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The End of Business Schools? Less Success Than Meets the Eye

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Although business school enrollments have soared and business education has become big business, surprisingly little evaluation of the impact of business schools on either their graduates or the profession of management exists. What data there are suggest that business schools are not very effective: Neither possessing an MBA degree nor grades earned in courses correlate with career success, results that question the effectiveness of schools in preparing their students. And, there is little evidence that business school research is influential on management practice, calling into question the professional relevance of management scholarship.

At first blush, business schools are the success story of late twentieth-century education. Both undergraduate and graduate business administration enrollments in degree-granting colleges and universities have soared. For instance, "in 1955–56, graduate business education was virtually nonexistent, with only 3,200 MBA degrees awarded in the U.S. By 1997–98, this number had grown to over 102,000" (Zimmerman, 2001: 3). By the fall of 2000, there were 341 accredited master's programs in business in the United States (*U.S. News and World Report*, 2002), 900 American universities offered a master's in business (Leonhardt, 2000: 18), and in the spring of 2001, some 1,292 schools, or 92% of all accredited colleges and universities, offered an undergraduate major in business (*U.S. News and World Report*, 2002). In 1996–1997, more than a quarter million undergraduate degrees in business were awarded (AACSB Newsline, 1999). New business education programs have started, and existing programs have expanded in the U.S. even as business education has grown around the world. For instance, "the number of business schools in Britain has risen from 20 in the early 1980s to 120" (*The Economist*, 1996: 54), while business education has spread throughout Asia and continental Europe. Within the United States, an informal study conducted by the Graduate Management Admissions Council indicated that 93% of business schools surveyed intended to either increase or maintain their target class size (GMAC Application Trends Survey, 2001).

There is little doubt that business education is big business and for many, including business schools and their professors, a lucrative business at that. "Since the mid-1980s, 36 Americans have each given more than $10m to business schools" (*The Economist*, 1996: 53). One study estimated that even in the United Kingdom, certainly not the largest or earliest participant in the business education market, business schools "are among the United Kingdom's top fifty exporters, attracting over . . . $640 million a year from other countries" (Crainer & Dearlove, 1999: 4). In the United States, business schools have rapidly expanded their money-making executive education activities. A McKinsey-Harvard report from 1995 estimated that nondegree executive education "generated around $3.3 billion and was growing at rate of 10 percent to 12 percent annually" (Crainer & Dearlove, 1999: 6).

Does this past market success mean that business schools have provided important value and that their future success is also assured? Here the evidence is much more equivocal. Although business schools and business education have been commercial successes, there are substantial questions about the relevance of their educational

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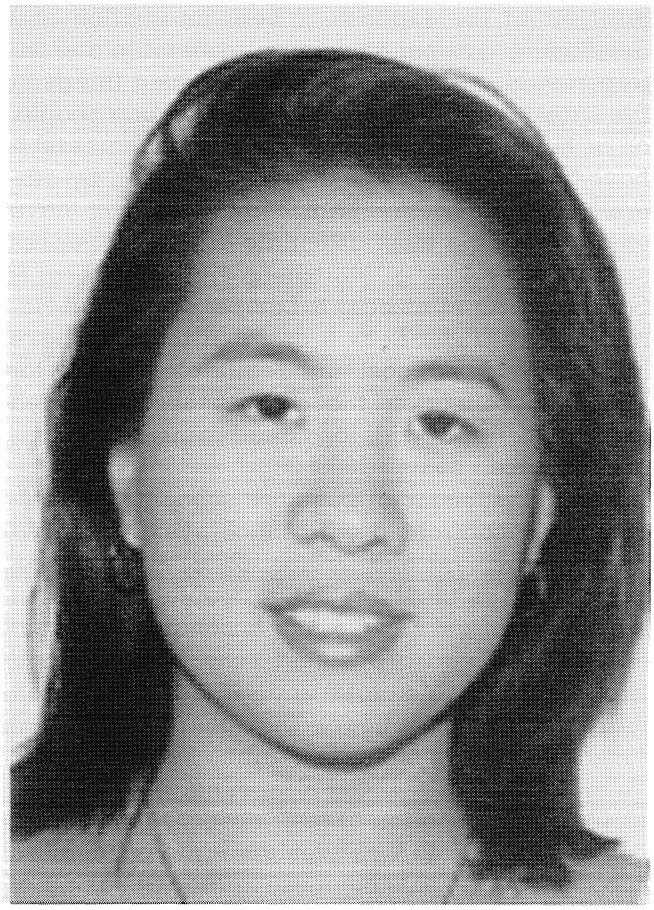

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product and doubts about their effects on both the careers of their graduates and on management practice. These concerns, coupled with the rise of many competitors including consulting and training companies, e-learning and company in-house programs, as well as the fact that according to Robert Hamada, ex-dean of the University of Chicago's business school, "the [MBA] industry is overbuilt" (Gaddis, 2000: 52) mean that business schools may soon confront some substantial challenges.

Note that throughout the modern history of business schools, there have been criticisms of their educational product, although the specifics of these criticisms have changed dramatically over time. In the 1950s, the Gordon and Howell report (1959) "described American business education as a collection of trade schools lacking a strong scientific foundation" (Zimmerman, 2001: 2). The Gordon and Howell report and funding from the Ford Foundation and the Carnegie Council (Pierson, 1959) started business schools on their continuing trajectory to achieve academic respectability and legitimacy on their campuses by becoming social science departments, or perhaps, *applied* social science departments. In the process of achieving academic legitimacy, business schools took "on the traditions and ways of mainstream academia" (Crainer & Dearlove, 1999: 40). Quantitative, statistical analyses gained prominence, as did the study of the science of decision making. In both their teaching and research activities, business schools "enthusiastically seized on and applied a scientific paradigm that applies criteria of precision, control, and testable models" (Bailey & Ford, 1996: 8).

