HOW BUSINESS SCHOOLS LOST THEIR WAY

by Warren G. Bennis and James O'Toole

Too focused on "scientific" research, business schools are hiring professors with limited real-world experience and graduating students who are ill equipped to wrangle with complex, unquantifiable issues—in other words, the stuff of management.

BUSINESS SCHOOLS ARE ON THE WRONG TRACK.

For many years, MBA programs enjoyed rising respectability in academia and growing prestige in the business world. Their admissions were ever more selective, the pay packages of graduates ever more dazzling. Today, however, MBA programs face intense criticism for failing to impart useful skills, failing to prepare leaders, failing to instill norms of ethical behavior—and even failing to lead graduates to good corporate jobs. These criticisms come not just from students, employers, and the media but also from deans of some of America's most prestigious business schools, including Dipak Jain at Northwestern University's top-ranked Kellogg School of Management. One outspoken critic, McGill University professor Henry Mintzberg, says that the main culprit is a less-than-relevant MBA curriculum. If the number of reform efforts under way is any indication, many deans seem to agree with this charge. But genuine reform of the MBA curriculum remains elusive. We believe that is
because the curriculum is the effect, not the cause, of what alls the modern business school.

The actual cause of today's crisis in management education is far broader in scope and can be traced to a dramatic shift in the culture of business schools. During the past several decades, many leading B schools have quietly adopted an inappropriate—and ultimately self-defeating—model of academic excellence. Instead of measuring themselves in terms of the competence of their graduates, or by how well their faculties understand important drivers of business performance, they measure themselves almost solely by the rigor of their scientific research. They have adopted a model of science that uses abstract financial and economic analysis, statistical multiple regressions, and laboratory psychology. Some of the research produced is excellent, but because so little of it is grounded in actual business practices, the focus of graduate business education has become increasingly circumscribed—and less and less relevant to practitioners.

This scientific model, as we call it, is predicated on the faulty assumption that business is an academic discipline like chemistry or geology. In fact, business is a profession, akin to medicine and the law, and business schools are professional schools—or should be. Like other professions, business calls upon the work of many academic disciplines. For medicine, those disciplines include biology, chemistry, and psychology; for business, they include mathematics, economics, psychology, philosophy, and sociology. The distinction between a profession and an academic discipline is crucial. In our view, no curricular reform will work until the scientific model is replaced by a more appropriate model rooted in the special requirements of a profession.

Before asking how business education should change, we need to examine its evolution. Most business schools claim a dual mission: to educate practitioners and to create knowledge through research. Historically, business schools have emphasized the former at the expense of the latter. In fact, for the first half of the twentieth century, B schools were more akin to trade schools; most professors were good ole boys dispensing war stories, cracker-barrel wisdom, and the occasional practical pointer. We remember when MIT's Sloan School of Management was known as MIT School of Industrial Management and its production class was taught by the manager of a nearby General Motors assembly plant. That was a useful, but hardly comprehensive and professional, education.

Then, in 1959, prompted at least in part by the enormous demand for professional managers in a booming postwar economy, the Ford and Carnegie foundations issued devastating reports on the woeful state of business school research and theory. Both foundations recommended ways to give B schools respectable academic underpinnings and offered grant money toward achieving that end. Driven by conscience and cash, top-tier universities began to treat their business schools almost as seriously as law schools. By the end of the twentieth century, nearly all the nation's leading business schools—the two dozen or so elite MBA-granting institutions and another dozen schools fighting to join the highest echelon—offered a curriculum of academic distinction. But, in the process, their focus switched, and now the objective of most B schools is to conduct scientific research. Going back to the trade school paradigm would be a disaster. Still, we believe it is necessary to strike a new balance between scientific rigor and practical relevance.

