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Subtle Transformation

I’ll admit it. I’m a technophobe. I’ve never been a first adopter, never been the kind of person who hurried to buy extra gadgets to customize my newest electronic purchase. But even I am amazed at times by the way technology has changed my life, in ways both subtle and ubiquitous. In my own small house, there is a proliferation of televisions, VCRs, DVD players, CD players, computers, and phones—not to mention the radios, major appliances, and automobile that were technological marvels just a few generations ago. How has the technological revolution transformed my life so completely that I don’t resent—or even notice—its intrusion any more?

The only true answer is this: Technology makes everything better. It’s terrifying to learn and unbelievably frustrating when it fails, but when it works it’s a profound marvel. It’s life-changing. It’s essential. Humans have a lot of congenital desires, and one of the most ineradicable is the drive to make life more efficient. We invented the wheel, and we never looked back. It was only a few short skips from the first cart to the first spaceship. No wonder we have embraced the silicon chip.

Even in the staid environment of the business school, technology is performing its inevitable magic. In this issue of BizEd, we look at how the advent of the Internet and the availability of digital media have changed the delivery of courses and case studies in the classroom. We also examine the way business schools are using Web sites and other electronic communications to promote themselves to potential students, alumni, donors, and other stakeholders. BizEd itself is not immune to the sweeping effects of technological change. With this issue we offer a digital experiment in partnership with BusinessWeek. With its support, BizEd readers can visit www.resourcecenter.com/digital/bized to download this issue in a searchable digital format. In addition, BusinessWeek has offered our readers access to the current issue of BusinessWeek Digital.

But we don’t mean to imply that change only blows around the corner on the back of a silicon wind. Change can be just as powerful, and just as transformative, when it’s built around a radical rethinking of culture and environment. Ricardo Semler has discovered the power of change. He’s the unconventional CEO of Brazil’s Semco Inc., which he totally overhauled in the 1980s to create a corporation of complete employee empowerment. He offers his insights on a different—and, he thinks, better—way to do business in “The Maverick CEO.”

I have to say, I’ve never liked change for change’s sake any more than I like technology for technology’s sake. But I loved Semler’s autobiographical book, Maverick, which recounts the slow and often painful process of remaking Semco. And I love my computer, which enabled me to make my first contact with him via e-mail. As is so often the case, technology and change have come together with a blissful synergy. I expect they will continue their dance of terror, transformation, and delight for all the rest of my days.
Engle and Granger Win Nobel Prize

Tools that help measure risk in stock portfolios are among the discoveries that have led to a 2003 Nobel Prize in Economics for two business professors, Clive W.J. Granger and Robert F. Engle. The two were longtime colleagues at the Department of Economics at the University of California in San Diego. Currently, Engle holds the Michael Armellino Professorship in the Management of Financial Services at New York University’s Stern School of Business. Granger, an emeritus professor of economics at UCSD, was a visiting scholar at Canterbury University in New Zealand last fall. Both still maintain offices at UCSD.

While the two men often collaborated on projects, they also worked separately on their time-related analysis of factors that affect markets. “Economic data has special properties and it requires special techniques,” says Granger, whose theory of cointegration led to breakthroughs in statistics and macroeconomics forecasting. “I have developed techniques that can be used by central banks and federal reserves for forecasting and policy development. I’m always hoping to make my research practical and useful. It starts out as theory but then one aims to move toward the practical end of things.”

Engle’s key research, known as autoregressive conditional heteroskedasticity (ARCH), revolves around analyzing volatility in the stock market as a way to manage risk. BizEd recently spoke with Engle to discuss his theories.

Can you give a layman’s definition of the principles behind your research? It’s a quantitative approach to measuring risk. If you think in terms of your portfolio, the risk is the possibility that its value might go down, so you’d like to figure out whether or not that’s a likely event. When you diversify, for example, you’ll find that the risk is less. But also, in the same time period, the risk might be less due to other factors.

How are your economic models used in the real world? First, financial institutions use these models to forecast risk in many different flavors. They are concerned about the risk to their U.S. equity portfolio, their small-cap portfolio, their Tokyo office. An investment bank will typically calculate risks for hundreds or thousands of kinds of exposure every day, and that risk has to be quantified.

Second, these models are used to figure what the fair price of an option might be. An option might be something you buy in the market that will pay if the stock goes up but won’t pay if the stock goes down. But the question is, how much do you have to pay for that? “Put options” will pay off only if a stock goes down, not if it goes up. These are really good ways to protect your portfolio, but the amount they cost is clearly related to how risky they are.

What are you looking at with your current research? I’m actually pushing in two different directions. One is analyzing large collections of assets all at once and whether or not they move together. This makes it a more appropriate vehicle for talking about portfolios with collections of assets. The second is measuring these at a higher and higher frequency until there is almost a second-by-second measure of volatilities and correlations. Every time there’s a new piece of information, like a trade or a quote, you could update your volatility estimates.

Do you think business schools could restructure their courses to provide students with better preparation for careers in finance? I think there ought to be more quantitative tracks in the MBA program. When I consult with investment banks, I find that in a lot of positions where I expect to find MBAs employed, they’re not. Banks hire people who have physics degrees but don’t know any finance. Schools should be teaching a little more about these statistical models. I think you have to learn those hard skills when you’re young. If you pass on this opportunity to learn them, you’re just not going to pick them up later in life.

How do you expect winning the Nobel Prize to change your life? I’m pretty happy with my life the way it is, so I’m hoping the award won’t affect it too much. I do hope it will give recognition to people in this line of research and lead to increased interest in these kinds of research methods.
Resource Center Highlights

Learning Assessment

Business schools looking to improve their learning assessment practices have a new online resource in AACSB International’s Assessment Resource Center. The Web page, which can be accessed through www.aacsb.edu, provides a wide-ranging set of tools and information to guide management educators toward better learning assessment.

The site offers a revolving menu of articles and discussions about best practices and current thinking in the realm of learning assessment. “We’re starting with a pretty good foundation,” says Dan LeClair, the director of AACSB’s Knowledge Services, which will manage the site. “We want to see the site grow and evolve as a result of member involvement.”

Sections about accreditation standards, professional development, and reading lists are also on the site. Whenever possible, links are provided to allow users to acquire or learn more about books and articles that are referenced. An “Overview” portion of the site will address specific questions posed by visitors to the site, answered by the Knowledge Services staff.

The Assessment Resource Center is the first of three sites planned by AACSB. Next on the agenda are an Ethics Education Resource Center and a Doctoral Education Resource Center. While AACSB will welcome suggestions and contributions to the sites, says LeClair, the content that appears will be edited by the Knowledge Services staff with the help of experts. However, management educators will be able to address each other directly through the “Community” section of each site, which allows members to subscribe to listservs organized around common interests.

The resource centers will help AACSB offer members help in fields such as learning assessment, which has assumed critical importance in today’s business schools. “We passed the assurance of learning standards, but a quick survey of members indicates that there will be many challenges associated with implementation,” says LeClair. “It’s incumbent upon AACSB to assist schools to meet these challenges.”

Meet Me in Montreal

More than 1,200 business school deans and faculty members from 40 countries are expected to travel to Montréal, Quebec, this spring to attend the International Conference and Annual Meeting hosted by AACSB International. The conference, to be held April 18 through 20 at the Palais des Congrès de Montréal, will focus on business education against the backdrop of the global economy.

Seminars will cover topics such as how to remain agile during turbulent times, how to plan for evolving business school models, and how schools can stay current on key issues such as doctoral supply, learning outcomes assessment, and ethics. Among the presenters and plenary speakers will be Freddy Vandenspiegel, chief economist of Fortis Bank in Belgium.

Until March 8, attendees can get special rates at two Montreal hotels near the convention center, Le Centre Sheraton Hotel (514-878-2000) and Fairmont the Queen Elizabeth (514-861-3511). Both hotels are located downtown near shopping venues, the business district, and cultural attractions. Special conference registration fees are also in effect until March 8.

Additional information about registration, hotels, and conference programming is available on the association’s Web site at www.aacsb.edu. For information about reserving exhibit space, see the Web site or contact Linda Walter, director of business development and events, at lindaw@aacsb.edu or 314-872-8507, ext. 243.

AACSB Nominates Board Members

Nominations have been finalized for elections to the 2004–05 AACSB International Board of Directors. The election will be held in the last two weeks of January; results will be announced by mid-February. New members will assume their positions July 1. At that time, chair elect Doyle Z. Williams of the University of Arkansas in Fayetteville will become chair. Richard E. Sorensen of Virginia Polytechnic Institute in Blacksburg is running uncontested to become vice chair-chair elect.

Of the six candidates nominated as representatives of accredited member institutions, three will be elected.
On the ballot are W. Randy Boxx of Millsaps College; Ned C. Hill of Brigham Young University; Lynne Richardson of Ball State University; George E. Stevens of Kent State University; Kathryn M. Verreault of the University of Massachusetts in Lowell; and Jan R. Williams of the University of Tennessee at Knoxville.

Two candidates will be elected to serve as representatives of non-accredited member institutions. Candidates are L. K. Chan of the City University of Hong Kong; Fred J. Evans of California State University in Northridge; Geralyn McClure Franklin of The University of Texas of the Permian Basin; and George K. Najjar of the American University of Beirut.

To serve as representative of a non-U.S. educational institution, the candidates are Sung Joo Park of KAIST and Stephen R. Watson, Henley Management College; one will be elected. Running uncontested as representative of a non-educational member institution is Amelia Maurizio of SAP America Inc.

Tracking Women in Massachusetts Business

Two studies conducted by Massachusetts business schools indicate that women are conspicuously absent from most corporations’ boards of directors, at least in Massachusetts. When they are running their own businesses, however, they’re having measurable success.

The first study was co-authored by two professors from Bentley College in Waltham, Massachusetts, in partnership with The Boston Club. Patricia Flynn, trustee professor of economics and management, and Susan Adams, associate professor of management, found that nearly half of the largest 100 public companies in Massachusetts do not have women directors. Only nine percent of all board seats in these companies are held by women.

A second study about businesswomen in Massachusetts revealed that 53 percent of women-led businesses in the commonwealth grew over the past two years despite the poor economic climate; 35 percent of them experienced strong growth. Under lead researcher Nan Langowitz, the study was conducted by Babson College in Wellesley and the Commonwealth Institute. According to the report, the top 100 women-led businesses contributed more than $6.5 billion to the Massachusetts economy in 2002 and employed more than 32,300 people.

KU Student Portfolio Outperforms Wall Street

Like students at many business schools, students at the University of Kansas Business School in Lawrence are handling real money as part of their b-school training—but unlike some, they’re making their investments pay off. In the school’s Applied Portfolio Management (APM) class during 2003, the students got better returns on their investment than NASDAQ or SP500.

“The APM portfolio returned 40 percent in the second quarter and 73 percent over the last twelve months,” according to Catherine Shenoy, associate professor and director of APM. “To put these numbers in perspective, the SP500 returns were 13 percent and minus 2 percent over the same period. In the July 7 Wall Street Journal Mutual Fund Report, the APM portfolio would have ranked fifth for the quarter and in the top ten for the year of all funds.” The fund was started with a quarter-million dollar gift in 1988 from alumni Kent McCarthy.

The students work in groups of three or four, doing research on potential investments and tracking their progress. Guest speakers, many of whom are University of Kansas alumni and CEOs of companies the groups are considering, visit the class and give information on their respective companies. Working with the faculty, the members of the class make investment decisions together.
Collaborative MBA Focuses on North America

Four North American business schools have joined forces to offer The PanAmerican Partnership on Business Education, an MBA program with a common core curriculum at all four schools. Participating are Pace University’s Lubin School of Business in New York City, the HEC/Montréal Faculty of Management in Quebec, the Faculty of Commerce at Dalhousie University in Halifax, Nova Scotia, and EGADE of the Instituto Tecnológico y de Estudios Superiores de Monterrey in Mexico. The program was announced last fall.

“The MBA program of the PanAm Partnership is focused on building the next generation of North American managers,” said Stephen Blank, professor of international business and management at Pace University and director of the Lubin School’s Center for International Business Development. “Participants gain perspective on the emerging North American economic system and the knowledge and skills relevant to this new reality.”

Each partner school has a PanAm track in its MBA program. The tracks share core content, although they differ in detail. They are linked by regular physical and online interaction and by joint programs, collaboration in research projects, and student and faculty exchanges. Students who complete the program receive an MBA from their home university and a document issued by the partnership in the name of all four schools. PanAm students will have the opportunity to participate in study visits to Brazil, Mexico, the United States, and Canada. As a capstone, each June the students in the program will assemble in New York City for two weeks of intense classroom work, meetings with business and government leaders, site visits, and social activities.

Wharton Raises $445 Million

The Wharton School of the University of Pennsylvania in Philadelphia has announced the successful completion of the Campaign for Sustained Leadership, which launched in 1996 and raised more than $445 million. More than 23,000 donors joined 86 percent of the faculty and 98 percent of the MBA class of 2003 in giving money to the school.

More than $143 million of the money was earmarked for facilities, some of that going to build the 324,000-square-foot Jon M. Huntsman Hall. More than $127 million was funneled to academic programs, including new research centers and programs. Additional money has gone toward faculty support and research, including 26 endowed professorships, and toward financial aid for students. Thirty-five percent of the dollars raised came from MBA alumni.

Entrepreneurship

The Ryffel Center for Entrepreneurial Studies at the M.J. Neeley School of Business at TCU was recently awarded the NASDAQ Center of Entrepreneurial Excellence Award at the National Consortium of Entrepreneurship Center Directors conference. The NASDAQ award is bestowed upon entrepreneurship centers that have made remarkable advancements in the entrepreneurial field. The Neeley School’s entrepreneurial program was also recently ranked in the top 40 by Entrepreneur magazine.

The Neeley School offers comprehensive programs in entrepreneurship at both the undergraduate and graduate levels.
NEW DEANS AND FACULTY

David Parker has joined Cranfield School of Management in the United Kingdom as professor of business economics and strategy. He was formerly a professor and deputy director at Aston Business School. He also is co-director of the Regulation Research Programme for the Centre on Regulation and Competition funded by the Department for International Development.

David Berkowitz of the University of Alabama in Huntsville has been named director of the Center for the Management of Science and Technology at the school. The center provides both research and consulting services for academic, government, military, and private organizations.

Robert McLean has been appointed dean and director of the Australian Graduate School of Management (AGSM). For many years, he was managing partner of McKinsey & Co. for Australia and New Zealand. The AGSM is a school of both the University of Sydney and the University of New South Wales.

