way to tap the talents of enthusiastic business students. They're also a way to seek out future employees. Trey Scott, a finance major who interned at KBR's Dubai central office for Middle Eastern projects, worked side-by-side with Arab workers wearing native robes and Western-dressed KBR employees. He says he is interested in a career at Halliburton post-graduation. In fact, about half of KBR's interns return as interns or are hired full-time.

That's just what Halliburton CEO Dave Lesar likes to hear. "These students are working in the Middle East to get a flavor of what we're doing and add value and knowledge," he says. "We see these folks as our next generation of managers."