The Scientific Model

Virtually none of today's top-ranked business schools would hire, let alone promote, a tenure-track professor whose primary qualification is managing an assembly plant, no matter how distinguished his or her performance. Nor would they hire professors who write articles only for practitioner reviews, like this one. Instead, the best B schools aspire to the same standards of academic excellence that hard disciplines embrace—an approach sometimes waggishly referred to as "physics envy." In departments such as physics and economics, top faculty members have few responsibilities other than to attend to their disciplines. They are not required to train practitioners or to demonstrate practical uses of their work; and they are free to do whatever research they choose and to produce subsequent, even more focused, generations of scholars. In this scientific model, the university exists primarily to support the scholar's interests. For the most part, universities accept this arrangement and the intellectual premise on which it rests: namely, that universities help society advance by supporting scientists who push back the boundaries of knowledge. They leave the practical implications to others.

It's very different in schools of law and medicine, which deliberately engage with the outside world. Law schools expect faculty members to be first-rate scholars; in fact, articles published in law reviews are often cited in trials. But these institutions also value professors' ability to teach. Similarly, medical schools carry on advanced biological research, but most members of the teaching faculty are also practicing doctors.

Why have business schools embraced the scientific model of physicists and economists rather than the professional model of doctors and lawyers? Although few

Warren G. Bennis is the University Professor and Distinguished Professor of Business Administration and the founding chairman of the Leadership Institute at the University of Southern California's Marshall School of Business in Los Angeles. James O'Toole is a research professor at USC's Center for Effective Organizations and the author of Creating the Good Life (Rodale, 2005).
B school faculty members would admit it, professors like it that way. This model gives scientific respectability to the research they enjoy doing and eliminates the vocational stigma that business school professors once bore. In short, the model advances the careers and satisfies the egos of the professoriat. And, frankly, it makes things easier: Though scientific research techniques may require considerable skill in statistics or experimental design, they call for little insight into complex social and human factors and minimal time in the field discovering the actual problems facing managers.

Business school professors using the scientific approach often begin with data that they use to test a hypothesis by applying such tools as regression analysis. Instead of entering the world of business, professors set up simulations (hypothetical portfolios of R&D projects, for instance) to see how people might behave in what amounts to a laboratory experiment. In some instances those methods are useful, necessary, and enlightening. But because they are at arm’s length from actual practice, they often fail to reflect the way business works in real life.

When applied to business—essentially a human activity in which judgments are made with messy, incomplete, and incoherent data—statistical and methodological wizardry can blind rather than illuminate. Consider some of the most difficult questions facing managers: How does a culture of celebrity affect leadership? How should a CEO be compensated? How does one design global operations so they are at once effective and equitable? What is the purpose of a corporation beyond the creation of shareholder value? Such broad, multifaceted questions do not easily lend themselves to scientific experiment or validation.

Another consequence of the scientific model is that professors’ evaluations are influenced by the number of articles they publish in A-list business research journals. Submissions to these discipline-based publications are refereed by anonymous panels of scholars who assess research findings based on objective, scientific standards. Those safeguards, de rigueur for A-list journals, help ensure that published research passes scientific muster. Indeed, the system works fairly well in the hard business disciplines, such as economics and finance, to which mathematical modeling can be easily applied. Even in finance, however, the system creates pressure on scholars to publish articles on narrow subjects chiefly of interest to other academics, not practitioners.

To be fair, some of what is published in A-list journals is excellent, imaginative, and valuable. But much is not. A renowned CEO doubtless speaks for many when he labels academic publishing a “vast wasteland” from the point of view of business practitioners. In fact, relevance is often systematically expunged from these journals. For instance, a leading management journal recently reviewed the results of a promising study of the behavior of several thousand leaders in global corporations. The initial research results showed that certain indicators of leadership misbehavior could be monitored to identify ethical problems before a crisis occurs. Unfortunately, that finding could not be proved in a strictly scientific sense. As a result, the version of the article that was finally published focused not on developing practical methods to reduce organizational risk but, instead, on questioning a minor detail in a previous study on a different subject. The article was factual, but it was neither interesting nor useful.