However, adopting the ways of other academic social science departments has produced a new set of problems, including concerns about the relevance and centrality of business schools and business education to the world of management. In an update and revisiting of the Gordon and Howell report, Porter and McKibbin (1988: 64–65) noted that business school curricula were seen as too focused on analytics, with insufficient emphasis on problem finding as contrasted with problem solving and implementation (Leavitt, 1986), and as insufficiently integrative across the various functional areas. More than a decade later, these criticisms remain relevant. The themes—an overemphasis on

analysis at the expense of both integration and developing wisdom as well as leadership and interpersonal skills, or teaching the wrong things in the wrong ways (and perhaps to the wrong people, or at least at the wrong time in their careers)—have been picked up and expanded upon by others, including Henry Mintzberg, who may have emerged as the most articulate critic of business school curricula (e.g., Mintzberg, 1996; Mintzberg & Gosling, 2002; Mintzberg & Lampel, 2001), and Harold Leavitt (1989). Leavitt asserted that "we have built a weird, almost unimaginable design for MBA-level education" that distorts those subjected to it into "critters with lopsided brains, icy hearts, and shrunken souls" (1989: 39).

Recent criticisms of business schools have seldom been confronted with much systematic evidence. Mintzberg and Lampel (2001) for instance, noted that of the four CEOs people most often named when asked who had accomplished great things, none had a business school degree (and two, Galvin of Motorola and Gates of Microsoft didn't even finish college). They also reported that 40% of U.S. CEOs mentioned in the *Fortune* article "Why CEOs Fail," had MBAs (Charan & Colvin, 1999). The implication of their observations is that possessing an MBA neither guarantees business success nor prevents business failure. Speaking at a conference, Gary Hamel claimed that most of the best ideas in management over the past decade or so did not originate in business schools (Crainer & Dearlove, 1999: xx), although he did not provide any data to buttress that assertion. Others also complain about the relevance of business school research: "Richard R. West, writing 10 years ago as dean of New York University's graduate school of business, applied the stinging terms 'fuzzy, irrelevant, and pretentious' to management school research" (Gaddis, 2000: 55). Bailey and Ford asserted that "business schools appeal to one another as scholarly communities through a plethora of academic journals that are utterly divorced from the challenges of everyday management" (1996: 8). These observations are interesting anecdotally and certainly suggestive of a problem, but they do not provide convincing evidence about the effects of business schools on their graduates or of the impact of their research on management practice.

Therefore, our first task in this article is to review the empirical evidence—as well as offering some of our own—on what business schools actually do and what their effects are. When we examine the actual effects of business schools on the two outcomes of most relevance and importance, the careers of their graduates and the knowledge they produce, the picture is reasonably bleak. There is little evidence that mastery of the knowledge acquired in business schools enhances people's careers, or that even attaining the MBA credential itself has much effect on graduates' salaries or career attainment. Similarly, the impact of business school research, judged by a number of different criteria, appears to be quite small, and this is true even when research produced by business school professors is compared with business research conducted by writers not in business schools.

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We first review the evidence on what business schools don't do, consider some reasons why, and then argue that prospects for change and reform are not particularly good, especially for established, elite schools, for some very understandable reasons. Business education does not have to be in this condition. Medical and other professional schools offer some interesting contrasts, and there are some innovative business schools and business school programs that actually embody a model that overcomes many of the problems we enumerate.

To focus the argument and for reasons of space, we don't try to cover all aspects of business education in this article, but concentrate our analysis of research impact on management research and its effects, although there is some indication that the data and conclusions would be similar for many of the other subjects taught. Our analysis of the effects of business schools on careers concentrates on the MBA degree. Even though executive education is an increasingly large proportion of teaching at some schools, such as Harvard, Columbia, and Wharton, we know of no published studies, or even informal but systematic data, that would enable us to assess the effects of executive education on either the individuals who receive it or their organizations. In fact the absence of much assessment of any kind is one of the defining characteristics of contemporary business education, and one reason that problems are likely to persist. Finally, we focus our argument on the formal goals of a business school, to impart knowledge and influence the practice of management, rather than

examining some of the more informal benefits of attending business school, such as building useful social networks.

MBA EDUCATION AND CAREER OUTCOMES

If an MBA education is useful training for business, then the following should be true as a matter of logic: (1) having an MBA degree should, other things being equal, be related to various measures of career success and attainment, such as salary; and (2) if what someone learns in business school helps that person be better prepared for the business world and more competent in that domain—in other words, if business schools convey professionally useful knowledge—then a measure of how much one has learned or mastered the material, such as grades in course work, should be at least somewhat predictive of various outcomes that index success in business. Consider some evidence on each of these questions and some reasons that may help explain why business education has such a small effect on career outcomes.

The Effects of the MBA Degree

In the late 1990s, consulting firms found it difficult to compete with high-technology start-ups for talent. Consultants had always hired some people without MBA degrees, but now they increased the pace. For instance, the Boston Consulting Group hired 20% of its consultants without MBAs in 2000, Booz Allen and Hamilton planned to hire one third of its people without graduate business degrees, and "more than half of the consultants at McKinsey and Company do not have a Master of Business Administration degree" (Leonhardt, 2000: 1). If there is a job that ought to be connected to the MBA degree, it is management consulting. Consulting has typically been the destination for a large fraction of graduates, particularly from the elite programs. In 1995, for instance, 38% of Harvard Business School graduates went into consulting (Norris, 1997: C23).

Consulting firms who hired people without business degrees—some of them lawyers, doctors, and philosophers—obviously had to provide some training so these individuals could go out and give advice to companies using business language and business knowledge. Many of the companies started or expanded relatively short, 3-week programs in which "new hires" learned the basics of business. Apart from the fact that apparently it took only 3 or 4 weeks for people to cover what business schools take 2 years to teach, is the more interesting question: How did the hires without graduate business degrees perform? Internal studies conducted by the firms found that the non-MBAs did no worse and, in some cases, better than their business school counterparts. The London office of the Boston Consulting Group (BCG) reported that the "non-MBAs were receiving better evaluations, on average, than their peers who had gone to business school," (Leonhardt, 2000: 18) while a study at McKinsey of people on the job 1, 3, and 7 years found that at all three points, the people without MBAs were as successful as those with the degree. Similarly, an internal study by Monitor Consulting "had determined that the people . . . hired from high-end business schools were no better at integrative thinking than the undergraduates . . . hired from top-notch liberal-arts programs" (Lieber, 1999: 262).