John H. Earl Jr., associate professor of finance, has been installed as the David Meade White Distinguished Teaching Fellow at the University of Richmond’s Robins School of Business in Virginia. Nancy Grandis White and her family members and friends established the fellowship in 2001.

The Mays Business School at Texas A&M University in College Station has announced two new appointments. Jim Dixey has been named director of the Graduate Business Career Services. Michael A. Hitt has been named distinguished professor of management, Joe Foster ’56 Chair in Business Leadership, and Carroll and Dorothy Conn Chair in New Venture Leadership.

Three new faculty members have been appointed at the Fox School of Business and Management at Temple University in Philadelphia, Pennsylvania. In the general and strategic management department, Arvind Parkhe has been named professor of international business, and Keith D. Brouthers has been named as an associate professor of global entrepreneurial management. In the finance department, David Reeb joins the school as an associate professor.

A. Frank Adams III has become a faculty associate of the Cox Family Enterprise Center at the Coles College of Business at Kennesaw State University in Georgia. Adams, a financial economist, teaches economics and finance in the school’s executive MBA programs. He was recognized as the Coles College Outstanding Scholar for the academic year 2001–2002.

EXTERNAL APPOINTMENTS

Jim Simpson, chair of the Management and Marketing Department in the business school at The University of Alabama in Huntsville, has been elected to chair the American Marketing Association’s technology and innovation special interest group. The group includes about 300 business school faculty at institutions around the world.

Rice University professor Steven C. Currall has been awarded a $83,000 grant from the National Science Foundation for a study about assessing public trust in nanotechnology. Currall is the William and Stephanie Sick Professor of Entrepreneurship and associate professor of management, psychology, and statistics at the Jesse H. Jones Graduate School of Management in Houston. He is working on the study with Kristen Kulinowski, executive director of the Center for Biological and Environmental Nanotechnology, Education and Policy.

PROGRAMS

The University at Buffalo, State University of New York, has established a program at the Singapore Institute of Management that will lead to a bachelor’s degree in business administration from UB. The Singapore program will be comparable in all respects to the undergraduate business program offered in Buffalo, including admission, course requirements, curriculum, faculty qualifications, and academic standards.

A new Global Scholars Program has been initiated at the Kenan-Flagler Business School at the University of North Carolina in Chapel Hill. The program is designed to help undergraduates better prepare for careers in a global economy by encouraging them to participate in a variety of living, learning, and immersion activities.
ties. Students from North America and Asia live together on a reserved floor in a single residence hall and enroll in common courses. They also travel together on local study trips and may choose to join in a two-week immersion trip to Asia at the end of the academic year. The program was made possible by a $10 million grant from UNC alum Alston Gardner.

The Business School of the National University of Singapore has launched a joint executive education program with the Indian School of Business called “Doing Business in Asia.” Offering strategic frameworks, perspectives, and analytical tools to executives focusing on international market growth and brand visibility in Asia, the intensive 12-day programs have been held in Singapore, Shanghai, and Hyderabad, India.

The Bryan School of Business and Economics at the University of North Carolina in Greensboro is launching a full-time day MBA program next fall. The program is being offered to attract younger and more international students and is geared toward those with limited work experience.

**HONORS**

Stephen Wheeler has been named the first Neven C. Hulsey Chair in Business Excellence at the University of the Pacific in Stockton, California. Wheeler is a professor of accounting in the Eberhardt School of Business. The chair was made possible by a $4 million grant from Neven and Nancy Hulsey.

The College of Business Administration of the University of Nebraska in Lincoln has announced that William L. Gardner III will be the first holder of the newly endowed Howard Hawks Chair in Business Ethics and Leadership. Gardner was the Michael S. Starnes Professor of Management at the University of Mississippi. His areas of expertise include management, organizational behavior, and research methods.

The M.J. Neeley School of Business at Texas Christian University in Fort Worth, Texas, has received two recent honors. Its James A. Ryffel Center for Entrepreneurial Studies was awarded the NASDAQ Center of Entrepreneurial Excellence Award at the National Consortium of Entrepreneurship Center Directors Conference last fall. Additional awards, which go to entrepreneurship centers that have made significant achievements in the entrepreneurial field, went to the University of Notre Dame in Indiana and the University of Colorado at Boulder. The Neeley School also received the Educational Institution Award from the DFW chapter of the National Society of Hispanic MBAs for its efforts in supporting NSHMBA initiatives.
**Headlines**

**SHORT TAKES**

- **Valerie Zeithaml**, associate dean for the MBA program at Kenan-Flagler Business School at University of North Carolina, Chapel Hill, won the 2004 Innovative Contributor to Marketing Award. The award is given by the Marketing Management Association.

- **Marcia Armstrong**, associate dean of masters programs at the Cox School of Business at Southern Methodist University in Dallas, Texas, has received the Bud Fackler Award given by the Executive MBA Council Board of Trustees. The annual award recognizes individuals who have contributed both to the Executive MBA Council and to EMBA programs around the world.

- **Karen V. Pincus**, S. Robson Walton Chair in Accounting and department chair of accounting in the Sam M. Walton College of Business at the University of Arkansas in Fayetteville, has received the Joseph A. Silvoso Faculty Merit Award from the Federation of Schools of Accountancy. The award, the highest given by the organization, is funded by KPMG LLP.

**DONATIONS AND GRANTS**

- **The University of Wisconsin-Madison** has received gifts totaling $8.4 million. Mutual fund manager Albert O. Nicholas donated $6.4 million to the school’s Applied Corporate Finance Program, while the remainder, which will also benefit the program, came from an anonymous donor. The gifts will help fund new plans for a graduate program in which students take core courses in their first year and spend their second year in a specialized area that has a faculty director, staff director, executive advisory board, dedicated space, and dedicated endowment funds.

- Three recent gifts will go to improve the Sam M. Walton College of Business at the University of Arkansas in Fayetteville. The Oracle Corporation has donated software and curriculum valued at more than $7 million to the Information Technology Research Center at the school. In addition, Simmons First National Corporation and Arkansas Blue Cross and Blue Shield have pooled resources to start a $250,000 faculty fund that will be used to retain and recruit faculty to the Walton school. The fund will be named after alums Louis L. and Joy Ramsay to honor the leadership posts Louis Ramsay held at both organizations and the couple’s contributions to Arkansas organizations. Finally, alumnus Gerald Alley and his brother, Troy C. Alley Jr., have pledged more than $50,000 for the Gladys and Troy C. Alley Sr. Memorial Entrepreneurial Scholarship, which will be awarded for one year to a junior-level management student of color.

- **The National Institute of Standards and Technology (NIST) has provided initial support of $400,000 to the Smeal College of Business at Pennsylvania State University** in University Park. The money will be used for several studies on the performance of small manufacturing firms as part of a five-year grant that could eventually total between $3 million and $5 million in funding. The NIST initiative, led by Gerald Susman, the Robert and Judith Klein Professor of Management and director of Smeal’s Center for the Management of Technological and Organizational Change, will involve collaboration between teams of representatives from several of the college’s research centers.

- **A $1 million gift has established the James C. and Rhonda Seacrest Faculty Fellows Fund at the University of Nebraska** in Lincoln. The Faculty Fellows Fund creates stipends to enhance faculty salaries within the College of Business Administration and the College of Journalism and Mass Communications.

**FACILITIES**

- **A new $41 million environmentally friendly complex for the University of Oregon’s Charles H. Lundquist College of Business recently opened in Eugene. The 196,500-square-foot Lillis Business Complex includes sustainable features such as solar panels and architectural solar glass, a “green roof” covered with soil and drought-resistant plants, windows and skylights that reduce the demand for electric lighting, and construction from materials that contain recycled content.**

- **The School of Management at the University of Texas at Dallas formally dedicated its new facility last month. The 204,000-square-foot, $38-million building brings the school’s 4,385 students and 96 faculty members together under one roof for the first time. The new facility features 29 classrooms that contain 1,165 seats,**
two large computer labs, a 350-seat auditorium, breakout rooms for undergraduate, graduate, and executive education student groups, and desktop Internet access in every classroom.

The Mays Business School at Texas A&M University in College Station has recently dedicated its 66,000-square-foot addition known as the Jerry and Kay Cox Graduate Business Center. The focal point for Mays’ master’s degree education, the center contains seven classrooms, eight MBA team-learning rooms, and two computer labs. The center also houses the Benton and Dianne Cocomougher Special Events Center, named after the former dean and his wife. Two early gifts were keys to making the new center possible, including the $1.5 million donation from the Coxes. A $3 million endowment from Reliant Energy helped establish the Reliant Energy Securities & Commodities Trading Center.

OTHER NEWS

Five architects with a history of designing business schools have started their architecture practice in Princeton, New Jersey. Alan Chimacoff, Joseph Tattoni, Arvind Tikku, Charles Maira, and Richard Holmes—all former principal and associate principals at architectural firm Hillier—have left to form ikon.5 architects. Between 1986 and 2002, they led Hillier’s Higher Education Studio, designing buildings at Arizona State, Brown, Columbia, Cornell, Duke, Howard, Johns Hopkins, Princeton, Rutgers, and Southern Methodist universities. ikon.5 will continue to focus on colleges and universities.

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Questions? Call Viviana Harper at 417-831-1810 or email vharper@webebi.com.
Ricardo Semler, CEO of Semco Inc. in São Paulo, Brazil, likes to quote a parable about three stone cutters who are asked to describe their jobs. One views himself merely as a man who cuts stones. Another thinks of himself as a craftsman who painstakingly cuts stones into specific shapes. The third says, “I build cathedrals.” Semler wants to attract some of the people in that third group to Semco, a business that produces marine and food processing equipment. In fact, he thinks he may already employ them. He just has to structure his company in such a way that they feel free to devote their considerable talent and energy into making Semco a cathedral among corporations.

That wasn’t his first thought when he took over the business from his father in the early 1980s. At that time, Semler—young, eager, and ambitious—wanted to make Semco a model of efficiency. He hired hard-driving managers, installed new technology, and worked extraordinarily long hours to achieve that goal. The result was a restless workforce at the factories and poor health for Semler.

Gradually his mindset changed as he began considering ways of turning over more and more responsibility for the business to the people who were actually doing the day-to-day work. According to his reasoning, medieval cathedral builders produced magnificent works of art virtually without supervision. Why couldn’t the men and women of his workforce—adults who made complex and far-reaching decisions in their daily lives—be trusted to choose the colors of their uniforms and decide when to start their workdays? Come to think of it, why couldn’t they organize their pay scales and approve their bosses? Why couldn’t they decide what new ventures Semco could invest in and veto plans proposed by the CEO? No reason at all.

Over the next few years, Semler and a radical management team completely upended traditional business theory at Semco, doing away with conventional organizational charts while allowing employees more and more freedom to choose what products they would work on and how they would produce them. The evolution, engagingly detailed in Semler’s 1993 best seller *Maverick*, was hardly a smooth one. Many employees were eliminated by job reconstruction or left because they couldn’t handle the turmoil. But those who remained became passionate about Semco and their place within it. They became cathedral builders.

Today, Semler spends much of his time away from the corporate offices, giving lectures or merely traveling with his family. His new book, *The Seven-Day Weekend*, stresses the value of free time away from the office and time for creative thinking in the office. Such priorities, he notes, have raised Semco’s revenues from $35 million to $160 million in the last six years. Semler is still an evangelist for worker empowerment—and now he also advocates taking time to rest in the company hammock and feed the ducks down at the pond. He believes that, even at the business school level, budding CEOs can learn valuable lessons about what’s really important in the workplace.

**You received intensive executive training at Harvard Business School. What were the most valuable lessons that you learned there?**

I enjoyed my stint at Harvard Business School and found it helpful as a cross-reference—getting to understand what peers think and testing my ideas in an intellectual atmosphere. Also, the specific concepts of professors and the lively drive toward learning and re-thinking were all very useful.

**What do you think is overlooked in the education of typical business students?**

I think business students are insufficiently prepared, because
the business world is changing faster than they can comprehend and because their personal and emotional abilities have been clouded by excessive decision-making drills. Not enough effort goes into accepting that many times there is no good answer—and that things can be left at that.

I was once received very coolly at a graduation of Brazil’s foremost business students, in the mid-’80s, when I gave a talk to them. I said that I thought that the jobs that they were dreaming of, based on b-school, would not be there when they finally arrived.

Most business students would find themselves unprepared for the way business is done at Semco. You restructured the company so that there’s no organizational chart. Workers approve their own bosses, and people only attend meetings if they think the meetings are important. When you instituted such changes, what made you think they would work?

People’s self-interest. Nobody wants to stay in boring meetings or work for bosses they didn’t choose. Of course, you can make people come to meetings and look alert, but it’s more difficult to get them to perform what was decided at the meeting. We want people to follow their instincts and to choose as bosses people they respect—even if they don’t like them. This happens often at Semco.

Do you think all companies could be structured the way yours is?

This is an exercise in sociology or anthropology and has to do with respecting tribes. It has very little, if anything, to do with types of companies. So, yes, it seems universally applicable to people and how they work. We’ve seen that proved in practice by police divisions, hospitals, and schools in many parts of the globe—in organizations that have seen our way of doing things and have implemented similar concepts.

Can a company implement some of your strategies and not all of them? Which ones are most easily transferable and which ones would be most difficult for another company to implement?

There are many standalone concepts. One is the idea of a 360-degree evaluation, which we instituted in 1979, or of candidates for leadership jobs being interviewed by their future subordinates, or even the idea of people working at home—which we’ve been practicing since 1981.

Many companies would encounter difficulties convincing bosses to give up control, which is a basic tenet at Semco. But there are also thousands of company owners who could implement freedoms and don’t. Finally, there is a long series of little things that each person can do within his or her sphere of influence. These things can change lifestyles and create gratification. It doesn’t require all or nothing.

If business students were reading a case study of Semco, what do you think they would take away as valuable lessons?

The main lesson is that freedom is a prime driver for performance.

But that very freedom sometimes makes it harder for people to work within an environment such as yours, because they’re accountable. Did you have workers who resisted your reorganization? How did you deal with them?

The system naturally expels people who find no place for free-
"Why grow as a business? What proof is there that companies that grow—above, say, the minimum few percent a year—do better than the ones that don’t? I’ve researched, and the answer is: None."

don, but they are very few. On the other hand, we’ve had many autocratic bosses leave. If autocratic bosses are going to stay, all it takes is for them to find employees who feel better coming to work at a given time, wearing certain clothes, and speaking at the right time. There is no brainwashing in the system. Bosses have the freedom to be a pain in the butt. All they need is people who like to work for them.

At Semco, employees can vote to veto new products or new product ventures. This must mean you trust your employees as a group absolutely. How can you achieve that trust? How do you make sure you’re hiring someone who will fit in with the Semco way?