**WHEN APPLIED TO BUSINESS—**

where judgments are made with messy, incomplete data—statistical and methodological wizardry can blind rather than illuminate.

Scholars, in their own defense, argue that the gradual accumulation of tiny facts will one day accrete to a larger and more general scientific understanding of organizational behavior. Practitioners who have to make real decisions, however, must meanwhile look elsewhere for guidance, notably to the business press and to the bestseller list—now home to fewer and fewer books by faculty members.

Most issues facing business leaders are, in the final analysis, questions of judgment. What looks like a straightforward financial decision—say, to cut costs by relocating a service center—often has implications for marketing, sales, manufacturing, and morale that can’t be shoehorned into an equation. Strategic decisions, especially, are likely to go awry when based purely on quantitative
When Business Schools Lost Their Way

In a world of instant gratification, most business schools have been too slow to adapt. As Robert McNamara—the developer of many such techniques at Ford and, later, the U.S. Department of Defense—ruefully admits, in what amounts to a major mea culpa, he now argues that hard analysis often leads to overweighting the value of the knowledge you have. Of course, this bias affects everyone, not just scientists, but the aura of quantification masks the fact that social scientists often assume that the variables not included in their equations are insignificant. In business research, however, the things routinely ignored by academics on the grounds that they cannot be measured—most human factors and all matters relating to judgment, ethics, and morality—are exactly what make the difference between good business decisions and bad ones.

As McNamara’s Vietnam War-era experience painfully demonstrates, leaders tend to get into trouble not by fouling up the numbers but by failing to give the correct weight to all the quantitative and qualitative factors that should figure in their decisions. The greatest risks they run are the by-products of their trained tendency to define problems in terms of what they know and then to fall back on past behavior when faced with a new challenge. As McNamara concedes, “We see what we want to believe.” That is not surprising; most of us wear the concrete shoes of our earlier successes. But in a rapidly changing global economy, business education should help students learn to recognize their conditioned reflexes. However reassuring the halo of science, it can also lull us into a false sense of confidence that we are making objective decisions.

By allowing the scientific research model to drive out all others, business schools are institutionalizing their own irrelevance. We fear that this will be a difficult problem to correct because many business professors lack enough confidence in the legitimacy of their enterprise to define their own agenda. For example, business economics journals today are practically indistinguishable from traditional economics journals. And, not to be “outscienced,” management researchers now focus on technical issues that have the look and feel of topics studied by their peers in the harder disciplines.

Business scholars could take a lesson from their colleagues in the discipline of psychology, which was stifling under the scientific model three or four decades ago. Psychological research then was dominated by rigorous, but ultimately unproductive, studies of reaction time. As long as psychology professors labored within that small area, they learned little that was of value to anyone. It was only after they began to apply their imaginations—and rigor—to much broader problems that psychology began to make enormous strides. Not until respected psychologists dared to ask questions that mattered, whether or not they could be quantified in traditional ways, were groundbreaking studies undertaken, such as the Nobel Prize-winning work of Daniel Kahneman and the late Amos Tversky on how people make financial decisions. Unfortunately, most B school professors still limit their sights to what they can measure readily—a kind of “methodolatry”—instead of searching for new ways to study what is important. In fact, management professors seem to have an almost morbid fear of being damned as popularizers. Do they believe that the regard of their peers is more important than studying what really matters to executives who can put their ideas into practice? Apparently so.

Who Gets Tenure

This new emphasis on scientific research in business schools remains, for the most part, unspoken. Indeed, most deans publicly deny it exists, claiming that their schools remain focused on practice, albeit with an increasing awareness of the value of rigorous research. Here we must watch what leaders do, not what they say. At elite business schools, and at the wannabes emulating their practices, the shift toward the centrality of scientific research is evidenced almost everywhere.