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Investment banking is another major destination for graduates of MBA programs (Norris, 1997), and another occupation where one might think that having a graduate business degree is important and useful. Ronald Burt did a private consulting study of the careers and career success of its employees for an investment bank, and concluded that because getting a degree takes time, people with an MBA were, on average, a year older than those without the degree (R. Burt, personal communication, Nov. 26, 2001). "With respect to pay" however, "more education has no association with total compensation . . . but has a negative association when it matters at all." Burt, who has also done follow-up studies of University of Chicago alumni, concluded: "I have never found benefits for the MBA degree—usually it just makes you a couple of years older than non-MBA peers" (Burt, personal communication, Nov. 26, 2001).

Livingston (1971), comparing Harvard MBA graduates and attendees at an advanced management course with similar years of work experience, reported that the senior managers earned more than the Harvard Business School graduates. Two studies compared the salaries of graduates from MBA and undergraduate business programs, in one instance from the University of California at Berkeley, and in the second case from three business schools in the Midwest. Both studies reported that, although there was an effect of having the graduate MBA degree on starting salary, there was no

effect of having an MBA on current salary, except for students from lower socioeconomic status backgrounds (Dreher, Dougherty, & Whitely, 1985; Pfeffer, 1977).

Even those studies that have found a positive effect of the MBA degree are open to the alternative interpretation that what is being assessed is the quality of the student body rather than the effects of acquiring some specific skills or knowledge. A study by the Graduate Management Admissions Council of people who registered for the GMAT (Graduate Management Admissions Test) found that 7 years later those who had graduated from business school had higher earnings than those who had either never attended business school or who had started a program but did not finish (Dugan, Grady, Payne, & Johnson, 1999). But the benefits accrued mostly to graduates of the more prestigious programs; individuals coming from unaccredited or less competitive schools earned amounts that were more similar to people who either did not attend business school at all or who did not graduate. These findings echo those of others who have observed there are almost no economic gains from an MBA degree unless one graduates from a top-ranked program (e.g., *The Economist*, 1994).

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A straightforward interpretation of these results is that it is not education in business but selectivity that is being assessed. As Dugan et al., noted, the fact that graduates from the most competitive, elite programs achieved the greatest earnings is scarcely surprising as these people "were selected by their programs on the basis of their much higher than average capabilities and credentials" (1999: 23). This interpretation, that what matters are the personal attributes of the attendees not what they learn while in attendance, is consistent with the fact that the course of study, and even the textbooks used, are remarkably similar across schools of different degrees of selectivity, so it is hard to argue that there are important differences in the knowledge being provided in the different schools. Studies conducted by the Educational Testing Services in 1982, as well as Porter and McKibbin's (1988) investigations of curriculum across business schools have emphasized that the curriculum is quite similar across schools.

The fact that graduate business programs may be as much networking, screening, or recruiting services as educational institutions is an observation made by numerous others. For instance, Jill Rupple, a partner at the consulting firm Diamond Technology Partners in response to the question of why companies recruit MBAs, replied, "It is a prescreened pool" (Leonhardt, 2000: 18). Similarly, Seth Godin, a journalist from *Fast Company* who attended Stanford's Graduate School of Business, argued that the core curriculum taught at business schools is irrelevant, and that the utility of a business school degree is to provide a pedigree rather than learning (Godin, 2000: 322).

Do Higher Grades—More Mastery of the Subject Matter—Have Any Effect?

One reason that having an MBA degree may show no effect is that mere possession of the credential may not be strongly related to the individual's mastery of business knowledge. Recently, an investment bank was horrified to find that an MBA graduate it hired from a leading business school, an individual who had apparently taken a number of courses in finance, could not calculate the net present value of a future stream of payments. Crainer and Dearlove (1999), in their critical overview of business education, described the "Wharton Walk"—a drinking ritual in which the students at the University of Pennsylvania business school visit 10 bars in one night. They concluded, "This is what happens in business schools. Most students simply get drunk. MBA students bond and network" (Crainer & Dearlove, 1999: xix). Robinson's (1994) description of his life at the Stanford Business School is illustrative of many students' perspective. "Learning is not an explicit goal. Nowhere does Robinson address the issue of *what he wants to learn*" (Armstrong, 1995: 102, *emphasis in original*). Obviously this is not a generalization that applies to all students in all schools all of the time, but to the extent this depiction of what goes on in business schools has some validity, it can help explain why the credential, in and of itself, may not have a lot of economic value.

If the credential itself could potentially mean nothing in terms of mastery of the subject matter, then perhaps we need to examine the effects of some measures of knowledge acquired. Although grades are certainly not a perfect measure of subject matter mastery, they have the advantage of being available in some studies and, moreover,

are likely to be at least somewhat related to how much one has learned in courses. The empirical evidence on the effects of business school grade point average (GPA) is mixed. Neither Pfeffer (1977) nor Dreher, Dougherty, and Whiteley (1985) found any effect of grade point average on either starting or current salaries. O'Reilly (2001), at our request, reanalyzed data from his study with Chatman on the effects of personality and intelligence on MBA graduates' subsequent career outcomes (O'Reilly & Chatman, 1994). He reported that U.C. Berkeley MBA graduates' GPA was unrelated to (a) salary increases over 3 to 4 years after graduation, (b) average salary of the job accepted, (c) the number of jobs held since graduation, (d) the number of promotions since graduation, (e) the number of job offers received upon graduation, (f) either job or career satisfaction, and (g) the person's fit with his or her current job. Burt (personal communication, Nov. 26, 2001) reported that data from a survey of women who graduated from the University of Chicago Business School showed that GPA had no effect on either income or the probability of reaching senior rank.