We trust the process. We’re never sure that we hired right, but then, no organization is. We just reduce the risk. Job ads are pieces of fiction and speak of how good a place Semco is to work. Job candidates participate in the fiction by leaving the negative aspects of their careers out of their résumés. What are the chances that these two fictions will lead to mutual comfort levels? So we bring in many Semco people to interview every candidate—dozens, sometimes—and the candidate comes back many, many times before hiring occurs. That way, we dilute the fiction and increase the chance of a good match. Our turnover rate of one percent bears this out.

You put hammocks in the offices at Semco so that employees can take a break—and while they’re resting, they often come up with bright new ideas. But what about people who aren’t used to working creatively? Do they have to be trained to stop and think? How do you get them to buy into this attitude?

On the flip side, what if the employee really is bone-idle and doesn’t want to do anything but sleep while he’s lying in the hammock? How do you make that person become a contributing member of the team?

We stopped evaluating people by hours and methods a long time ago. Our people contract with us for a given output—say, 512 thingamajigs produced or sold per month. If they’re idle most of the time, but can produce, we love them. If they come in early and leave late and don’t deliver the 512, we probably cannot live with them.

Obviously, when you took over Semco, you began to question the traditional role of the employee. In general, you have an attitude of “Why, why, why?” In addition to some of the things you’ve changed in your own corporation, what do you see in the business world that needs to be rethought from the why-why-why point of view?

Why do we wear suits and ties? Why do we want democracy in the rest of our lives when we’ve never seen a democratic workplace?

Why grow as a business? What proof is there that companies that grow—above, say, the minimum few percent a year—do better than the ones that don’t? I’ve researched, and the answer is: None.

Then you believe “grow or die” is a bad way to approach a business?

To grow the few percent that keeps a company abreast of its markets is fine—and that’s not really growth. It’s just enough to make up for inflation and demography. Above that, we are reacting to insecurities and generalizations. We say that we need to grow for globalization, for career opportunities, or for added resources. However, seasoned CEOs know that globalization just shifts jobs around the globe, thus destroying the career opportunities of those lower down, and that the additional scale economies that we plan for rarely surface. When companies focus on growth, then diseconomies of scale, long periods of transition to grander phases, and the imbalance in the human ecology are nefarious problems.

And yet, Semco grew 900 percent under your leadership. If it’s not necessarily a good thing to grow, how were you able to cope with such a dramatic spurt?

We’re not against growth at all. We just want to make sure that it happens because our customers bring it about, not our board or a goal-hungry CEO. Our growth has come from markets that grew or market shares that increased. Sometimes our growth was a mistake, and we ended up losing the business unit entirely. We’re often wrong about this.

Therefore, you have to rely on experience to learn such business lessons, as opposed to learning them in business school. What else do you think is impossible to learn at any business school, no matter how good it is?

As professor Henry Mintzberg says, knowing how to get into, and survive, b-school is no indication of whether a particular person will know how to lead in the business world.
What I feel has been lost, and was present in the Greek *paideia*, was the development of a full human being, with emotions and personal abilities included. After the Renaissance, only the intellect was developed through schooling. Arts and physical education became of almost no importance.

The business school is more a result of Henry Ford’s assembly line than Frederick Taylor’s concepts. Not in the sense of pouring out ready-made managers dressed in black—although a bit of that is also true—but in the sense that the emotional development is arrested by a brains-directed effort.

A student who is timid and slow on tests might submerge in b-school, but could have turned out to be a wonderful, compassionate, thoughtful leader.

So much of the business curriculum today is taught in silos. How can schools break out of that habit? How would it benefit students if they did?

Schools developed the class size, the expository method, and the breakdown into disciplines to account for the industrial revolution and the mass-market method of learning. This era is bygone, but the conservative mentality is keeping the school system from evolving. Silos are a silly way to learn, and they lead to a situation in which almost all adults are unable to relate to or cross-reference subject matter. How many adults know what was happening in the Western world during the Ming Dynasty? Was Christopher Columbus
exploring then? How many know that Gregor Mendel was an Augustinian monk, or that his precepts in genetics also set the laws for probabilities that are used in Las Vegas today? Or that those precepts came via Lucas Pacioli, a 15th-century mathematician?

Silos will be out the door in a decade or so, but a new system has yet to be learned. This is why we set up the Semco Foundation, to construct a new system of education for the new century.

In fact, you’re deeply involved in the creation of a school in São Paulo that celebrates freedom and flexibility. Has the school opened yet? Who will attend? The school is in place and has started enrolling two- to ten-year-olds. We want to change things at the starting point. At this school, our kids determine the rules and make decisions every week at a school meeting. We don’t want to holler and point fingers at kids. They are perfectly able to settle disputes and regulations alone. We do sit in to facilitate, when they want.

We also split the teacher’s role into two parts: tutor and master. The tutor has ten to 12 kids under his or her wing, but is responsible for transmitting wisdom, support, and guidance, not facts. The masters, who must be experts in something and passionate about it, transmit the accumulated knowledge of humankind. We have some 40 kids and 97 masters.

At the Lumlar Institute, which runs the school, we develop a mosaic technology to teach free children effectively, something that the educational world knows nothing about. Since our kids are obliged to be in school but not in class, it behooves us to interest them—and we do. Children are already staying 1.84 times longer at our school, out of free will, than at other schools in the system. We plan to take over a public school in February.

Even once they’re out of grade school and business school, people can benefit from lifelong learning. Are managers at Semco encouraged to continue with their educations, and if so, via what model? People at Semco, by setting their own timetables and workloads, are more apt to take time out for learning. But we also have sabbaticals, and a system whereby people can diminish and increase their workweeks by arrangement with their teams. We also have Retire-A-Little, where people can take a day, or half-day, off every week, to do what they would when they retire.

What piece of advice would you like to give business students as they graduate from school and prepare to enter the working world? They should use the tools and skills that they mastered with care. Those are hammers and screwdrivers they’ve been given, and people are made of delicate skins.
Those who bet print media will never become obsolete may want to rethink that wager. With the cultural shift from static print to dynamic digital media growing stronger every day, the demise of the printed page may come sooner than anyone expects.

by Tricia Bisoux
illustration by Derek Lea

When Vanderbilt University in Nashville, Tennessee, opened its first technology-enhanced classroom in 1989, complete with projector and computers at every seat, statistics professor Malcolm Getz was delighted. He could now integrate Excel spreadsheets directly into his course at Vanderbilt’s Owen School of Management, rather than send students off to fend for themselves. Since then, Getz has developed new interactive components to his course, including adjustable diagrams, PDFs, sampling distributions, and simulation tools.

In the mid-1990s, publisher South-Western, part of the Thomson corporation, expressed interest in Getz’s project and worked with its macromedia director to create a more stylized interface for Getz’s materials. Today eStat, Getz’s interactive digital textbook for accounting, incorporates 40 simulations and 500 spreadsheet problems, with navigation tools and links to glossaries and other content.

“With a digital textbook, it’s quite easy for a student to deal with a data set comprising several hundred observations, figure out the variables, and evaluate the results. That’s impossible to do outside the computer,” says Getz.

Professors like Getz represent what Kurt Gerdenich, South-Western’s director of technology, calls “digital evangelists”—those educators who are not only using digital content, but also creating fully interactive learning environments for their students.

“These are the people who are willing to change their lives to use these tools to the fullest extent,” says Gerdenich.

At the moment, early adopters such as Getz are still in the minority. The use of digital content requires a completely new way of approaching the classroom—one that many educators aren’t quite ready to embrace. Even so, the digital component of the educational materials market is growing, as more options become available and technology becomes more advanced, less expensive, and easier to use.

It’s time for digital technology to come into its own, says Frank Moretti, executive director of the Columbia Center for New Media, Teaching, and Learning (CCNMTL) at Columbia University in New York. “The whole dot-com era was really a step backward for new technology because behind it was the assumption that instant success was possible in every field because of a theoretical decrease in overhead and increase of market size,” says Moretti. Now that the dot-com fervor has been quelled, he says, people are ready to view interactive technologies with an objective eye and focus on the true value of the Internet as an informational resource.

More important, access to such an abundance of information is cultivating a public that’s growing increasingly accustomed to navigating digital environments. Slowly but cer-
tainly, the ways people teach, study, learn, research, write, and communicate are crossing over into the interactive age.

**Information Unlimited**

In the November 10, 2003, issue of *Newsweek*, columnist Steven Levy noted that we are experiencing a “revolution made possible by the digitalization of, well, everything.” The world was changed completely last October, he wrote, when Amazon.com announced its new “search inside the book” service. Amazon users can now enter a term into a search engine and retrieve all instances of that term in 120,000 books the company has scanned into its massive database—one that will continue to grow.

The purpose of the technology, of course, is to sell more books. The implications for learning and research, however, are astounding. “We are now on the threshold of a system by which all books are scanned—eventually including even hard-to-find, out-of-print volumes—with their contents instantly accessible,” Levy writes.

For Moretti of CCNMTL, that threshold has been already crossed. The Center is working closely with the university library to create a number of online, multimedia study environments (MSEs) on topics ranging from history to literature to sociology. An MSE on Salman Rushdie’s novel *Midnight's Children*, for example, includes large selections from the novel embedded with hyperlinks to related material. Videos feature viewpoints of Columbia faculty and include an hour-and-forty-minute long video of Rushdie himself discussing his work. Users also can view segments of the Royal Shakespeare Company’s play adaptation of the novel and access the library’s collection of materials on South Asian history to research the novel’s historical context.

The university’s library provides access to many texts in digital form, through MSEs and directly from its Web site. The searchable text of 10,000 books is available online, as well as the text of 96,000 early English texts printed between the years 1475 and 1700. Students and faculty also can access encyclopedia entries, dictionaries, and other reference tools. The library’s goal is to have its text, video, and audio collections completely digitized and accessible via the Web, says Moretti.

Columbia University’s vice president for information services and university librarian, James Neal, has been working to make the university’s vast library holdings digitally available. The task is Herculean but inevitable, Moretti believes. “James Neal is working to help people understand that libraries should no longer be immobilized collections that people have to penetrate. Instead, they should be dynam-

**It’s All About the Web**

In 2000, Kris Nebel, director of admissions at the University of Michigan Business School in Ann Arbor, gave a presentation at the Graduate Admissions Conference about the school’s new CD-ROM viewbook. It was a new form of paperless marketing, Nebel told her audience.

Now, just three years later, the CD-ROM viewbook is no more, says Nebel. The University of Michigan Business School is moving its content to the Web. Now that nearly all students have access to the Internet, says Nebel, the Web is the perfect place for a full range of content designed to attract students. In the past, business schools used their sites mostly for short text-based descriptions of their programs and contact information, but business schools are now viewing their Web sites as a digital extension of their physical campuses.

The Wharton School at the University of Pennsylvania in Philadelphia finds itself in a situation similar to the University of Michigan Business School’s. In 2002, the school won a Gold award from the Council for Advancement and Support of Education (CASE) for its “innovative CD-ROM,” designed to replace its print viewbook for its MBA program altogether. The award committee called the CD “impressive,” “engaging,” “attractive,” and even “fun.”

And now, says Alex Brown, senior director of Wharton’s admissions office, it’s history. The school has dropped both its printed viewbook and its CD-ROM version altogether in favor of a significantly enhanced Web environment. The only printed item the school sends to prospective MBA students is a brief brochure that asks them to visit the Web site for more information.

Wharton’s redesigned site for its MBA program is a content-rich environment, where visitors can join in ongoing discussion groups and view video clips from students and faculty. When visitors view a page on a specific topic, the technology driving the site searches for the latest discussions on that topic and posts links to them at the side. Visitors also can read student diaries and return regularly to read new entries that relay students’ continuing experiences at the school.

Through the continuous addition of entries in the discussion groups and diaries, the site is largely self-updating and always evolving. This characteristic is called “active content,” explains Brown. “What we’ve tried to do is pull all of our
ic, accessible resources that provide a personalized search interface,” he says. “They should create a seamless food chain from the object of study to the deep-seated primary and secondary resources related to it. This level of access to information will become a matter of course.”

A Boon to Assessment

Course management systems like eCollege, Blackboard, WebCT, and PageOut, and Web-based educational content available from companies like XanEdu have contributed significantly to higher education’s growing comfort level with digital technology. By providing online access to hundreds of thousands of textbooks and journal articles and enabling faculty to customize course packages to suit individual courses, they have sparked an expectation of almost unlimited access to information.

That expectation, in fact, is driving the companies who provide educational materials to expand their databases even further, to include access not only to previously published resources, but also same-day access to just-released news, data, and articles. For instance, CoursePacks, a product from XanEdu that gives faculty the ability to customize packets of materials to suit their individual courses, now include research engines that allow professors to add newly published articles on the fly.

“We now have three new research engine modules, including one for the MBA that is divided into 13 business disciplines. When professors add one of these modules to their CoursePacks, students can link to materials that are updated daily,” explains XanEdu’s marketing manager Nan Gottfried. “If something breaks in the news and you want your students to read a Wall Street Journal article, you can add it immediately even if you purchased the CoursePack a month ago.”

But the true advantage of digital media lies in its potential use in learning assessment, says Bob Lynch, president of South-Western. Students and instructors are looking for tangible ways to measure progress in a course, he says. To meet that demand, the company has developed Web Tutor Advantage, which incorporates interactive quizzes. If students miss a question, they can link to content that explains the question and helps them master core concepts.

ALEKS (Assessment and Learning in Knowledge Spaces), integrates tutorial, assessment, and course management in a single learning tool. ALEKS uses assessment tools that utilize a type of artificial intelligence, Lenney explains.

Digitally based assessment tools such as ALEKS determine the individual course topics each student has mastered and the student is prepared to learn. Students work on new material when they have achieved mastery of prerequisite material and receive tutorials in areas requiring extra practice. ALEKS is currently available for business statistics and business math, and will be offered in financial accounting later this year.

“ALEKS accelerates learning by building student confidence at the appropriate pace,” says Lenney. “It not only enables students to improve their skills quickly, but also helps faculty keep students engaged in a particular course.”

Digital in the Mainstream

When the Web was in its nascent stages, much of the information it offered was disorganized and notoriously unreliable. Neither the Internet nor its users had developed the appropriate filters to qualify its content. In fact, most thought
the Internet would become an incredible vehicle for commerce; few predicted it would primarily function as a vast repository of information.

But as sites for organizations such as the U.S. Library of Congress, WebMD, and countless online newspapers, journals, and magazines became more sophisticated, they helped tame a relatively feral informational environment and transform it into a valuable, navigable, all-inclusive resource. More important, the Internet is cultivating a public that’s growing more proficient at navigating digital environments.