Just look at the hiring and tenure processes. Deans may say they want practitioner-oriented research, but their schools reward scientific research designed to please academics. By recruiting and promoting those who publish in discipline-based journals, business schools are creating faculties filled with individuals whose main professional aspiration is a career devoted to science. Today it is possible to find tenured professors of management who have never set foot inside a real business, except as customers.

At many schools, the road to tenure does not run through field work in businesses. Among young academics and their advisers, this understanding is explicit. Junior scholars are urged to avoid too much work with practitioners and to concentrate their research on narrow, scientific subjects, at least until late in their quest for tenure. (While many conscientious researchers take it upon themselves to learn about the practice of business after they are tenured, there are few incentives for them to do so.) To be sure, there is merit in suggesting that fledgling faculty members try their wings before attempting arduous intellectual journeys, but B school research is becoming too narrow even for academics. One traditional factor in tenure decisions is how often a candidate’s work is cited by other scholars. Paradoxically, deans and tenure committees tell us that the number of citations of articles written by candidates is dramatically lower than it was a decade ago—evidence that researchers’ work doesn’t matter even to their peers.

Nevertheless, a management professor who publishes rigorously executed studies in the highly quantitative Administrative Science Quarterly is considered a star, while an academic whose articles appear in the accessible pages of a professional review—which is much more likely to influence business practices—risks being denied tenure. We know of no scholar at a first-rate business school with
a good publishing record who has been denied tenure or promotion for being a poor teacher or for being unable to teach effectively in executive education programs, where teachers must have real-world business experience.

But we do know of a professor of finance who was denied promotion when his department decided he was not a serious scholar. The damning evidence against him included seven articles in this publication and the highest mathematical and quantitative skills in the revised Graduate Management Admission Test, the first filter of future managers.

Business professors too often forget that executive decision makers are not fact collectors; they are fact users and integrators. Thus, what they need from educators is help in understanding how to interpret facts and guidance from experienced teachers in making decisions in the absence of clear facts. After all, any low-level administrator can make sound decisions when all the facts are in; having the courage to take a shot in the dark is one of the hallmarks of leadership. If the purpose of graduate business education is to develop executives—leaders—then the faculty must have expertise in more than just fact collection. The best classroom experiences are those in which professors with broad perspectives and diverse skills analyze cases that have seemingly straightforward technical challenges and then gradually peel away the layers to reveal hidden strategic, economic, competitive, human, and political complexities—all of which must be plumbed to reach truly effective business decisions. We all can name great practitioners of this style of business education; unfortunately, given the narrowing of the intellectual paradigm over the past two decades, chances are good that not one of them would be hired—or tenured—at a top business school today. Columnist David Brooks laments that "...our universities operate too much like a guild system, throwing plenty of people with dissertations at students, not enough with practical knowledge. Why aren't there more scholars...who teach students to be generalists, to see the great connections?"

In that regard, conditions at business schools have worsened dramatically since the mid-1980s. During the 1970s and early 1980s, the best business schools were arguably the most intellectually exciting places in academia. In many universities, B schools were the primary loci of multidisciplinary research. That intellectual ferment and cross-pollination helped make business schools the hugely popular institutions they are today. At one point, the faculty in our department at the University of Southern California’s Marshall School of Business included individuals teaching ratings in his department. In short, the stated end of business education may remain the same: to educate practitioners and to create knowledge through research. But the means make that end impossible to achieve because rewards are directed elsewhere.

**What Gets Taught**

What professors study, and the way they study it, directly affects the education of MBA candidates. As research-oriented business professors come to dominate B school faculties, they assume responsibility for setting the MBA curriculum. Not surprisingly, they tend to teach what they know, which often translates into first-class instruction on methodology and scientifically oriented research. These professors are brilliant fact collectors; but despite their high level of competence, they are too often uncomfortable dealing with multidisciplinary issues in the classroom. They are ill at ease subjectively analyzing multifaceted questions of policy and strategy, or examining cases that require judgment based on wisdom and experience in addition to—and sometimes opposed to—isolated facts. As a result, these messy issues, no matter how pressing, receive less attention in MBA courses. The trend away from using the case method corroborates this point and is accelerated by greater emphasis on

**TODAY IT IS POSSIBLE** to find tenured professors of management who have never set foot inside a real business, except as customers.