Williams and Harrell (1964) found that GPA in required courses was unrelated to earnings for Stanford MBA graduates, but that grades from second-year electives were correlated with compensation (see also Harrell & Harrell, 1974). Harrell interpreted this difference in the effects of core versus elective grades as reflecting the consequences of strong work motivation and working hard, rather than as an advantage from what was learned. The logic is that grades in elective courses reveal more about a person's willingness to expend discretionary effort. Weinstein and Srinivasan (1974), however, did find a statistically significant effect of GPA on compensation for their subsample of line managers. Srinivasan and Hanson (1984) also reported an effect of MBA's GPA on compensation, regardless of whether the MBA was computed on core or elective classes. Their analysis also demonstrated that this effect was not driven by the relationship between GPA and prior work experience.

This evidence, at best mixed, does not provide a lot of support for the contention that mastery of the subject matter of business schools, at least as assessed by grades, is related to subsequent performance in business. If the subject matter of business schools were directly tied to business success, there should be more consistent and stronger connections between business success and mastery of the relevant content.

WHY IS THERE SO LITTLE EFFECT OF THE MBA ON THE GRADUATES?

For a number of reasons the empirical observation of little effect of either the MBA credential or grades on the subsequent careers of MBA graduates is not surprising. First, there are economic reasons for why the MBA provides little advantage. The supply of MBAs has, as already noted, expanded rapidly. Because business education is a "cash cow" at many universities, programs have proliferated, including, more recently, part-time, evening, and weekend programs; executive MBAs; and expansion of existing programs. Although fewer than half of the schools offering an MBA degree are accredited, the fact of rising supply remains. At the same time, demand for MBAs may be falling: "In Britain, the demand for MBA graduates has fallen by a fifth since 1991 (*The Economist*, 1996: 54). More supply and about the same or less demand would translate into less advantage in terms of salary or other career outcomes for MBA graduates. Moreover, unlike other professions such as law, medicine, accounting, architecture, and some branches of engineering, the practice of business management is not restricted to people who possess a formal credential or certificate of training. Thus, with no barriers to entry into the profession—and with no entry point controlled by business schools—it is not surprising that there is a smaller effect of the credential on various economic outcomes (e.g., Pfeffer, 1974).

Second, neither grades in business school nor completion of the program may provide much evidence of learning. Grade inflation is pervasive in American higher education, and business schools are no exception (Kuh & Shouping, 1999; Muuka, 1998; Redding, 1998). As a consequence, almost no one fails out of MBA programs, which means the credential does not serve as a screen or an enforcement of minimum competency standards. If the MBA degree doesn't really distinguish among people then it is no surprise that it doesn't have much effect on career outcomes. As Armstrong, a professor who has taught MBAs for more than 30 years, observed:

> In today's prestigious business schools, students have to demonstrate competence to get in, but not to get out. Every student who wants to (and who avoids financial and emotional distress) will graduate. At Wharton, for example, less than one percent of the students fail any given course, on average. . . . the probability of failing more than one course is almost zero. In effect, business schools have

> developed elaborate and expensive grading systems to ensure that even the least competent and least interested get credit (1995: 104).

Next, a large body of evidence suggests that the curriculum taught in business schools has only a small relationship to what is important for succeeding in business. Porter and McKibbin (1988: 65) noted that many critics felt that quantitatively based analytical techniques received too much attention, while there was too little attention given to developing leadership and interpersonal skills, and too little emphasis on communication skills. Not surprisingly, a survey conducted in 1982 by the Graduate Management Admissions Council came to the same conclusions regarding "perceived weaknesses in personal skills" (Jenkins & Reizenstein, 1984: 21). Mintzberg and Gosling (2002) noted that "contemporary business education focuses on the functions of business more than the practice of managing" (p. 28).

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Another GMAC survey of first-year graduate students in business from 91 schools asked what attributes they believed were important in business and which attributes they thought were enhanced by the curricula business schools teach. Of 10 traits, only one, communication skills, was perceived by more than 50% of the respondents as being both important and something that business schools improved (Stolzenberg, Abowd, & Giarrusso, 1986: 12). Many inconsistencies arose between what skills students thought were important and what they perceived business schools as proficient at developing. "The ability to apply theories to practical situations is ranked seventh . . . in its importance for successful management but is ranked *first* . . . in the extent to which it is believed to be enhanced by the business school experience" (Stolzenberg et al., 1986: 13). "For those who see business schools as academies of leadership skills, these may be disappointing results" (Stolzenberg et al., 1986: 13). If students see little connection between what is important and what is being taught, small wonder that they are occasionally cavalier about their classroom performance. And if there is, in fact, only a slight connection between the skills needed in business and what is taught in graduate business programs, then the absence of an effect of the MBA or mastery of the subject matter on the careers of graduates is understandable.

An interesting paradox occurs in the list of attributes or skills taught by business schools and what students and others believe to be the most important. Much of what business schools impart—theory and analytical techniques of various sorts—is readily learned and imitated, at least by intelligent people. Communication ability, leadership, interpersonal skills, and wisdom—"the ability to weave together and make use of different kinds of knowledge" (Mintzberg & Gosling, 2002: 28)—are at once less easily taught or transferred to others but, at the same time, because they are less easily imitated, have more value in the competition for leadership positions that occur in organizations. There are some alternative models of business education and, for that matter, leadership development that can do a better job imparting these qualities, and we discuss some of them presently. But we need to be cognizant of the trade-off between what schools can and do readily teach and what might be required to differentiate oneself and succeed in the world of management.

In spite of these long-standing issues about the curriculum, and lest one be concerned about the age of some of the surveys and studies, there is evidence that curricula have changed little over time. "Course materials have been upgraded and some class offerings have changed, but the 1960s product is still quite recognizable . . . in the 1990s" (Davis & Botkin, 1994: 90). Delivering essentially the same material over the Internet is an innovation in access and delivery, not in content, and the same holds true for programs held in remote locations or under different—for instance part-time or evening—schedules. As Mintzberg and Gosling (2002) commented, "curricula for so-called executive MBA programs, or educational programs for working managers, are organized in much the same fashion" (p. 28) as regular MBA programs. This is not to say that curricula haven't changed to incorporate new knowledge—obviously they have. But the basic structure of courses and the basic concepts have remained remarkably similar.