This cultural proficiency may already be evident in the capacity of today’s teenagers to juggle text messaging, pop-up boxes, and hyperlinks simultaneously. In fact, where some see in the younger generation an inability to focus, Moretti of CCNMTL sees the evolution of a new cognitive capability. “People are developing the ability to operate within complex digital environments,” Moretti says. “That development is a transition of culture and cognition.” Eventually, everyone may not simply be accustomed to working within digital environments—they’ll prefer those to the printed page.

To prepare for this possibility, print periodicals already are making preemptive strikes. Although magazines aren’t prepared to abandon print form just yet, a handful are going beyond simply having a Web presence. Zinio, a company with locations in Brisbane, California, and New York City, has developed software that converts the content of magazines into a digital format, which is e-mailed to subscribers.

The digital publication’s text, graphics, and advertising appear exactly as they do in the printed publication, but Zinio adds to that content interactive features that allow subscribers to search by keyword, annotate, and hyperlink to articles straight from the table of contents. Plus, customers can create a searchable archive of past issues on their personal computers, meaning they’ll never have to contend with rifling through dusty stacks of old magazines again.

A number of mainstream magazines have signed on to the service, in which readers need only perform a onetime download of the Zinio Reader software to be able to read and archive their magazines in digital form. Not surprisingly, many of the publications are technology-related, such as Macworld and PC Magazine. But a handful of other publications have also subscribed to the service, BusinessWeek among them.

The magazine launched BusinessWeek Digital last March, but it’s just beginning to promote it aggressively to business schools, says Kenneth Eng, a senior marketing manager with BusinessWeek. Business schools such as Purdue University’s Krannert School of Management in West Lafayette, Indiana, and Merrimack College’s Francis E. Girard School of Business and International Commerce in North Andover, Massachusetts, have been among the first to sign up their business students to receive BusinessWeek each week in their e-mail inboxes.

“These students have grown up with the digital medium and have become very comfortable with it,” says Eng. “They like business news, but they aren’t necessarily inclined to read it in print.” Digital content puts many of them in their element, says Eng, where they can read content, search the issue by keyword, and hyperlink to company Web sites straight from the text.

“We know this product is really early in the game. Over time we’re going to learn a lot more about how users interact with it,” says Eng. “We’re at the start of what I hope is a digital revolution.”

Students at the Girard School receive their laptops with the Zinio Reader software already installed. In addition to subscribing students to the digital publication, the school uses textbooks with interactive components, including an accounting text with an accompanying DVD, created by Brigham Young University. Interactive text encourages real-time learning that is only possible through digital means, says Edward Popper, dean of the Girard School.

“Traditional case studies offer a sense of reliving business history, which can be incredibly useful. But they don’t give you the same dynamic that interactive media offers,” says Popper. “A couple of years ago, you couldn’t say to students, ‘Fleet Bank was acquired by Bank of America today. I would like a paper discussing the ramifications of that tomorrow morning.’ The library didn’t even have that copy of BusinessWeek yet. Now students can connect to the Internet and access timely data about what’s going on today. That timeliness makes them much more aware of the dynamic of business.”
Educators are just beginning to discover how to react to students who are becoming more proficient receivers of digital information, Popper notes. The interactive environments at their disposal are a place to start. “The technology is not just serving as an analytical device,” he posits. “It’s serving as a gateway to information.”

Awaiting the Right Device

Of course, as much as students enjoy learning in digital study environments, there are still limitations. Bandwidths on the Web still have not reached the point at which large amounts of streaming video are practical. Not to mention that no one has yet to introduce a device that truly suits onscreen reading. “Our students seem to have every device under the sun. They have mobile phones and digital cameras—they even have phones that are cameras,” says Gerdenich of South-Western. “But technology has yet to introduce the right device for education. We have expensive laptops that are very powerful, but are not well-suited to displaying educational content. We have PDAs that are very portable, but are limited in delivering the applications that will benefit learning.”

Many e-book devices like the goReader, which BizEd featured in its January/February 2002 issue, have come and gone, having failed to introduce a device that truly suits onscreen reading. “Our students seem to have every device under the sun. They have mobile phones and digital cameras—they even have phones that are cameras,” says Gerdenich of South-Western. “But technology has yet to introduce the right device for education. We have expensive laptops that are very powerful, but are not well-suited to displaying educational content. We have PDAs that are very portable, but are limited in delivering the applications that will benefit learning.”

Tablet PCs are a step in the right direction, but they lack the screen resolution required to view large amounts of onscreen content comfortably. It’s only a matter of time, though, before a feasible device reaches the marketplace. To
serve education, it would likely have to be both e-book and Web browser with wireless capability. It would have a screen size and visual resolution conducive to viewing content, and be lightweight, durable, and portable with long battery life. And it would help if it cost less than $200, Gerdenich says only half-jokingly. But when it comes, he says, “we’ll be able to make digital content really fly.”

The Digital Printing Press
Like Getz of the Owen School, Suzanne Loker is another educator-cum-digital evangelist. A professor in the textile and apparel department at Cornell University in Ithaca, New York, Loker sought funding to create an online interactive textbook for her entrepreneurship course for fashion designers. At first, she supported the project through small academic grants. Eventually, she received an endowed professorship to pursue the project, making her the J. Thomas Clark Professor of Entrepreneurship and Personal Enterprise.

It took three years and the help of a Web designer for Loker to develop the current version of her interactive textbook, titled *Designers as Entrepreneurs*. Students navigate the book via hyperlinks and dropdown menus. Loker also incorporates video that she provides on CD-ROM to accommodate students who may not have high-speed access to the Web. The textbook has evolved as a series of small tasks over the years—the only way to tackle such a large and complex project, Loker emphasizes. The option isn’t for everyone, she admits, but for many educators interactive environments may provide a better way for students to learn.

“There are pockets of people doing this in every discipline,” says Loker. “The real question is simple: Are you gaining anything from doing it this way? If it’s more efficient and accessible for the student, if there is some educational reason that students will learn better in this medium than another way, then professors should do it.”

As professors such as Loker and Getz have found, creating interactive textbooks from scratch is often a labor of love that not all educators are ready for. Although sales of digital textbooks are growing with vendors like South-Western, McGraw-Hill/Irwin, and XanEdu, they still represent a very small part of the educational market.

Still, Moretti of CCNMTL likens this moment in time to the years after Johann Gutenberg invented the printing press in the 15th century, when people were first exploring its significance. “People are still inventing uses for digital media,” he says. “The horizons of new media have just begun to be glimpsed.”

For students entering college classrooms in the upcoming years, search engines and hyperlinks might supercede bibliographies and indexes, while “search inside the book”-style technology could replace concordances. Although those who enjoy the experience of turning pages and browsing through the library stacks may mourn its coming, an interactive culture with seemingly unlimited access to information is on the way. And for many of those whose lives center on study and research, it can’t come too soon.
Technology, student demographics, and globalization have transformed almost every aspect of business school, and the case study method of teaching is no exception. Today’s case studies have the same goals as those pioneered at the Harvard Business School 80 years ago; they are designed to teach students how to analyze a specific problem, faced in the real world by a specific company, and decide on the best course of action in response.

However, new media, new delivery options, fresh and urgent issues in the business world, and the evolving makeup of the student body have combined to ensure that the 21st-century business case is nothing like the one students mastered back in the 1920s. For one thing, cases today deal with topics and problems that weren’t even considered 80 years ago. But the biggest transformation case studies will ever undergo may still be in the offing, as major case providers consider the best way to deliver cases in a multimedia format.

The Message in the Medium
As of yet, most publishers have only a small number of their case studies available through digital media such as DVDs or interactive Web sites. However, the simple combination of high-quality technology and student demand would seem to indicate that more and more cases in the future will be produced for multimedia presentation.

“There aren’t as many multimedia cases available as I would have expected by now, to be honest,” says Jeffrey Gray, director of The European Case Clearing House, Cranfield University, England. “I think one of the reasons is that the level of investment is relatively high and often the cases that are produced in this format can have quite short shelf lives. Technology changes. People are worried that if they invest the sort of money needed to produce these cases, they’ll be superseded by something else within three or four years. They won’t really have had their investment repaid through a relatively short period. Having said that, we do have a number, and that number is growing.”

Copyright issues also are problematic, especially if the case writer wants to use clips from TV shows or bits of music, notes Paul Beamish, the associate dean of research at the Richard Ivey School of Business at the University of Western Ontario in London,
Ontario, and the man who heads Ivey Publishing. He adds, “You get to the point where you say, ‘I hope somebody else does it.’”

But the advantages of multimedia case presentations are so strong that a few adherents have been completely won over. One huge fan of the new media is Kathie Amato, director of Darden Business Publishing at the University of Virginia’s Darden Graduate School of Business Administration in Charlottesville. She notes that the school is leaning heavily toward investment in multimedia delivery of cases, driven primarily by tools like the Internet.

“People are accustomed to being able to access streaming video with the touch of a button,” Amato says. “So when they read about what someone had to say in a situation, what they really want is to hear what that person had to say. They want to see that visual and have that entire experience.”

She continues, “We have some products that lend themselves to being put on a CD and sent out to people, just as we used to mail text cases. We have some cases that can be accessed over our server. We have some cases that can only be delivered that way because they are simulations in which people can actually interact with others. People can log on simultaneously, whether they’re in a class of 30 or 300 people.”

In particular, cases that focus on supply chain marketing work well in such an interactive setting, she says. “One of the things people never seem to get is the concept of channels of distribution and how decisions have to be made throughout the channel to make sure the right inventory is in the right place at the right time,” Amato says. “We’ve got some very dynamic ways that allow people to log on simultaneously and be part of the supply chain. They make decisions that affect other parts of the supply chain. It’s very much like interacting in a real-world environment. Some of these cases have a gamelike aspect to them. The professor can divide people into teams, and they can compete with each other.”

Some of the Darden cases available on CD allow students to score themselves in certain areas. “If you make this decision, you get this outcome. If you make a different set of decisions, you get a different outcome,” says Amato.

Harvard also carries a few multimedia cases, though the school has not yet heavily invested in that format. “The multimedia cases may have some accompanying audio or video, or some animated exhibits,” says Lisa Joy, senior project manager with the Case Group at Harvard Business School Publishing in Boston, Massachusetts. “They present information in a way that brings the case to life a little more. When they work and when the situation is appropriate, multimedia cases can be really powerful.”

For instance, she describes a case that presents a manager’s point of view in a specific situation. “When students merely read the case, they’re sympathetic with the manager; but they’re not sympathetic when they hear him on video,” she says. “When he’s on video, they think he’s rude. It really changes things.” As more cases are written about recent events, and students can view live clips of CEOs on the Internet and cable television, such audio and video accessories are likely to become even more essential to case study presentations.

**Electronic Ease**

Despite the possibilities inherent in new media, the majority of cases available from all providers are still text-based. However, even those have been influenced by the electronic media, particularly in their method of delivery. Today’s case is far more likely to be sent to the end user over the Internet than on a printed piece of paper.

“We try not to deliver text cases in the mail any more,” Amato says. “We either deliver them electronically as a PDF file that the user can download and reproduce, send cases on CDs, or allow people to come to us and access our server remotely.”

Indeed, the ability to deliver cases electronically has been a huge boon to suppliers of case studies, who used to reproduce and mail reams of paper to professors teaching a case-based course. “Now we can transmit almost our entire collection in portable document format, which other schools can download and convert into print paper copies for their students,” says Beamish of Ivey.

Such online delivery requires encryption techniques so the case doesn’t end up endlessly forwarded in an e-mail loop,
“When students merely read the case, they’re sympathetic with the manager; but they’re not sympathetic when they hear him on video. When he’s on video, they think he’s rude. It really changes things.” –Lisa Joy

says Sheryl Gregson, general manager of Ivey Publishing. However, the electronic delivery system does shift the burden of reproduction to the teaching school. And make no mistake, she says—most cases still end up on paper at some point.

“Our own internal survey of our students says they still want paper,” she says. “If we give the case to them electronically, they’ll print it out.”

Amato concurs. “The vast majority of cases we produce are still somehow put into a hard copy format on our end or the student’s end,” she says. “But I think over time we are going to see people becoming much more comfortable with reading things on the screen, and that will change our delivery methods even more.”

The Internet has also made it possible for professors to go online and sort through available cases to cherry-pick items suitable for their particular classes. All the major case study providers offer searchable databases that allow professors to hunt for a case by discipline, location, or problem. “You can use the search engine to ask for a strategy case on the fisheries industry in the North Atlantic and come up with various hits,” says Gray. “The search engine will take you to all the case abstracts. If you’re registered as a member of a teaching faculty, you can actually see copies of the cases online.”

At the Asian Business Case Centre, located at Nanyang Technological University in Singapore, the database is organized so that site visitors can search by title, author, organization, country, subject, and industry. Specialized resource pages are available specifically for student use and for visitors researching South Asian cases. The Web site has been “designed to help professors search cases according to the topic areas they are currently teaching,” says Shirley Tan, research associate. “We are planning to update it to include more customized features to help them design a case pack for their courses.”

Other case providers also rely on technology to make it easy for professors to use their cases in the classroom. For instance, Harvard has devised a system called Course Planning, which helps professors pull together an online course that can then be ordered through a bookstore or a third party or delivered directly to students. Other providers offer a service that will match their available cases to a professor’s probable course outline, often by suggesting cases based on the chapter headings of standard textbooks within certain disciplines.

“It just makes it easier for the professor to find a case that goes with a particular chapter in a book he’s teaching,” says Beamish. “We’ve also started to organize our cases into themes. So if somebody wants a case that deals with ethics, for example, we’ve already done an advanced search on the topic.
“Many classic cases teach timeless lessons; but if they’re from the ‘80s or the ‘70s, students aren’t always tolerant of them. They want to know about things that are happening right now.” – Lisa Joy

People can download all the abstracts that might apply.”

The Internet has also provided an easy way for case providers to personalize the cases by presenting information on the authors. “We’ve started introducing short video clips of the author on our database,” says Gray. “You can come to the Web site and hear the professor who wrote the case talk for three or four minutes.” This brings the case vividly to life and connects the author who wrote the piece more directly to the professor who will be teaching from it.

Timeliness and Relevance

No matter how the cases are accessed or what format they’re in, today’s versions are apt to be current, global, and highly relevant. Students are less interested in outdated cases that might offer excellent lessons but deal with old or obsolete companies, say providers. They’d rather read about companies in the news this week. For instance, a case about Enron—including live clips of the top executives—was the lead item for months on Darden Publishing’s Web site.