MAY 2005
How Business Schools Lost Their Way

with advanced degrees in mathematics, anthropology, sociology, engineering, decision sciences, economics, and psychology. Recruitment committees actively sought out scholars who were conducting innovative research and, at the same time, were committed to making a difference in organizations. Those scholars published regularly, but few appeared in what today are regarded as the "right" journals. During the past 15 years, however, hiring almost everywhere, including at the Marshall School, has focused on narrowly trained specialists, particularly those holding discipline-based doctorates from other business schools. One unfortunate result of this trend has been that many B schools have to hire adjunct professors to teach required MBA courses.

Worse, the integration of disciplined-based knowledge with the requirements of business practice is left to the student. A few years back, the curriculum committee of a highly regarded B school considered a proposal for a multidisciplinary first-semester MBA course based on the current challenges of a well-known global corporation. The committee rejected the proposal—but not because it was poorly designed or pedagogically flawed; in fact, the committee said it would be an advance over the existing program. The problem, in the words of one faculty member, was that "we are not qualified to teach it."

The impact of this loss extends far beyond the classroom. Businesspeople are starting to sense that individuals in the academy are not engaged in the same profession they practice. Employers are noticing that freshly minted MBAs, even those from the best schools—in some cases, especially those from the best schools—lack skills their academic publishing than about the problems of the workplace. It's no wonder there's been such a marked increase in the number of in-house corporate universities and for-profit management education organizations.

Regaining Relevance

In a 1927 address to the American Association of the Collegiate Schools of Business, the philosopher and mathematician Alfred North Whitehead spoke prophetic words:

Imagination is not to be divorced from the facts; it is a way of illuminating the facts....The tragedy of the world is that those who are imaginative have but slight experience, and those who are experienced have feeble imaginations.

Today, Whitehead's observation is more fitting than ever. If business schools are to regain their relevance, they must come to grips with the reality that business management is not a scientific discipline but a profession, and they must deal with what a professional education requires. Harvard Business School associate professor Rakesh Khurana has pointed out that professions have at least four key elements: an accepted body of knowledge, a system for certifying that individuals have mastered that body of knowledge before they are allowed to practice, a commitment to the public good, and an enforceable code of ethics. Professions thus are oriented toward practice and focused on client needs. Above all, professions integrate knowledge and practice. We do not propose making management a gated profession requiring credentialing and licensing. Nonetheless, we believe a useful step toward acknowledging that business is a profession would be to recognize that both imagination and experience are vital—and ought, therefore, to be central to business education. With an eye toward integrating knowledge and practice, Polaroid's Edwin Land suggested 50 years ago that every business school should run its own business. Why shouldn't business schools operate ventures that function like the equivalent of medical-school teaching hospitals? Cornell University's S.C. Johnson Graduate School of Management has recently responded

THE PROBLEM IS NOT that business schools have embraced scientific rigor but that they have forsaken other forms of knowledge.
to this long-ignored challenge by establishing the Cayuga MBA Fund, run by students at the Parker Center for Investment Research.

By whatever means they choose—running businesses, offering internships, encouraging action research, consulting, and so forth—business school faculties simply must rediscover the practice of business. We cannot imagine a professor of surgery who has never seen a patient, or a piano teacher who doesn't play the instrument, and yet today's business schools are packed with intelligent, highly skilled faculty with little or no managerial experience. As a result, they can't identify the most important problems facing executives and don't know how to analyze the indirect and long-term implications of complex business decisions. In this way, they shortchange their students and, ultimately, society. Things won't improve until professors see that they have as much responsibility for educating professionals to make practical decisions as they do for advancing the state of scientific knowledge.