Issues With the Teaching Process

Two other issues can further help us understand the limited effects of MBA education. The first is that many programs operate on the basis of some incorrect assumptions about learning, thereby doing things that contribute to poorer learning outcomes. One such assumption is that good teaching equals more learning, and that good teaching is

best assessed by the students in end-of-quarter (or midquarter) evaluations. Partly in response to the ratings game and the accompanying emphasis on student satisfaction with MBA programs, for instance in the *Business Week* ratings, and partly because for many business schools, attracting students is an issue, most schools have made courses more "student friendly." Students now routinely expect summaries of course readings and materials. For instance, at Stanford and many other business schools, it is now customary to pass out copies of overheads at the end of each class session summarizing the main points and ideas of the class, in response to student demands for "structure" and "take-aways."

The problem is that when students are relieved of any sense of responsibility for their learning and much involvement in the learning process, the evidence is that they learn much less. Tough (1982), studying self-reported learning by adults, found that few learning experiences occurred in groups with a teacher. Armstrong maintained that "when teachers direct and evaluate learning, students feel less responsibility" (1995: 102). Interestingly, the evidence shows there is little relationship between students' satisfaction with their teachers and what they learn (Attiyeh & Lumsden, 1972), calling into question the emphasis on course ratings. Teaching and learning are fundamentally different in their orientations: "The focus on teaching incorporates an input orientation. A focus on learning requires an output orientation" (Boyatzis, Cowen, & Kolb, 1995a: 9).

The second incorrect assumption is that external incentives are important and that by grading students' performance, the motivation problems previously enumerated can be overcome, either by providing positive recognition or by threatening academic difficulty. There are two problems with this assumption. First, as already noted, few sanctions are actually administered for poor performance in classes. Moreover, although schools can offer various forms of recognition for academic achievement, in the business schools, unlike law schools, where class standing has a real effect on job prospects, there is little evidence that course grades or class standing, even when available, are given much weight by employers in their applicant screening. Second, as reviewed extensively by Kohn (1993), the evidence, particularly in education, is that the use of external incentives, such as grading, impedes, rather than enhances, learning outcomes.

The final issue is the method of instruction. Some schools lecture, others teach by the case method, some use a combination. But in relatively few instances in established business schools is there much clinical training or learning by doing—experiential learning where "concrete experience is the basis for observation and reflection" (Kolb, 1976: 21). Students learn to talk about business, but it is not clear they learn business. "Unfortunately you cannot replicate true managing in the classroom. The case study is a case in point: Students with little or no management experience are presented with 20 pages on a company they do not know and told to pronounce on its strategy the next day" (Mintzberg & Lampel, 2001: 244). As Bailey and Ford argued, although a scientific approach may be useful for the *study* of management, it is not at all clear that it helps in *teaching* management: "The practice of management is best taught as a craft, rich in lessons derived from experience and oriented toward taking and responding to action" (1996: 9). But as Leavitt noted, "business schools have been designed without practice fields" (1989: 40).

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A method of instruction stressing language and concepts, not wisdom or mastery of practice, explains how consulting firms can, in 3 weeks, replicate a 2-year business school experience: "The three-week program was helping them learn the vocabulary of corporate America . . . 'It's a question of learning the jargon'" (Leonhardt, 2000: 18). But as Mintzberg (1996) has argued, management is a practice craft, and the typical business school experience is too far removed from the context of business. Schon (1983, 1987) has noted that "practice is characterized by indeterminacy, and what distinguishes the excellent practitioner from the merely adequate one is the ability to render indeterminate situations determinate. Professional artistry, then, requires transcending the rules and plans of technical rationality to 'reflect in action'" (Bailey, Saparito, Kressel, Christensen, & Hooijberg, 1997: 157). The importance of practice and experience is why studies of leadership development (e.g., McCall, 1998) consistently find that the best way of developing leaders is to provide people with opportunities to lead. The importance of clinical experience is also one reason why on-the-job training is so effective—it avoids the transfer of training problem, or generalizing what is learned in the classroom to the work setting, that to some extent bedevils other education modalities. With-

out a larger clinical or practice component, it is not clear that business schools ever will impart much lasting knowledge that affects graduates' performance.

THE IMPACT OF BUSINESS SCHOOL RESEARCH

At the outset we should note that one goal of business school research is to enhance the prestige of the business school where the research is done. There is evidence that research *does* achieve that goal, as "research has, historically, been regarded as the primary determinant of a school's prestige" (Armstrong, 1995: 103). Armstrong and Sperry (1994) observed a significant correlation between the prestige of a business school and a measure of research impact for each school. Armstrong also found a relationship between research impact and a measure of the tax-adjusted net present value of graduating from a particular school: "The most obvious answer to the question, 'Why does research correlate with students' earnings?' is . . . in reference to its effect on a school's prestige" (1995: 103). *Business Week* has now added a research influence measure to its ratings of business schools, so to the extent a school scores highly on that measure, it will enhance its overall prestige ranking. Most deans' ratings of business schools, which are incorporated in rankings such as that produced by *U.S. News and World Report* respond, at least partly, to the research prestige of the schools.

The second goal of research—and the focus of our examination—is to influence, either proximately or remotely, the practice of management. Here the evidence indicates considerably more modest results than is the case for the impact of research on prestige. One piece of evidence comes from the innovative study by Barley, Meyer, and Gash (1988) in which they used constructs from academics' and practitioners' writing about organizational culture over time to study patterns of mutual influence. Barley et al. concluded that "the pragmatics of academic discourse came to resemble more closely that of the practitioners' subculture" (1988: 52). The practitioner conceptualizations stayed constant while the academics' changed in a direction to become more similar to the practitioners. This suggests that although academics are influenced by practitioners, little influence flows from academics to industry. Future research, perhaps using other operationalizations of influence, such as diffusion of ideas, methods of analysis or data, or language, could examine the direction of influence between academia and management practice. This would provide useful generalizations of Barley et al.'s work and potentially help us understand the conditions under which there is comparatively more influence from academics to practitioners and vice versa.