“Students are used to having immediate access to research and knowledge,” says Joy of Harvard. Students like to go online to find additional information to support their analysis of a particular case, and that’s harder to do if the story isn’t a recent one. “Many classic cases teach timeless lessons; but if they’re from the ‘80s or the ‘70s, students aren’t always tolerant of them. They want to know about things that are happening right now.”

Even when the business press isn’t ruled by one particular story, the waxing and waning popularity of specific business trends will influence what kinds of cases will be written and requested at any given time. Ten or 15 years ago, the European Case Clearinghouse was receiving a number of cases dealing with just-in-time management, says Gray. Now, cases on globalization, corporate governance, and ethics are arriving.

Other case providers say that topics like leadership and teaching negotiations have been popular in recently written case studies. Then again, certain topics like general management, strategy, and organizational behavior have an “evergreen” quality to them and are in demand no matter what the business climate.

Even when today’s cases are focused on current business trends, they tend to be shorter than cases were in the past. “While people still want cases with complexity, depth, and richness, they want them to be more focused,” says Amato. “While the cases are fully integrated, they’re more self-

The Case for Cases

While both media and topics have changed in today’s case studies, one thing remains the same: the passion with which devotees of the case study method view this educational tool.

“A case is about a real business situation faced by managers and is authenticated by a release from the company,” says Shirley Tan of Asia Business Case Centre. “It’s not hypothetical. It allows students to step into the real situation, understand the complexity of the context, and make a decision.”

Says Paul Beamish of the Ivey School, “Case studies give students a great opportunity to learn about individual industries, individual countries, and individual organizations by studying the kinds of problems they’ll often encounter in their careers. Professors use case studies to teach students how to devise rules for decision making that will allow them to tackle problems in a methodical and comprehensive fashion.”

In addition, the case method allows students a chance to test ideas—and learn from mistakes—in a safe environment, says Kathie Amato of Darden Business Publishing. She also believes that students who learn through the case study method increase their ability to think through decisions once they’re in the corporate world, especially when they’re faced with morally ambiguous situations. “Because they’ve had to make decisions and discuss why they made these decisions, it’s so much easier when they’re out in the world faced with an ethical dilemma,” she says.

She describes a case she studied as a student, in which a company had to decide whether to recall a flawed product at a huge loss or continue to sell it at a profit. When students expressed horror at the very idea of selling a product with defects, the professor made the analogy that they were walking down a yellow-brick road.

Says Amato, “He told us, ‘Every time you make an unethical decision, even if it’s on a very minor matter, one of your yellow bricks turns red. Over time, all your bricks shift, and suddenly you’re not on a yellow-brick road any more, you’re on a red-brick road. The change happens one decision at a time.’ If his comments hadn’t come at the end of an hourlong debate, I don’t think they would have had the same impact. I would have felt I was being preached to. As it was, the case discussion was very compelling—almost a life-changing experience.”
contained. They can be taught in a class period. A teacher can start pulling more and more cases for assignments on a daily basis and add some interactive teaching.”

“I think the shorter cases are very much a response to the needs of executive education,” says Gray of ECCH. “Executives, particularly senior executives, find it unacceptable to have to read massive amounts of materials. So the whole emphasis is on producing high-quality material that’s much shorter in length and more easily usable by people in executive courses—though of course these cases are also usable by people in the MBA and undergraduate programs.”

**Classroom Prep**

While the case study can be an exhilarating experience for students, it can be intimidating for teachers—particularly those teaching cases for the first time. “One of the things that frightens new case teachers is, you don’t know what’s going to be said,” says Joy. “You get to class and you don’t know what curve ball is going to be thrown. Not only do you have to manage the discussion, but you have to lead it in a way that’s going to be productive.”

However, professors needn’t let their unfamiliarity with the process stop them from integrating case studies into their classrooms. All sorts of resources are available to help teachers become more comfortable with the case study format. First, many cases are accompanied by teaching notes—the author’s description of how the case should be used, what questions might be appropriate, and what kind of analysis might be expected.

“There’s also usually a what-happened section,” says Beamish. “What happened is what that particular company did. It may or may not have been correct. We try not to fall into the trap of saying, ‘Just because the company made this decision, it was the right decision.’ Clearly, it isn’t always.”

Books, articles, and workshops are available that introduce professors to the joys and hazards of teaching with cases. Gray recommends *Teaching and Writing Case Studies, A Practical Guide (Second Edition)*, written by John Heath and published through ECCH. He also notes that ECCH runs one- and two-day workshops that introduce professors to teaching and writing cases. ECCH is also producing a DVD on the topic. Parts of the DVD were filmed at sessions of the International Teachers Program held at the Stern School of Business and The Copenhagen Business School. In addition, Gray suggests sitting in on a veteran teacher’s case study class, if possible, to watch how he handles the discussion.

And, as always, individual preparation is key. “You do need to spend a lot of time with the case study you intend to teach so you know it absolutely inside out,” says Gray. “You have to be able to handle it better than the best student you’ll be teaching. Professors say that when they’re picking up a case for the first time, they might spend upwards of 20 hours in preparation, going through the analysis and working it through, seeing what alternative methods of analysis present themselves in case a student ends up going down that road. You want to be able to respond rather than saying, ‘Well, I never thought of that.’”

**A Case for the Future**

While case studies have experienced a great deal of change already, some providers think more is in store. Primarily, the effect of digital media is likely to be profound in the coming years. “I think we’re just at the beginning of the impact that multimedia presentations are having on cases,” says Amato. “I think we’re going to see huge, geometric growth where we’re pulling all sorts of media into the case to make it a rich, even more active learning experience.”

Beamish expects to see cases used in more institutions worldwide. He recounts a tale of a visit made to Ivey 15 years ago by a group of Chinese professors who had never witnessed the case study teaching method before. “They thought it was very interesting but that it would never work in China,” he relates. “Fifteen years later, those same people are on a state education committee that has required 25 percent of classes in China’s business schools to be taught by the case method.” As a result, many of Ivey’s cases have been translated into Chinese—and Ivey cases are also available in French, Spanish, and Korean. “I think the internationalization of management education really bodes well for the case method,” he says.

Widespread availability, up-to-the-minute relevance, and easy access are combining to make the early 21st century a golden era for the case study method. As new delivery methods make case studies even more engaging for students, these reliable teaching tools are becoming even more dynamic and compelling methods for conveying the basic precepts of business.
The Innovative Strat

For too long, strategists remained enthralled by the “brilliant plan.” But brilliant plans mean nothing to modern strategic management, say three of its practitioners, unless organizations can effectively execute them.

by Tricia Bisoux
Not long ago, strategic planning was all the rage among managers, many of whom worked under the belief that if they designed a great plan, success would take care of itself. Business courses in strategic planning filled fast. And many a business consultant formulated brilliant game plans for corporate clients—whether or not those corporations actually had the resources to put them into action.

Times, certainly, have changed. After all, any plan—no matter how impressive, comprehensive, or well-intentioned—is only as good as a company’s ability to execute it. Before a company acts on a plan, it must make sure it has the right personnel, resources, and support to make it a success.

Transforming business students into modern-day strategists is a key concern for management educators, including the three featured here: James Griesemer, Dan Schendel, and Veronica Hope-Hailey. While their perspectives may sometimes differ, they all maintain that educators must bring into sharp relief the fundamental trifecta of strategic management: goals, plans, and execution. In the fight for competitive edge, good strategists realize that one means nothing without the other two.
Strategy: In Focus

As dean of the Daniels College of Business at the University of Denver in Colorado, James Griesemer has viewed his business school through the eyes of a strategist. Each year, for example, Griesemer and his senior staff attend a retreat for several days to discuss the school’s strategy and develop a limited set of initiatives linked to its mission and strategy. During the year, the school also employs a number of processes designed to focus effort and resources on strategic goals and then monitor the results.

Griesemer is a frequent speaker on strategic management issues and regularly presents at seminars to management educators through AACSB International. Griesemer views the strategy of any organization, whether business or business school, as a reflection of its mission and the shared values of its employees. An imprecise mission and a disengaged staff are the enemies of good strategy, he emphasizes, while focus and common interest are its champions.

Intense competition and the speed of change are now the primary forces driving businesses. In many cases, responses to those forces must be mounted with limited resources; in higher education, this is obviously true. It’s the confluence of these forces that has made strategic management more important than ever before. When an organization has limited resources in a highly competitive environment, there is a razor-thin margin of error.

There’s no doubt that the business of business education has become increasingly competitive and complicated. Unfortunately, many managers have been led to believe that strategy, too, should be complicated and all-encompassing. Nonprofit organizations, business schools especially, often view their missions in extremely broad terms. As a result, the mission statements of educational organizations are often stated in broad terms, and can often seem ubiquitous and platitudinous. And yet, without a clear mission and vision, neither their goals nor the resulting strategy can be sufficiently focused to achieve significant organizational action or change.

Effective strategy, on the contrary, is based on a focus that flows first from an organization’s set of shared values, to its mission, to its goals. After all, an organization is, or should be, a group of people who want to accomplish something together—in their church, school, or business. That group shares values they view as important. Out of those values, the organization defines its mission, its true reason for being. Based on that mission, the organization creates a vision of a realistic and attractive future. With that future in mind, it establishes a set of goals, those statements of desired outcomes or positions in the market that are consistent with its vision.

Only then, once values, mission, and goals are in place, should strategy come in as a plan or pattern of action to help the organization achieve its goals, move toward its vision, and support its mission. This progression may seem fundamental, but it often gets lost in the strategic shuffle. As educators, we and our students must realize that strategy isn’t just about the plan. It goes beyond the plan. It’s a way of managing the whole organization in order to create a pattern of action that directly supports its values, mission, vision, and goals.

Without focus, organizations risk dissipating their resources on random initiatives. In a competitive environment, organizations that waste resources will flounder or fail altogether.

Real-world necessities such as tight budgets and small staffs have brought strategic management to the forefront. These necessities can help managers concentrate their resources only on those strategies that reflect their values, mission, and vision. In the current business climate, managers must know how to communicate effectively with their employees, not simply because it’s a nice thing to do, but to keep themselves and their employees aligned with the mission. Otherwise, they place their organizations at risk.

For example, Dell’s original strategy was to build computers to order and sell mostly to the business market. Initially, it succeeded. But in the early 1990s, Dell decided it could sell...
more computers if it went into the retail market at a time when Gateway was coming on strong and Compaq was everywhere. Dell began to flounder as its margins declined—a wonderful example of a company taking an action inconsistent with its core strategy. In less than a year, the company realized it was heading down the wrong path, corrected its strategic error, and has gone on to achieve remarkable success.

It’s certainly trite to say, “We must keep our eye on the ball.” But strategic management really is about keeping one’s attention on the most important goals. Strategic management is ultimately about focus, and focus doesn’t happen accidentally. There has to be a series of processes and protocols to make it happen.

Today, the pressures upon both public and private schools require that we manage strategically. To help their students become effective strategists, business schools must themselves become leaders in strategic management. They must align their annual projects and initiatives with their strategy and goals and seek innovations in strategy that will benefit themselves and their students. In the natural sciences, invention occurs in the laboratory before it is put to use in the real world. In business, however, most innovation occurs in the real world. It is our job to go out and find pioneering best practices, organize them, and bring them back to our schools and to our students.

Redefining Strategy

Dan Schendel has been following the development of strategic management as a discipline since the early 1960s, when it often existed under the auspices of “business policy.” As one of the discipline’s first practitioners, Schendel helped to facilitate its growth into a field of its own throughout the 1970s. He was the founding president of the Strategic Management Society, co-author of the 1994 book Fundamental Issues in Strategy: A Research Agenda, and has served as the editor-in-chief of the Strategic Management Journal since its inception in 1978.

Currently the Black Family Professor of Strategic Management at the Krannert Graduate School of Management, Purdue University in West Lafayette, Indiana, Schendel notes that the word “strategy” is now invoked in so many contexts that the word has begun to lose its meaning.

One of the most notable developments in strategic management has been the entrance of the word “strategy” into the lexicon of the layman. Everything has become “strategic.” For many of today’s managers, strategy is a hammer and everything else is a nail. When that’s the case, the word “strategy” means nothing.

This development, I suppose, is a tribute to the success of the growth of the discipline. Even so, it’s imperative that we redefine strategic management, disabusing students of the misperception that strategy is simply long-term planning according to a set of assumptions. Rather, it’s thinking of an organization as a dynamic entity, in terms of the allocation of its resources and its position relative to its competition.

We also must distinguish between “strategy” as mere act and “strategy” as a true reflection of an organization’s operations. All organizations have a strategy that they act on, whether or not they realize it. And they may be incredibly effective in its execution. But execution means nothing if the strategy does not suit the organization. As Peter Drucker puts it, “It’s the difference between doing things right and doing the right things.”

When I worked as a consultant, I would ask a company’s managers, “How do you make money in this business? What are your costs? What value are you creating and for whom?” It always surprised me that people would not have a deep understanding of why or how they made money doing what they were doing. And if they didn’t, it was my job to find out.

If students understand those questions in a fundamental sense, they have the makings of good strategists.

Our students must understand those questions within today’s complex environment, which refers to all those events and situations that will influence them, but they cannot influence. If they’re planning for a picnic, they can hope for good weather but they must prepare for the possibility of rain. It’s no different in business. They must be able to deal with environmental influences. They must make assumptions about what’s likely to happen but plan for disaster.

Perhaps most important, they must know that strategy is now about taking stock of resources before taking action. In strategic management, there has been an emerging interest in how a company creates intangible assets, such as its knowledge, capability, core values, alliances, and networks. Trying...
to understand a company as something more than its physical assets is an incredibly difficult thing to do. Even so, students must know how to take into account more than an organization’s resources; they must somehow assess assets that don’t appear on the books.

It will become especially difficult as corporations strive to create and keep their assets and resources in a global environment that is often beyond their control. At one time in the U.S., we had 50 different states making laws that created problems for business and government. Now, think about 150 or 200 countries making laws that apply to international business. Take, for example, Microsoft getting by U.S. antitrust laws but having trouble in the European Union. Or, the EU blocking the Honeywell-General Electric merger, which had already won approval in the U.S. government.

Understanding the complexity of a company’s assets and resources, capabilities, and goals in such a shifting environment will be crucial in the years to come. Imparting that skill, that understanding, to students is now the business educator’s challenge.

Managing ‘Below the Cloud Line’

A professor of strategic human resource management (HRM) at Cranfield School of Management in the United Kingdom, Veronica Hope-Hailey directs much of her research to helping corporations effectively manage change and achieve their goals through their personnel. To implement change, she points out, corporate leadership must first understand the challenges faced by individuals throughout the company.