The strongest potential force for change is the business community, but, unfortunately, most corporate employers have been sending mixed signals. They complain that B schools aren't producing potential leaders, but then they hire MBAs with narrow specialties. What's more, business leaders have been unimpressed in their support of business schools, often giving large sums of money, typically without strings. This support is interpreted as a vote of confidence. After all, when a donor gives $30 million to put his name on the outside of a school, one can't blame faculty members for assuming that donor is pleased with what they do inside. In our view, business leaders have not demanded enough from the educational institutions purporting to serve them. But until the business community clearly articulates its needs, deans will continue to respond to calls from the faculty for more of the same.

If prestigious organizations like the Business Roundtable or the World Economic Forum were to undertake a study of the quality and utility of business education, the findings would likely garner a level of attention among faculty and administrators similar to that generated by the 1959 Ford and Carnegie reports. We don't think it is healthy for corporate philanthropists to micromanage the policies of educational institutions; but in the case of professional schools, practitioners must adopt a governance role. The first step in this process is for corporate leaders to educate themselves about the current practices of the schools producing their future managers. They might start by picking up a copy of an A-list business journal and asking themselves if the articles in it say anything their managers need to hear.

At the risk of sounding repetitive, let us be clear: We are not advocating a return to the days when business schools were glorified trade schools. In every business, decision making requires amassing and analyzing objective facts, so B schools must continue to teach quantitative skills. The challenge is to restore balance to the curriculum and the faculty: We need rigor and relevance. The dirty little secret at most of today's best business schools is that they chiefly serve the faculty's research interests and career goals, with too little regard for the needs of other stakeholders. Serving the business community by educating practitioners and generating knowledge they can use may exist as secondary functions at those institutions, but such objectives are honored mainly in speeches made by deans seeking donations.

The Professional Model

To balance the goals of faculty members with the needs of other constituencies, business schools might look to their sister professional schools in medicine, dentistry, and law for guidance. Dental education is an apt model to the extent that it prepares students to deliver a service requiring sophisticated skills and to manage hands-on enterprises. Research is critical to dental education, but it plays a secondary role to the task of educating competent and ethical practitioners. Isn't that also the right balance for business education?

Ultimately, however, we believe business schools would reap the greatest benefit from emulating the most innovative law schools. The law is a broad-based activity drawing upon many of the same disciplines relevant to business: economics, psychology, accounting, politics, philosophy, history, sociology, language, literature, and so on. Law schools, however, have not succumbed to physics envy and the scientism it spawns. Instead, they tend to reward excellence in teaching and in pragmatic writing. Research is an important component of legal practice and education, but most of it is applied research, and its validity is not equated with the presence of a scientific patina. Law schools recognize that a well-written book or a well-documented article published in a serious, practitioner-oriented review is as valuable as a quantitative article published in a journal read only by cutting-edge researchers. Nevertheless, scientific publications are certainly valued in law school performance assessments. A law school professor who uses the scientific method to demonstrate that a commonly held belief is wrong, or to quantify an insight that is counterintuitive, will be rewarded. When assessing the work of law school faculty members, evaluators ask questions such as, Is the research important? Is it useful? Is it interesting or original? Is it well thought-out, well argued, and well designed? All of these queries seem more appropriate as standards for appraising the work of business school faculties than the narrowly defined standard of scientific rigor.

Of course, not all business schools suffer from the attenuated focus we find so alarming. Deans and faculties at a few top-tier institutions are conscientiously struggling to find ways to conduct rigorous research without abandoning their professional missions. At Harvard Business
School, for instance, continued emphasis on case studies makes practitioners an integral part of the educational process. And Harvard helps ensure that its curriculum will keep evolving by making course development a consideration in tenure and promotion decisions. Similarly, Tom Campbell, dean of the Haas School of Business at the University of California, Berkeley, has made a public commitment to teaching and research in the broader and softer areas of business that are the focus of his school’s influential—but unrefereed—California Management Review.