This suggests that although academics are influenced by practitioners, little influence flows from academics to industry.

To further explore the impact of academic research on management, we collected two data sets to shed some light on this question. The first data examined *Business Week*'s lists of the best business books in 2001, 1991, and 1984 (the first year that such a list was published), to find out what percentage of the best business books were written by people teaching at business schools. The underlying assumption is that the books listed by *Business Week* on this best books list are, in general, more influential than other books in affecting management thought, language, and practice. Our interest was in exploring the extent to which these influential books came out of academia, specifically business schools, or from other nonacademic sources. We also wanted to see if there had been any change in the origins of these books over time—in other words, if there was any evidence that business schools were increasing or decreasing their influence on management thought.

These data show that only a very small fraction of business books that presumably influence management are actually written by academics. In 2001, only 2 of the Top 10 Best Business Books were written by academics, with the remainder of these books authored by journalists or businesspeople. One of those two books was written by Jim Collins, who does not have a PhD, was once a lecturer at Stanford, and is now an independent consultant and researcher. Therefore, it could be argued that only one book, just 10% of the list, was written by someone currently in a business school. In 1991, again only 1 of the top 10 books was authored by an academic, and in 1984, just 4 of the Top 10 Best Business Books came from academic authors. The data suggest little change over time in the origins of influential management books, but if there is a trend, it is in the direction of having fewer of the best business books authored by academics. This is consistent with the observation that the connection between business schools and the profession of management has diminished over time.

We also examined *Business Week*'s lists of the business best-sellers. The list of the best books

reflects *Business Week*'s judgment, while the best-seller list reflects the judgments of the market. As far as we know, this is the only national best-seller list devoted solely to business books. Since 1995, the first year that these lists appeared, a maximum of 2 of the top 15 best-selling business books came out of academia in any year. Again the data suggest that business schools are not a major source of books that directly influence management thought, whether measured by sales or by more subjective assessments of the value of the books.

Some people will object to using the origins of the best or best-selling business books as a measure of the relative influence of business schools compared with other sources of business ideas. After all, academic research does not necessarily have a *direct* influence on business practice or thinking, but possibly there is an indirect influence as this research is cited and used by others, including those writing more popular and accessible texts. This is a reasonable argument, so we collected a second set of data to explore whether this argument has much face validity. We did this by comparing the citations earned by a selected list of academic business books against the citations to books listed as the best business books by *Business Week*. Note that this procedure overstates the influence of the academic books, as they can be highly cited within the academic community even if they do not influence business thought or practice at all. Nonetheless, the data are informative.

The academic management books we selected were those that had won the George R. Terry Book Award, given annually by the Academy of Management. These are academic books that presumably should have a lot of influence on the discipline of management because they have won a prize given by that discipline. From 1991 to 2001, there have been 10 Terry Book Award winners. On average, these books received 39.9 total citations. Adjusting for the number of years since publication, on average the Terry Award winners received 6.80 citations per year. When we considered citations to books on the *Business Week* list of the 10 best business books, the average citations per year were 2.49. Although the academic books were cited, on average, more than twice as much per year as the business books, as already noted, these citations reflect impact on both other academics and more general writing, so the influence on management practice is undoubtedly overestimated by this comparison. Although the difference between the two sets of books in percentage terms is great, remember that the absolute difference is only 4 citations per year, on average, distinguishing Terry Award winners from the books on the *Business Week* list.

We also compared the average number of citations of books written by academics versus others within the best business books from 1991 to 2001. Out of the 107 books that have been listed in the past 11 years, just 19 (17.76%) were authored by academics. These books have been cited an average of 27.36 times. Books authored by journalists, CEOs, and other nonacademics were cited an average of 13.48 times, about half as often. However,

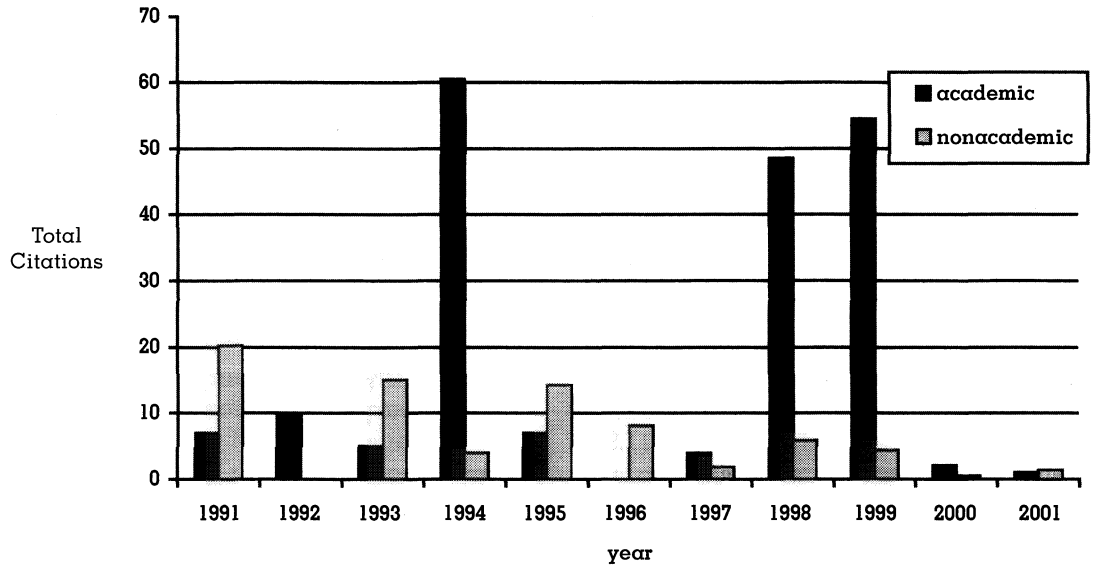

FIGURE 1
Total number of citations for academic and nonacademic authors, *Business Week's Best Business Books*, 1991–2001.

as shown in Figure 1, nonacademic books were cited more often than academic books in 5 out of the 11 years we examined.