Since 1993 Hope-Hailey has participated in the Leading Edge Research Consortium, examining HRM and change management within eight participating companies. She is also project director of the Cranfield Change Management Consortium, working with 12 multinational companies to examine corporate environments for signs of trouble ahead. The verdict is often unfavorable, she says. But only by seeing the realities of their operations can companies transform anemic workplaces into robust environments where employees are empowered and corporate strategies can flourish.

In the last ten years there have been tremendous changes in the workplace that have enormous significance for strategic management. I saw these changes in action through a study at London Business School, where I was a visiting fellow. In the study, my colleagues and I followed seven major corporations, including Hewlett-Packard, Citibank, and GlaxoSmithKline, from 1993 to 2003. Through board-level interviews, we discovered each company’s strategic intentions and then surveyed managers at the middle and lower levels of its workforce to discover their perceptions and reactions.

What we found was that massive merger and acquisition activity—divestments, restructuring, downsizing—has led to a decrease in corporate loyalty and employee commitment over the last ten years. As a result, lower-level managers are often no longer willing to change their behaviors or attitudes to suit the strategic intentions of senior management. Without job security, they no longer identify with those at the top or remain loyal to their cause.

From our research at Cranfield into change management, we know there is a growing belief among middle- and lower-level managers that senior managers do not know or care about what their subordinates feel or think. In my interviews with lower-level managers, I heard several managers use a very fitting analogy to describe their workplaces. They said that senior management consistently designed strategies “above the cloud line.” That is, when senior managers are above the cloud line, skies are clear and they can see for miles. However, they fail to look 37,000 feet below to the murky reality at ground level. These upper-level managers don’t realize that their true change leaders are their lower- and middle-level managers working in the trenches; they often don’t realize the effects of their directives. As one middle manager put it, “It’s come to the point where I’m considering whether or not to stay within the organization, or in the corporate world, because it seems to conflict with my values so much.”
The most successful strategists, then, will be those who are willing to look critically and objectively “below the cloud line.” These managers will recognize that leadership has been passed down to the lower echelons of the organization. They’ll need to offer managers at those levels an arena to express the difficulties they face in fulfilling new roles and the frustration they feel when forced to translate wholly rational strategies into people-based strategies designed for the workforce. The companies we work with in the consortium should be applauded for the fact that they’re allowing objective research teams to come into their organizations, survey their lower and middle levels, and offer a critical assessment of what their workplaces are like.

At this stage, we’re in the early phases of new research that will measure and assess what generates organizational change and what prevents it. But even at this early stage, we know this: Those companies that recognize the critical role that middle- and lower-level managers play in their strategies will be more successful than those that don’t. And the extent to which companies engage in two-way—not top-down—communication will determine to what extent middle- and lower-level managers are willing to commit to the company and take responsibility for effecting strategic changes.

The role for business schools in these new issues for strategic management is to present critical business case studies that do not portray the workplace as a rational, well-functioning engine, where as long as we find the right buttons to push, all will come right. Instead, it is the responsibility of academics to present the workplace as a place where there are tensions, contradictions, and difficulties. Only then will we equip managers to deal with workplace realities.

Likewise, only then will senior managers realize that successful strategies do not keep pace with the increasing speed of change through more efficiency or programmatic change. Rather, they need to increase the commitment and responsiveness of people within the organization to implement change. The military, for example, has fostered a culture of immediate responsiveness to events—whether war or natural disasters—that business would do well to emulate. Imagine the military general who says, “There has been an earthquake in South America. Once I formulate my strategy and create an organizational plan, I should be able to respond in six months.” That is simply not acceptable.

Over the next few years, we must try to understand how large, mature corporations can develop an agility and immediate responsiveness to change so they can implement strategy faster than they can today. We’ve always known that managers must understand the external marketplace, their competitors, and political, economic, and social trends. But in addition, before they design and formulate strategy, they’ve got to have a realistic picture of what their workplace is about. For corporations and business schools alike, the future of strategic management lies below the cloud line.
Rapid growth and constant changes in health care have left that industry sick with the need for business expertise. The cure just might be the MBA with a focus in health administration.

When you go to a hospital to seek medical attention, you’re secure in the knowledge that your nurse is an RN and your doctor is an MD. However, it might not occur to you to wonder if the top administrators have MBAs. Today, the chances are pretty good that they do. As health care becomes increasingly complex—with changes in insurance regulations, managed care, and the very makeup of physicians’ groups—health care providers are scrambling to keep their facilities profitable and in compliance with the law. Hiring someone who understands OB in the OR can be the smartest move a health care organization can make.

Business programs with a health care emphasis have proliferated in recent years as b-schools have realized the great potential of the medical market. While nurses, doctors, and hospital administrators are obvious targets for health care MBAs, the field also encompasses insurance company employees, medical device salespeople, pharmaceutical reps, ambulance drivers, biotech researchers, and Wall Street stock analysts who cover the health care field.
It appears that the need for well-trained health care professionals will only continue to grow. In the U.S. alone, health care accounts for approximately 14 percent of the gross domestic product, a number that could jump to 17 percent by 2012, according to the Web site of the journal *Health Affairs*. This means that 14 percent of the people with MBA degrees should be working in the field of health care. Obviously, that ratio doesn’t hold.

“I recently forecasted the number of people required in the health care field and the number of students being produced for the field,” says Vasanthakumar Bhat, who was program coordinator of the health systems management MBA at Pace University’s Lubin School of Business, New York City, until that program went on temporary hiatus. “I realized there was a gap of about 250 for New York state alone.” He expects that number to escalate.

**Healthy Programs**

While some health care programs—like the ones at Georgia State University and Boston University—have been in place more than 30 years, others have been crafted within the past decade or so as managed care and federal insurance programs have become more complicated. Others are being organized to open in the future. For instance, the Hankamer School of Business at Baylor University, Waco, Texas, is starting a health care concentration this fall, seeing it as a natural outgrowth of the school’s strengths in medical education and research.

“Our goal is to become a ranked top-20 program within five years,” says James Henderson, Ben Williams professor in economics and acting director of the Baylor program. “We felt if we were going to start such a program, we might as well strive to be among the best. Our short-term plan is to apply for provisional accreditation through the Accrediting Commission on Education for Health Services Administration with a goal of full accreditation within a reasonable time frame.”

Whether formally accredited or not, most health care MBAs give students a solid foundation in business courses and use electives to teach students about the field. The subjects to be covered in the specialization are exceedingly broad.

At the Robinson College of Business at Georgia State in Atlanta, courses examine topics such as health law, operations management in the health care field, U.S. health care systems, ethics, and health policies. “The policies class deals with broader issues in health care, all the way from how to get new prescriptions from Medicare to how does one justify new health care facilities,” says Andrew Sumner, director, associate professor, and Joe Taylor Chair of the Institute of Health Administration at GSU.

The Aston Business School at Aston University offers an MSc and an MBA in public services management at its campus in Birmingham, England. Courses cover issues of public service and offer collaborative sessions with social care colleagues who discuss interactions among various agencies and professions. “Health care in this country has to operate with all the different agencies now. Education, health services, and social care are all fairly integrated,” says Jill Schofield, senior lecturer and tutor in health care management at the school.

B-schools use electives and special courses to reinforce the health care message. Every semester at Baylor, all MBA students take a one-hour course called Focus Firm, in which they practice quantitative skills in analyzing a real company. In the second semester, instead of learning about the Focus Firm with other MBA students, the health care students will focus on a case study offered by the American College of Healthcare Executives. “The group has an annual meeting every year that revolves around a nationwide case competition, and our students will focus on that case competition in their second semester,” says Henderson.

Several schools are starting to emphasize the more technical aspects of health care. For instance, at Boston University’s School of Management, a course discusses how hospitals and physicians make decisions to adopt new technology, how tech manufacturers research and develop new products, how they gain approval of new devices from the Food and Drug Administration (FDA), and how new technology is paid for by insurance companies and Medicaid/Medicare. A new course on biotechnology teaches students some of the science of the field, as well as its financing and regulatory systems.

“We also cover venture capital markets and how to obtain the capital to build biotech firms,” says Alan Cohen, professor of health policy and management, program director for the health care management program, and executive director of the Health Policy Institute at Boston. “And then we discuss the issues of intellectual property and testing for biotech products.”

Those courses about finance and venture capital can be extremely valuable in the health care field. “If you have a
cost-reduction idea and you can start a business, health care is a very attractive area," says Pace’s Bhat. He recommends electives in how to start a health care venture—a small business that can support hospitals, provide better long-term care, reduce costs, or introduce new technology. These adjuncts to the field can be profitable for the entrepreneur and extremely valuable to the health care system itself.

**Is There an Intern in the House?**

For several schools, what’s as important as the work in the classroom is the work outside the classroom—specifically, internships and residency programs designed to give students hands-on skills.

A crucial component of Baylor’s new program is a seven-month internship that falls right before the final semester of classes—generally, the summer and fall of the students’ final year. “We felt that the most important thing for a new program would be to develop a very high-caliber field experience for students,” says Henderson. For students entering this fall, officials have lined up seven paid internships with hospitals in Houston, Dallas, San Antonio, and Waco, and a private consulting firm in Washington, D.C. These internships will be particularly vital for students who enroll in the program without any background in health care. “If they’re successful at their internships, many will receive job offers,” Henderson believes.

Students at Boston must complete a 400-hour field placement within a health care organization in the summer between their first and second years. Placement options are plentiful, from local hospitals to biotech firms and medical device firms. “We have a very formalized process for placing students,” Cohen says. “We send out a minicontract so that the preceptors of these organizations will define exactly what the project is for the student and what the final product will be, and then there’s a formal evaluation process at the end of the summer.” Projects focus on areas such as marketing, market research, financial analysis, information systems development, quality control, and strategic planning.

Georgia State students also bridge their coursework and their careers by completing a paid residency with some kind of health care facility—a hospital, physician group, consulting firm, insurance company, or managed care organization. The internship takes place after all the other coursework is completed.

“Is there a growing list of organizations that sponsor one- or two-year residencies or fellowships, similar to a physician’s residency, where students apply competitively with people all over the country. Up to 400 people may apply for some of these positions. We encourage our students to think big and compete for those,” says Sumner. Sumner credits the residency program with helping GSU maintain a 100 percent record of employment for students graduating from the health care program. “Once the student has moved to Moline, Illinois, to work on the John Deere health plan, if it proves to be a good match between

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**Medical Advances**

Changes in the health care field will be reflected quickly in specialized MBA programs, and administrators of such programs expect grand-scale restructuring in a number of key areas in the near future:

**Insurance:** “As managed care has been beaten back, we’re beginning to see double-digit price increases for health care insurance,” says Andrew Sumner of Georgia State. “We have some of the same pressures to reform health care that we had in the early 1990s. There will be a lot of effort to control costs.”

**Information technology:** While health care institutions are woefully behind the curve when it comes to information technology, UCI’s Patrice Werschmidt expects sweeping changes in the way IT affects medicine. “When you consider that your doctor still scribbles a prescription on a piece of paper, you take that paper to the pharmacist, and the pharmacist deciphers it, you can see how far we have to go,” she says. “It would be so easy to put prescription information into an online system that links directly to the pharmacist.” She also foresees a day when an individual’s
“If you have a cost-reduction idea and you can start a business, health care is a very attractive area.”

—Vasanthakumar Bhat, Pace University

employer and student, the company is likely to offer a full-time position. We usually recommend that the organization review many resumes and interview three to five people before making a selection. So they’ve already undergone the same kind of process they’d go through if they were hiring a full-time person. After the residency, the company can feel comfortable offering that student a job, knowing it’s already looked at other candidates.” He estimates that 85 percent of the students have been offered jobs at the companies where they’d completed residencies.

Other schools find it difficult to incorporate internship requirements into programs designed for students who are already working full-time. Even so, they often offer students a chance to examine the health care world outside the school borders. Aston’s students practice comparative learning by going on field trips to other schools and private hospitals—sometimes as far afield as Ireland and the U.S. “Health care delivery throughout the world is very different, although health care planning tends to be the same,” Schofield says. “There are some very valid cross-national comparisons throughout the world, but we have to remember how the context makes them different.”

At the University of California in Irvine, which also draws full-time working professionals to its program, students participate in three weeklong residencies—one in Washington, D.C. There, participants meet with health care policy makers, Congressmen, representatives from the FDA, and lobbyists. “They get a chance to really understand first-hand how federal policy is enacted,” says Patrice Werschmidt, director of the health care executive MBA program. “Almost every person who comes back from the trip says it’s worth the cost of tuition.”

The Student Body
Schools use a mix of methods to inform potential students about their programs, though most administrators readily admit they could do more. In fact, many professionals in the field are unaware that such programs even exist. Says Bhat, “Typically, people in hospitals are promoted through the line. If they start as administrators, they ultimately become managers. An MBA is a new idea for them.” He advises holding

health history will be kept electronically and be widely available, much like credit histories are today.

**Medical technology:** Future health care students will need an excellent understanding of the medical technology industries, predicts Alan Cohen of Boston University. “They’ll need to know how advances are brought to the marketplace, and how physicians and hospitals decide to adopt those new advances. I believe we’ll see more courses aimed at moving people into the technology industries,” he says.

**Drug reimbursement:** James Henderson of Baylor forecasts a greater emphasis on the quantitative aspects of health care as organizations like Medicaid benchmark certain drugs based more on cost than effectiveness. “Typically, a new drug comes on the market that might be more effective than the current drugs available, but it’s more expensive,” he says. “Is the added cost worth the extra effectiveness? It’s a question that is not being addressed. Reimbursement organizations are just saying, ‘We’re going with the cheaper of the two. If you want the more effective drug, you still only get the cheaper price.’ I think the direction we’re moving is one in which everyone is going to have to justify their treatment options and their procedures, based on a more quantitative approach.”

**Politics:** Many of the changes Aston’s Jill Schofield anticipates in the U.K. revolve around “health care policy as a function of the political will,” she says. For instance, a new initiative would allow some hospitals to have independent public status while still being funded by general taxation; thus, they could have more freedom to raise money and make capital investments, while they’d have a new governance structure with their own board of governors and management board. “That’s going to be a big thing here,” she says.

**International relations:** Schofield expects continuing emphasis on global public health issues such as SARS and AIDS. “We’re also looking at health in developing nations, because many of our students want to work elsewhere,” she says. “In this country, health care is a big export market, a huge knowledge industry.”