Many second-tier B schools, especially those not housed in large research-oriented universities, have also retained their professional focus. (Unfortunately, the quality of education offered at some of those institutions harkens back to trade school days). We are impressed with the University of Dallas’s recognition that an overly narrow approach to business education may have been a factor in the Tyco, Arthur Andersen, WorldCom, and Enron scandals. As Thomas Lindsay, the university’s former provost, explains: [B]usiness education in this country is devoted overwhelmingly to technical training. This is ironic, because even before Enron, studies showed that executives who fail—financially as well as morally—rarely do so from a lack of expertise. Rather, they fail because they lack interpersonal skills and practical wisdom; what Aristotle called prudence.

Aristotle taught that genuine leadership consisted in the ability to identify and serve the common good. To do so requires much more than technical training. It requires an education in moral reasoning, which must include history, philosophy, literature, theology, and logic....

Lindsay estimates that, before the recent scandals, business students spent “95% of their time learning how to calculate with a view to maximizing wealth. Just 5% of their time...is spent developing their moral capacities.” To right that balance, the Dallas business school introduced liberal studies into the curriculum and initiated a series of intellectual and ethical exercises.

Looking Ahead

Traditionally, business schools have lacked offerings in the humanities. That is a serious shortcoming. As teachers of leadership, we doubt that our topic can be understood properly without solid grounding in the humanities. When the hard-nosed behavioral scientist James March taught his famous course at Stanford using War and Peace and other novels as texts, he emphatically was not teaching a literature course. He was drawing on works of imaginative literature to exemplify and explain the behavior of people in business organizations in a way that was richer and more realistic than any journal article or textbook. Similarly, when executives are given excerpts from the classics of political economy and philosophy in seminars at the Aspen Institute, the intent is not to turn them into experts on Plato and Locke but to illuminate the profound recesses of leadership that scientifically oriented texts either overlook or oversimplify.

Naturally, reforming business education means more than adding courses in the humanities. The entire MBA curriculum must be infused with multidisciplinary, practical, and ethical questions and analyses reflecting the complex challenges business leaders face. We are encouraged on this score that the freshly appointed dean of the Marshall School has courageously gone on record as advocating a major rebalancing of our MBA program in order to link hard and soft skills. We certainly do not advocate that business schools, in revising MBA curricula, abandon science. Rather, they should encourage and reward research that illuminates the mysteries and ambiguities of today’s business practices. Oddly, despite B schools’ scientific emphasis, they do little in the areas of contemporary science that probably hold the greatest promise for business education: cognitive science and neuroscience.

In those fields, pioneering researchers use magnetic resonance imaging technology to study how the brain behaves while making economic decisions, taking into account such factors as gender differences and the role of trust.

The problem is not that business schools have embraced scientific rigor but that they have forsaken other forms of knowledge. It isn’t a case of either-or. Not every professor needs to be a switch-hitter; however. In practice, business schools need a diverse faculty populated with professors who, collectively, hold a variety of skills and interests that cover territory as broad and as deep as business itself. As the late Sumanta Ghoshal wrote in a shrewd analysis of the problems with management education today, "The task is not one of delegitimizing existing research approaches, but one of re legitimizing pluralism."

Rebalancing runs against the perceived self-interest of many professors, not to mention the seemingly unstoppable trend in academia toward specialization. We believe the most effective levers for overcoming this resistance are personnel policies related to recruitment, promotion, tenure, and other academic rewards. Instead of blindly following the paths forged by trade schools or traditional academic departments, business schools must create their own standards of excellence. However, many business school leaders now say their universities are forcing them to adopt the same standards for hiring and promotion used by graduate departments in the hard sciences. In our view, this is often an excuse for maintaining a dysfunctional (but comfortable) system. Other professional schools have carved out standards that are appropriate for their various professions; now business schools must have the courage to do the same.