The three most-cited books were authored by academics: *Competing for the Future* by Gary Hamel and C. K. Prahalad (121 total citations), *Development as Freedom* by Amartya Sen (91 total citations), and *The Corrosion of Character* by sociologist Richard Sennett (84 citations). Only one of these books came out of a business school; the others were written by an economist and a sociologist. When these three books are removed from the analysis, nonacademic books are cited an average of 1.62 times more often than the academic books on the *Business Week* list.

Yet another way of looking at the influence of business school research on management practice is to consider the source of ideas and techniques used in management consulting, things that businesses actually pay money to implement. Rigby (2001) has done a survey of management tools for the past 7 or 8 years, beginning when he noticed that there were consumer ratings on cereal but no rating of techniques and approaches that companies were spending tens of millions of dollars on. "The term 'management tool' can mean many things, but often involves a set of concepts, processes, exercises, and analytic frameworks" (Rigby, 2001: 139). Rigby gets his list from (1) a literature search on Dow Jones Interactive pulling off generic terms, (2) interviews with 10–15 business school professors, and (3) interviews with about 30 senior executives in companies. This list does change somewhat from year to year.

The 1999 survey results, reported by Rigby (2001), covered some 25 management ideas and tools. We interviewed Rigby to get his definitions of the tools and ideas as well as to jointly determine where the ideas originated. Seven of the 25 management tools came out of academia, and 18 came out of either corporations, consulting firms, or some combination. The survey asks about satisfaction with the tools, their utilization, and gives estimates of a defection rate, or the proportion of companies that stopped using a tool. The tools that came out of consulting firms and companies had a higher utilization rate than the tools from academia (49.7% vs. 33.6%, $p < .10$), had a higher level of satisfaction (3.79 vs. 3.71, n.s.), and a lower defection rate (11.9% vs. 20.6%, $p < .10$). Rigby's data suggest that less than one third of the tools and ideas that companies are paying money to implement came out of academia and those that originated in universities were used less often and were abandoned more often.

Considering the evidence, the data suggest that the research done in business schools is making a modest contribution to management practice and management thought, even when compared to research produced by nonacademics such as journalists, consultants, and people working in companies.

Explaining the Relatively Small Impact of Business School Research

Why has there been such a modest effect of business school scholarship on practice, in spite of the tremendous expenditure of resources by intelligent and motivated people? One possible answer comes from a reflective essay by Paul Lawrence. Lawrence argued that "the better work in our field has come from problem-oriented research rather than from theory-oriented research," (1992: 140) but that many institutional pressures conspired to ensure that there was not very much problem-oriented research being done. Sutton and Staw questioned whether theory in the organizational sciences was useful and wrote that "the field first needs more descriptive narratives about organizational life" (1995: 378). Pfeffer (1997), in a similar vein, argued that research should be anchored in important phenomena. So, perhaps the emphasis on theory rather than observation, problems, or phenomena explains part of the problem.

Another issue is whether research is actually oriented toward being used and useful and whether research proceeds from an intimate knowledge and concern with organizations and the people in them. For instance, Lawrence (1992) argued that whether the research "is in fact used by practitioners is the first quality test" (p. 141) to be applied, and suggested listening "for our subjects' voices identifying important problems where knowledge is needed" (p. 142). In a similar vein, "Argyris argues that for scholars to produce knowledge that is 'actionable,' they must capture in their research the conditions experienced by the practitioner" (Bailey & Eastman, 1996: 354).

Yet another, complementary answer about why organizational research has less effect on management thought and practice comes from Weick's (1989) analysis of theory construction. Using an evolutionary or selection logic, Weick argued that "heterogeneous thought trials are more likely than homogeneous thought trials to solve theoretical problems" (1989: 522). One implication of this argument is that there is a research benefit to generalists and generalism. That is because to the extent theories and theorists are increasingly narrowly focused and constrained, achieving the requisite heterogeneity or variety to solve interesting theo-

retical puzzles or to generate important theory is less likely. Therefore, to the extent that business school research increasingly resembles that of more paradigmatically developed social sciences, with the accompanying strictures, business school research is inadvertently disadvantaged: "Theorists often write trivial theories because their process of theory construction is hemmed in by methodological strictures that favor validation rather than usefulness" (Weick, 1989: 516). Moreover, Weick's argument suggests that the very generalism of training in the organization sciences provides an advantage in theory development, but this is an advantage that is lost as recruiting increasingly focuses on disciplinary specialists and as the career system rewards a narrowing of focus.

Although one may quarrel with the prescriptive wisdom of these various insights, there is little doubt that the arguments help us understand something about why research efforts in business schools do not invariably produce the impact one might like, given both the talent and resources expended. Following the recommendations—to be more problem or phenomenon focused, to pay attention to observation, to listen to our subjects, to occasionally hire and reward generalism and conceptual diversity, and to be concerned with applicability as well as other aspects of theory—although seldom implemented in the world of academic business schools, would probably produce research that has at least the potential of being more useful as well as more theoretically interesting.

A DIFFERENT PERSPECTIVE AND APPROACH TO BUSINESS SCHOOL EDUCATION

Although much of the foregoing argument may at first glance appear to be controversial or provocative, in fact it is neither—the problems are at once well recognized and simply not frequently acknowledged or discussed. For instance, Donald Hambrick, in his 1993 presidential address to the Academy of Management, bemoaned the lack of impact of the work of its members on the larger society because of the "incestuous, closed loop" nature of the research and writing (Hambrick, 1994: 13). More than 2 decades ago, Hayes and Abernathy complained about the "preference for . . . analytic detachment rather than the insight that comes from 'hands on' experience" (1980: 68).