**Inter-agency collaboration:** As health care around the world gets more complex, health care organizations will have to work more closely with various agencies and facilities. Says Cohen, “Understanding how to work in teams will be an important skill for students to have when they go into the field. The multidisciplinary health care teams are no longer professionally dominated by physicians. Students will have to know how to work with nurses, administrators, pharmacists, and a whole host of other individuals with very different skill sets.”
information sessions at local hospitals, creating brochures and mailing them to middle managers at hospitals, and being sure to tell employees how management knowledge can improve their department’s function and profitability.

UCI conducts monthly information sessions about its program, inviting prospective students to sit in on classes. The school also advertises in health care journals and sends direct mail to targeted groups. Aston markets its health care programs by holding seminars at hospitals and health authorities, distributing fliers and leaflets, and mailing about 70,000 direct mail pieces a year. The school also places newspaper ads and attends trade fairs to alert prospective students to their programs.

When students do enroll, they’re a decidedly eclectic group, perhaps more heavily weighted toward women and minorities than most MBA programs. At Georgia State, slightly more than half the health care students are women; last year, Boston’s program hovered at 75 percent women. UCI also has a good mix of genders and minorities, with about 40 percent of the most recent class female, “and the greatest ethnic mix of any of our programs. I think that’s a reflection of the health care field,” Werschmidt says.

Other schools are working to improve their minority attendance. “An Institute of Diversity has been established through the auspices of the American Hospital Association and the Association of University Programs in Health Administration, and we participate in that,” Sumner says. “At the graduate level, the Institute tries to find short paid summer internships for minorities, and we help oversee that process for the students.”

Programs vary widely as to how much real-world experience a student must have to enroll. At Georgia State, students need neither business nor health care backgrounds to be admitted. “We find that many were pre-med majors and biology majors who decided that being a physician wasn’t their cup of tea, so they looked for other options in public health,” says Sumner.

Other programs require students to have practical experience in the field before applying. For instance, UCI’s health care program is an executive MBA that meets once a month over a two-year period. Candidates must all have significant work experience in the health care industry; most are currently working in the field.

Students who don’t have a business background may require careful nurturing once they enroll in a business-oriented health care program, says Bhat. “They don’t know what you mean by the terms financial management or accounting. They get scared. They need a lot of advice. You have to tell them what courses to take in what order, because they don’t know which courses form the basis for the next one. They need much more support and advice than other students.”

Participants in most programs tend to be domestic because many of the classes are focused on health care in that country, but some foreign students do apply. Says Henderson, “If they’re working in a hospital in Ghana or

“In many parts of the country, and certainly here in Boston, health care is still an engine that is driving the local economy. Given that health care makes up one-seventh of the national economy, it’s still a growth industry.”

—Alan Cohen, Boston University
some other urban area, the nuts and bolts are basically going to be the same as they are in Waco, Texas. The delivery systems are similar, though the finance systems differ. In the health economics class, we will be doing a lot of microeconomic and macroeconomic evaluations, and in the macro part we will be comparing systems.”

Once students graduate, they enter a wide variety of fields, such as managing physician practices or hospitals, consulting, running IS departments in health care facilities, and marketing health care services. “We see the same typical career progression we see with other MBAs, where they move up beyond being managers to being VPs, COOs, and CEOs within organizations. They need that MBA to propel themselves to the next level,” says Werschmidt.

Benign Growth
While a number of b-schools around the world already offer solid health care programs, the field itself is growing rapidly enough to ensure that other schools will begin looking at offering a similar concentration. “I think the future for these kinds of programs is relatively bright,” says Cohen. “In many parts of the country, and certainly here in Boston, health care is still an engine that is driving the local economy. Given that health care makes up one-seventh of the national economy, it’s still a growth industry.”

Schools might consider these recommendations before going forward:

- First, analyze the local market to see what the health care needs are, then tailor the curriculum to those needs. Also, Sumner says, determine how much to invest in the health care program and whether to make it a concentration, a major, or a full-fledged degree.
- Don’t start such a program just to jump on the bandwagon, Schofield cautions. “And don’t underestimate how complex it is,” she adds. “Don’t treat it just like any other functional area. Health care is unique.”
- Make the program flexible to accommodate working professionals. “If they want to come in from 6 to 9 at night, you should try to organize that,” says Schofield.
- Institute a board of advisors that includes physicians, nurses, administrative personnel, and representatives from HMOs and pharmaceutical companies. “The advisory board can give you ideas about new directions in health care so that you see new areas for adding electives,” Bhat says.
- Consider establishing some kind of field experience requirement. If you don’t have the resources for an internship program, says Sumner, “decide how else you can facilitate the process of helping your students find positions in the field.”

Organizational Update
Business schools aren’t alone in looking to make health care settings more businesslike. In late 2001, a group of health care executives and existing health care organizations founded the National Center for Healthcare Leadership (www.nchl.org), specifically to ensure high standards for training and recruiting today’s health care administrators. According to Georgia State’s Andrew Sumner, “The big corporations of the world, like GE, have high-level executive training. The military has its war colleges. Because the health care system has been localized within hospitals for so long, there hasn’t been a unified way to give administrators advanced career training except to identify the best and the brightest and give them an extra leadership push. NCHL has met with other organizations to begin a dialogue of how to improve education.”

One of the sponsoring organizations for NCHL is the Association of University Programs in Health Administration (www.aupha.org), a not-for-profit association of university programs, faculty, practitioners, and provider organizations dedicated to continuously improving the field of health care. AUPHA is also affiliated with the Accrediting Commission on Education for Health Services Administration (www.acehsa.org), recognized by the Department of Education as the only organization to accredit master’s level health administration programs in the U.S. and Canada. A variety of master’s level programs can be accredited through ACEHSA, and they may be housed in a wide range of university departments, from business to public health.

Maintain an extensive network of alumni. Boston’s alumni often act as guest lecturers, serve as preceptors during field placement sessions, or hire recent graduates. “Our alumni have been put to use every single day,” Cohen says. “They are in some of the most responsible positions in the health care system, both regionally and nationally.”

Even as other MBA graduates struggle to find jobs in a tough economy, administrators of these programs say they are still achieving virtually 100 percent job placement. As health care becomes an even bigger component of the economy, and as the field itself grows more complex, the need for these graduates will only increase. For this particular specialized MBA, the prognosis is excellent.
I Don’t Overlook Nonprofits!

While business educators often channel students toward the Fortune 500s and lucrative startups, the best way for business students to use their MBAs may not be in the business world after all. The big secret—the one b-school professors don’t often talk about—is that nonprofits are in desperate need of MBAs.

A generation ago, there were no organizations helping people with breast cancer. Today there are dozens. The nonprofit sector continues to grow, even in times of recession and geopolitical uncertainty. Students can profit from this trend, not only with a well-paying job, but also with a career where their skills will be appreciated and their sense of satisfaction can skyrocket.

Ever since Ronald Reagan began dismantling The New Deal, Americans have become more adept at replacing and improving on government programs. In the last decade, 50,000 new nonprofits have been launched. Many executive positions are the result of an explosion in family and community foundations. Even during the recent economic downturn, the nonprofit sector has been surging ahead.

Smart job seekers will look beyond the traditional educational and health-related jobs to the array of local, national and international organizations serving every imaginable group in our society. After all, in the business world, our students are foot soldiers in the vast MBA army; in the nonprofit sector, however, they can immediately distinguish themselves. Better yet, a sense of satisfaction isn’t the only reward of a business career with nonprofits. Strong nonprofits—and there are many—will pay MBAs well if they respect their work.

In general, nonprofits often are long on principle, but short on business experience. And the best asset our students can offer those organizations is an understanding of how the business world works. For example, our students won’t break into a sweat when reviewing a budget. They won’t scratch their heads when members of the board mention Morgan Stanley or Berkshire Hathaway. They won’t see management as an inconvenience, but as an opportunity to provide leadership. In a world where dedicated professionals bring many skills to the table, our students will be the ones with the business skills to maximize personal talents and organizational efficiency.

When it comes to appreciating business acumen, nonprofits have truly entered the 21st century. Their boards are no longer accepting candidates for leadership positions who don’t relate to them as genuine peers. Instead, they’re seeking creative businesspeople who put a premium on good ideas and execution. And competition has entered the nonprofit world, making trained business professionals even more valuable. If MBAs are “on the money,” nonprofits will compete for them with attractive compensation and benefits packages.

In spite of the attraction of nonprofits, as a business educator you still may think your students just won’t be interested in this sector. Are you concerned your students won’t think that a nonprofit career could be fast-paced or challenging enough? Encourage them to think again. Have them imagine, for example, leading the American Red Cross in the wake of the September 11 attacks; Teach for America at a time when educational reform is at the forefront; or the Peace Corps as globalization and technology continue to bring the Third World into the First.

If you think your students will feel that nonprofit careers might not satisfy their entrepreneurial spirit, challenge them to look at the sector more closely. When they carefully examine a successful nonprofit, they’re bound to find a leader with entrepreneurial savvy. That entrepreneur could be an MBA who’s willing to create new alliances, find better ways to deliver services, and offer a product that is the best in its class.

Once MBAs realize the potential nonprofits have to offer, your students must be encouraged to learn the buzzwords unique to nonprofits. They should know that their supporters are called stakeholders instead of stock-

by Michael M. Appell
holders, for example. That doesn’t mean stakeholders can’t make our students’ lives miserable if they don’t perform well. It just means they don’t have any stock options to lose if they have a bad year.

In addition, as future nonprofit leaders, students should know how to rub shoulders with movers and shakers in the business world—with the executives who serve on their boards, lead their committees, and offer guidance on strategic planning. Rather than toiling away in some faceless organization, unnoticed for years, an MBA leader can gain immediate visibility as a nonprofit executive. Some corporate leaders might be so impressed that our students wind up on their payrolls! (It’s always nice to have options.)

Finally, they must know that maintaining a sense of humor will be critical, especially when donations are down because of unforeseen catastrophic events that everyone said could never happen. Your students should be prepared with a witty response when asked why they’re studying *The Wall Street Journal* instead of *The Chronicle of Philanthropy*. If MBAs can master the intricacies of macroeconomics, they can probably answer most of the other questions they’ll have to face.

As in any career, there is no guarantee of long-term success. But look at it this way: When your students are facing a mid-life crisis and want to give something back to their communities, at least they won’t have to change jobs—unlike many of their peers. ☺

Michael M. Appell is an adjunct professor of corporate ethics and social responsibility at Brandeis University’s International Business School in Waltham, Massachusetts.
UW Room Opens for Trading

Students at the University of Washington Business School in Seattle will be able to track the upturning stock market for themselves at the school’s new NASDAQ student trading room. Robert Greifeld, president and CEO of the NASDAQ stock market, was on hand for the official opening of the trading room last October.

The new facility is the first college-based trading room to open in the western United States, say school representatives. The room features a ticker showing stock prices; a display board running stock quotes from NASDAQ, Dow Jones & Co., and other data on continuous feed; two television monitors with live news coverage of financial markets from CNBC and CNNfn; and 12 trading stations. Each station is equivalent to a trading desk in a Wall Street firm, complete with dual computer screens, one of which provides market data from Reuters.

Although the room’s computer terminals won’t allow students to complete financial transactions, the space serves as both classroom and laboratory, where students access real-time data to manage portfolios and experience firsthand what market conditions make a company a winner or loser on Wall Street. “The trading room is akin to a chemistry or physics lab,” says Vance Roley, UW professor of finance and associate dean for academic and faculty affairs in the business school.

Seattle has not had a stock exchange since the early 1930s, when the Northwest Commodities and Stock Exchange operated in its downtown. Bringing a trading room back adds “a realistic dimension to the classes we teach about risk management and futures and options,” says Jefferson Duarte, a UW assistant professor of finance and former Wall Street bond trader.

The new trading room was partially funded by a $250,000 grant from the NASDAQ Stock Market Educational Foundation.

TOOLS OF THE TRADE

LearnTrac and PocketClassroom Designed for Interactive Learning

Handheld computers are quickly becoming a staple of the business world—and now they’re on their way to becoming a mainstay in the classroom. eLearning Dynamics, a company based in Washington, D.C., has designed two software products to create an interactive classroom.

LearnTrac (for the Palm operating system) and PocketClassroom (for Pocket PCs) allow students to respond electronically to quizzes, polls, and discussion questions via wireless PDAs. The data is then transmitted immediately to instructors’ computers, indicating how each student responded and what percentage of students answered correctly.

“The software offers educators tools such as instant messaging and ‘test wizards’ that allow them to develop quizzes spontaneously in the classroom and receive responses back in ways that traditional methods simply do not permit,” says Chase Weir, chairman and co-founder of eLearning Dynamics.

There is a widely held misperception that software such as LearnTrac and PocketClassroom “replaces hand-raising,” Weir remarks. In response, he points out that these learning tools actually increase student attentiveness and participation.

“Most students probably won’t get called on in a lecture with 100 or more students, even if they know the answer to a question,” says Weir. “With this software, the professor has a powerful tool to determine effortlessly whether each student has read the homework assignment and is paying attention. You have 100 percent participation.”

The software also allows professors to ask open-ended questions and receive a response from each student for discussion. It includes features that account for timing, allowing students to respond if they think they know the answer or when they’ve finished a particular problem.

LearnTrac and PocketClassroom already are in use at the Bryan School of Business and Economics at the University of North Carolina at Greensboro, which received 40 handheld computers contributed by Palm. Such software, says Don Sowers, the first instructor to test the program at the university level, may eventually change how instructors approach the classroom.

“It will replace many of the things we do and help us do some things differently. With LearnTrac, I know instantly how well students are learning the material. Otherwise it would be weeks into class, after the first test, before I knew how they were doing,” says Sowers. “As educators, we are really trying to teach and engage our students in the learning process, and this is a tool to help us do our jobs better.”
Henley Explores the Age of Interactivity

In a move that indicates just how important interactive devices such as cell phones and PDAs have become in our lives, Henley Management College in Oxfordshire, England, has created its International Centre for Media, Technology, and Culture. Officially launched in August 2003, the Centre will focus on empirical research that looks into how new mobile, media, and communications technologies are affecting the ways people live, work, and buy.

The results of such research could have far-reaching consequences for business practices, employment structures, and marketing methods, says Michael Hulme, director of the Centre. Hulme sees the Centre as an important resource to help business and education understand how technology is transforming culture.

“It is very important to understand mediated lives, if you will—how consumers and businesses live in a world that is essentially understood and derived from media and technologies,” says Hulme. “Our work is exploring what this is going to mean for organizations in the future.”

The Centre already has a slew of projects underway, including a behavioral study of interactive TV users; a survey that explores the relationships people have with their mobile phones; and research of broadband adoption and mobility within SMEs. Other activities include workshops and networking events and collaborative research projects with business schools worldwide.

Much of the Centre’s work targets mobile devices, Internet applications, contact centers, instant messaging, and interactive television that allows users to record and organize their television viewing. All of these technologies are becoming major forces in the global environment, as more people use them to exert more control over their daily experiences, Hulme points out.

“We’re becoming more interactive with devices. We expect to be able to exercise choice and to have more control over what’s going on. As we learn to become interactive, we also learn to control how we are contacted, open up newer channels, and change structures and formats,” Hulme says. “The ways people adapt and eventually use interactive technologies are very difficult to foresee. However, they’re changing in ways we must understand.”
A New Way to Research

A new business-oriented online search engine was recently launched by the eBusiness Research Center (eBRC) at Penn State University’s Smeal College of Business, University Park, Pennsylvania. The new engine, titled SmealSearch, could become one of the most comprehensive collections of business research documents on the Internet, say eBRC representatives.

SmealSearch, located at http://smealsearch.psu.edu, finds and catalogs a wide variety of materials, including academic articles, working papers, white papers, consulting reports, magazine articles, and published data about business. It does so by searching the Web sites of universities, commercial organizations, research institutes, and government departments. It provides users with early access to the newest working papers and notification when new documents are added to the database.

SmealSearch categorizes information by author, title, publishers, abstract, and citation rates. In addition, SmealSearch accepts user submissions.

Traditional search engines on the Web only go so far when it comes to

Newsbytes

PCs for Iraq
Madar Research, a research firm based in Dubai, United Arab Emirates, predicts that Iraq will purchase 450,000 PCs every year between 2004 and 2008. The firm also estimates that the country’s IT spending will surge up to US$1.42 billion by 2008, as it rebuilds its technological infrastructure. The rebuilding has already begun. In July, seven Iraqi ministries and three Baghdad community governments were furnished with computers, copiers, and printers by an aid organization.

Too Much Information?
The newest challenge facing business IT professionals may be “information life-cycle management” (ILM), the ability to cope efficiently with the deluge of data now descending on today’s companies. Computerworld reports that when users at the recent Storage Networking World conference were polled electronically, 33 percent said they planned to implement an ILM strategy in the next year, while 30 percent said they would do so within two years. ILM includes identifying appropriate data storage formats, backing up data, and purging obsolete data. The problem facing IT specialists, however, is that reliable products with which industry could launch an all-out ILM strategy effectively are still in development.

E-Fraud on the Rise
According to security vendor VeriSign Inc., Internet fraud is increasing as much as, if not more than, Internet use. In its study titled “Internet Security Intelligence Briefing,” VeriSign found that while 81 percent of security incidents, such as hacking, originated in the U.S., the U.S. generated only 48 percent of online fraud. Of all U.S. online transactions, 6.2 percent were fraudulent, with 52 percent of those fraud attempts coming from outside the U.S. The lack of legal jurisdiction over international fraud contributes to the problem, the study found.

Grid for Learning
In October, the Chinese Ministry of Education and a dozen universities launched a new computing grid that may become the world’s largest used for remote learning. By 2005, it may become one of the largest computing grids in the world. The grid, which is powered by 50 IBM xSeries servers, will handle applications for institutions such as the University of Hong Kong and Peking University.

Quick, Not Easy
Last October, the Geneva-based European Organization for Nuclear Research (CERN) and the California Institute of Technology in Pasadena set a new speed record for transmitting data via the Internet. CERN announced that it sent 1.1 terabytes of data at 5.44 gigabits per second (Gbit/sec) to a lab at Cal Tech in 30 minutes, surpassing the previous record of 2.38 Gbit/sec. That feat is equivalent to sending the data on a full-length DVD movie in 7 seconds. Researchers on both ends of the transmission hope that this record will move one step closer to instantaneous transmissions of large amounts of data over the Internet.
academic research, says Lee Giles, David Reese Professor at Penn State’s School of Information Sciences and Technology and creator of the technology on which SmealSearch is based. “In the future,” he says, “we predict the evolution of increasing numbers of powerful niche search engines that address the specific needs of specific audiences.”

SmealSearch is built on the CiteSeer technology platform, which is equipped to develop and deploy search engines in other disciplines such as biotechnology, entrepreneurship, and physics. The engine represents the second search engine launched by eBRC in the last year, following the late-2002 launch of eBizSearch, which finds information related to e-business.

BestofBiz Gold Takes Aim at Exec Ed

In the higher education market, information has become a powerful currency, one that the U.K.’s London Business School hopes to convert into growth for its executive education. It recently launched a virtual learning environment, BestofBiz Gold, an enhanced and expanded sequel to its award-winning online resource for business information, BestofBiz.com.

BestofBiz Gold provides hundreds of articles and essays on business, as well as access to mediated discussion groups and Web-based conferencing. It is available only to the school’s executive education clients and corporate market, explains Russell Altendorff, director of information systems. “It provides us with a competitive advantage over other business schools that have not created such a content-rich portal for their clients,” he says.

LBS created the site in association with Bloomsbury Publishing Plc. In addition to publishing the Harry Potter book series, Bloomsbury owns a comprehensive business database, BUSINESS: The Ultimate Resource, which is included on BestofBiz Gold. The site is maintained by 30 business information and library professionals and is regularly updated as the LBS and Bloomsbury databases grow.

Offering BestofBiz Gold is a way to solidify the school’s place as a primary provider of executive education, says Altendorff. “In the current climate, we feel we must protect our executive education market,” he says. “Customized for executive education, BestofBiz Gold helps us retain more students and keep growing our base of students.”

Ironically, the U of California – Berkeley information management study also found that information stored on paper, such as books and documents, has increased 43 percent since 1999, as people print out electronic documents. However, film photography is giving way to digital photography, with an approximately 9 percent decline in the use of film since 1999.
If you want to feel discouraged, outraged, and simultaneously enlightened about the current state of the stock market and the corollary issue of corporate excess, turn to Roger Lowenstein’s cynical and fascinating *Origins of the Crash: The Great Bubble and Its Undoing*. Carefully and clearly, financial reporter Lowenstein explains how the American financial system got to where it is today. He starts with a description of the stock market in the 1970s—an entity which at the time received only mild interest from the average American—and traces its evolution through junk bonds, stock options, the cult of the CEO, creative financial reporting, and colossal disasters like Enron and Tyco.

As presented by Lowenstein, the present abuses of the system become almost inevitable. Reacting to the ever more urgent cry of “shareholder value,” CEOs and CFOs begin managing their numbers to present favorable quarterly reports. Members of the press seem to be in collusion with insincere corporate boards. Auditors who question company practices are replaced. Companies that miss their financial projections see their stock prices fall—so they make sure not to miss. Because Internet technology makes stock market information instantly available to the smallest investor, in some instances it seems as if CFOs have no choice but to start lying in order to keep their investors happy.

While the subject matter is treated seriously, now and then the author’s sardonic viewpoint is genuinely funny, as when he discusses the astounding prevalence of the CEO in the financial media. “It became common to speak of how much an individual CEO had raised ‘his’ share prices—as if General Electric had not two hundred thousand employees but only Jack Welch, as if Eisner had not inherited the library of Disney cartoons but had personally drawn them,” he writes. No one is exempt from Lowenstein’s finger-pointing—not the CEOs, not the auditors, not the elite-school academics who praise corporate leaders in the new economy, not the investors themselves. It’s enough to make anyone rethink his portfolio—and his relationship with the stock market. (The Penguin Press, $24.95)

**Competitive Advantage**

The very techniques that help a new company succeed most often will lead to its ultimate failure. Companies need to sustain continual growth in order to stay competitive, but for an established company, adding new products or opening new markets are risks that rarely pay off. Clayton M. Christensen explored some of these conundrums in *The Innovator’s Dilemma*. In his new book, *The Innovator’s Solution*, co-written with Michael E. Raynor, he provides some answers.

Christensen and Clayton first explain the different kinds of innovations that companies continually produce—the sustaining innovations that improve current products; the low-end innovations that appeal to customers who don’t mind a lesser product that suits their needs; and new-market disruptions that target customers who typically didn’t buy anything in this market at all.

Established companies have no motivation to fight for the low-end or nonexistent portions of their markets, so they tend to ignore innovators at those levels. But as soon as these innovators get a foothold in the market, they begin targeting higher-end consumers with better and better products—and then the whole market is likely to change.

So how do companies, both new and old, design new products that are disruptive and guarantee their hold on the market? Christensen and Clayton advise readers to ignore traditional marketing tenets like market segmentation and customer demographics. Instead, they advocate learning what “job” the customer has “hired” the product to do—and then finding a way to make the product do that job more effectively. Their formulas should give any brand manager fresh ways to look at his own product line. (Harvard Business Press, $29.95)

**A Positive Outlook**

We’re all acquainted with good people—those who are positive, compassionate to others, quick to laugh, and quick to forgive. They seem happier and more productive than the pessimistic and paranoid people we also know. Strange as it sounds, there are also organizations that qualify as “good,” that embody
specific virtues and have such positive outlooks that they can overcome disastrous events and provide safe, friendly environments for employees.

In Positive Organizational Scholarship, editors Kim S. Cameron, Jane E. Dutton, and Robert E. Quinn focus on everything that can go right in business. They link their own work to studies done in related fields like positive psychology, prosocial and citizenship behavior, and corporate social responsibility. They believe that “the desire to improve the human condition is universal and that the capacity to do so is latent in most systems”—including corporations.

Lest the reader think this is just another motivational book, the authors support their theories with hard evidence. In the chapter on “Virtuousness and Performance,” Cameron cites studies that indicate that “virtuous companies” bounce back more quickly from negative events such as downsizing. Virtuous corporations also benefit by retaining productive, committed employees whose “upward spiral of positive feelings” toward their jobs “increase their pride in their organization.” Just as everyone wants to be around a happy person, everyone wants to work in a happy workplace. That conclusion is no surprise, but it might require a paradigm shift in thinking for less virtuous managers ferociously intent on the bottom line. (Berrett-Koehler Publishers, $45)

Quick Looks

Working executives considering applying to business school should do themselves a favor and pick up a copy of Business School Confidential, a thorough and plain-spoken book that takes a close look at the entire business school experience. Early chapters urge potential students to think deeply about why they want to attend business school, and what they should consider when they apply, from a school’s official rankings to its perceived reputation to its greatest strengths. Chapters cover a whole range of topics: prepping for the GMAT, writing a personal essay, funding the $80,000-plus degree, choosing roommates, working with peer groups, handling interviews with recruiters. Written by Robert H. Miller and Katherine F. Koegler, the book draws much of its hard information from a panel of “experts”—ten recent graduates from top schools. The whole book can be read in a couple of hours, but its thoughtful insights will stick with b-school candidates long afterward. (St. Martin’s Griffin, $17.95)

Is your company planning some kind of expansion or upgrade in the near future? Are you considering adding new technology, going public, making an acquisition, entering a new market, or reorganizing your staff? Any or all of these initiatives could drive your company into “strategic gridlock,” in which your goals are in direct conflict with the realities of your company’s culture, abilities, and other “organizational realities.” In Preventing Strategic Gridlock, Pamela S. Harper outlines the hidden roadblocks that cause new strategies and initiatives to fail: the “one-size-fits-all” mentality that makes managers believe past solutions will be successful again; the “management by lobotomy” solution in which personnel and programs are drastically cut; the “act now, think later” strategy that leads executives to move ahead without gathering sufficient information; and a handful of others. Harper gives real-life examples of companies that failed due to strategic gridlock—and a no-nonsense list of ways to break free of those traffic jams. (Cameo Publications, $19.95)

The third edition of How to Advertise offers advice and text as elegantly simple as its name. The book by Kenneth Roman and Jane Maas, with expanded new-media commentary from Martin Nisenholz in this edition, was first published in 1976 and continues to espouse some of the basic tenets of getting a product or company noticed. The book is cleanly written and presents concise chunks of easy-to-absorb information. It’s also both smart and fun. In the section on “Brands and Strategies,” the authors write: “Don’t forget to offer a benefit. Thousands of people buy quarter-inch drill bits, not because they want quarter-inch drill bits but because they want quarter-inch holes.” This no-nonsense guide to advertising makes it clear in the updated version why it’s still a classic. (Thomas Dunne Books, $24.95)
Preparing for the Future

Charles F. Dolan School of Business
Fairfield University
Fairfield, Connecticut

In the last seven years, the Charles F. Dolan School of Business at Fairfield University has acquired new credentials, a new name, a new degree program, and a new facility. After receiving AACSB accreditation in 1997, it moved into a new facility in 1998 and introduced a new MBA in public accounting in 1999. In 2000, the school was named the Charles F. Dolan School of Business in response to a $25 million gift from Dolan, the founder of Cablevision.

These developments lay the groundwork for the school’s next phase of growth, says its dean, Norman Solomon. In the next few years, the school will increase the size of its graduate programs, add more internships, establish more endowed faculty chairs, and expand its on-campus wireless network.

The Dolan School serves 300 full-time and part-time graduate students. Of Fairfield’s 3,200 undergraduate students, 1,200 of them major in business. Only 75 miles away from Manhattan, the Dolan School attracts an impressive series of speakers, including Steve Forbes, Bear Sterns’ CEO Alan Ace Greenberg, and New York’s mayor Michael Bloomberg. At the same time, the school also provides an alternative to nearby metropolitan institutions, for executives who work in New York, but live in Connecticut and the surrounding region.

The school also plans to enhance its international presence. This year, Dolan faculty visited faculty at Russia’s St. Petersburg State University of Economics and Finance (FINEC) to begin an informational exchange between the two schools. Dolan faculty will offer ideas FINEC faculty can use to replace largely lecture-oriented courses, while FINEC faculty will introduce new teaching techniques.

The Dolan School also has created three new exchange programs for its undergraduate international studies majors with Helsinki Business Polytechnic in Finland, the Institut de administration et de gestion University Catholique de Louvain in Belgium, and the Institut de Formation Internationale in France.

Although the Dolan School is preparing for an exciting future, says Solomon, its biggest challenge lies in handling the unanticipated surprises that are surely in store. “In today’s world, we don’t know what’s going to happen. I became dean here in July 2001, and the 9/11 tragedy happened only a few days after classes started,” he says. “We had a number of alumni who perished; and many people asked, ‘How do we handle something like this?’ But that year, an alum who works for the Bank of New York and was involved with bringing the bank back after the tragedy came to speak to our students. He gave a PowerPoint presentation that was riveting.”

Solomon continues, “L.L. Bean CEO Leon Gorman spoke to our students about last year’s anthrax scare in the U.S., when the company’s business plummeted because no one wanted to open its catalog. As horrific as 9/11 was, we must make it a learning experience for students to teach them what they can do in the face of tragedy and tough times. It’s important for our students to hear that.”