Business schools are relatively unique among professional schools such as law, social work, medicine, education, architecture, and engineering in the degree of separation from the profession that they supposedly serve. This is not to say that business school faculty don't consult for businesses or teach in company executive programs, or that students from business school don't go on to practice management—obviously all of this occurs. But, what is unique is the *degree* of separation that differentiates business from other professional schools—differences in terms of the proportion of faculty who move in and out of the profession or who practice it regularly, and the extent to which curricula in the various professions are or are not linked to the concerns of the profession and directly oriented toward preparing the students to practice that profession, including in many instances incorporating a clinical component.

A number of programs have begun to address the issue of relevance, and most share the following features:

1. *They concentrate on more experienced students*, often practicing managers who attend classes episodically and then return to their work environments to confront their learning with their everyday experiences, and vice versa. Teaching working adults assists in the transfer of training between the classroom and the workplace. Teaching working adults also helps with the readiness-to-learn issue, as for the most part, people with jobs are interested in learning things that will make them more effective on their jobs and are less concerned simply with acquiring a credential so they can find a job. And third, teaching working adults addresses the relevance problem, as pressures from these students will tend to ensure more connection between what is taught and what is needed.

2. *Their design is multidisciplinary.* These programs tend not to have the conventional set of functional courses, but instead recognize the interdisciplinary, interrelated world of modern business. This design element leaves them more veridical with the problems people face in actual management situations, where issues do not arrive to be solved segmented by discipline.

3. *They focus not only on learning concepts and techniques, but also on changing how people think about business issues.* This is an important dimension because many people who teach in business schools note how small the effect sometimes is on those who pass through the school. Changing how people think is an essential element in changing what they do and how they manage, as it is philosophy that underlies many management perspectives and approaches, such as total quality management (e.g., Pfeffer & Sutton, 2000).

4. *They have a clinical or action component.* Learning is coupled with the application of that

learning, sometimes in groups, and invariably in ways relevant to the individual's current job and company.

These are a few examples of different models of business education. At the Duxx Graduate School of Business Leadership in Mexico, 35 courses are offered in three core areas: "business reasoning, social knowledge, and personal and interpersonal skills" (Ransdell, 1999: 48). The courses are taught by part-time faculty who fly in for short periods and spend time interacting on an intense basis with students. At the Rotman School at the University of Toronto, there is an increased emphasis on interdisciplinary training (Lieber, 1999: 262). One of the most ambitious and innovative business school education models is the International Masters in Practicing Management (IMPM), founded by Henry Mintzberg (Reingold, 2000: 286). The program consists of 2-week modules spread over 16 months and across five continents—there is no home campus. Students must be practicing managers and must be sponsored by their companies. When students return from their learning modules to work, "they must write a reflection paper describing how what they learned relates to their job" (Reingold, 2000: 286). The program is focused on changing how students think, rather than on a set of specific analytical constructs. It consists of five modules: "Managing Self, the reflective mind-set; Managing Relationships, the collaborative mind-set; Managing Organizations, the analytic mind-set; Managing Context, the worldly mind-set; and Managing Change, the action mind-set" (Reingold, 2000: 286). Mintzberg's philosophy is that good management education will help people "learn to ask the right questions, to reflect, and to avoid the traditional manager's trap of reacting to one crisis after another" (Reingold, 2000: 286). Classes are structured to leave 50% of the time for students to talk to other students in the class, and are much less professor-centric than traditional MBA classes.

Boyatzis, Cowen, and Kolb (1995b) described the redesign of the MBA program at the Weatherhead School at Case Western Reserve University, notable in that it was shaped by an underlying philosophy, not just the typical political horse trading among functional groups for places in the curriculum, as well as by conscious and systematic efforts to evaluate the consequences of the curriculum redesign. Outcome evaluation—the analysis of the effects of various educational program interventions—is more frequently seen in public elementary and high school education, and indeed evaluation research and methodology is a component of training in educational schools. However, evaluating results or curricula is extremely rare, if not nonexistent in university graduate programs and business school programs in particular. The Association to Advance Collegiate Schools of Business (AACSB) for a time advocated evaluating programs, courses, and their effects (Boyatzis et al., 1995b), but such efforts never went very far and have not penetrated the day-to-day design and management of business school programs. The MBA program the Weatherhead School developed "has six key elements: the managerial assessment and development course, the Learning Plan, the core courses, Executive Action Teams, perspectives courses, and advanced electives" (Boyatzis et al., 1995b: 37).

We have not tried to cover every new or different model of business education here, but to provide some representative examples of what is being done and what is possible. As business school training and research have become less problem-centered and more self-referential, problems of relevance and impact have arisen. Therefore it is understandable that recent innovations in business education incorporate more clinical work, more connection between concepts and practice, and a less-fragmented view of the subject matter.

BARRIERS TO CHANGING THE CURRENT MBA EDUCATION MODEL

There are several, seemingly insurmountable barriers to fundamentally altering MBA programs in the ways just described, and the existence of these barriers helps us understand why so little has changed in spite of the evidence. First and foremost is cost. The shortage of business school faculty is severe and growing. Zimmerman (2001: 15) noted that the top ten PhD-producing schools have reduced by one third the number of students produced each year, and the forecast is for the next decade to graduate only half as many PhDs as in the 1990s. This shortage has resulted in two inexorable trends—increasing salaries, including providing more summer support, research support, and higher 9-month salaries—and reduced teaching loads, particularly at the more competitive business schools, although the salary pressures exist almost everywhere. Both of these trends increase costs, as more highly paid faculty (who also cost more because of increased support) teach fewer classes.

The way many schools have coped is to increase the size of sections, to increase average class size and reduce the number of smaller classes, or at a minimum, to hold class sizes constant. At Stanford, some classrooms were retrofitted a few years ago, much like airplanes, to place more seats into the

existing space. At many schools, utilization of facilities and of classes is measured and managed. With MBA tuition covering at most one half the cost of educating students, business schools face budget pressures that show no sign of diminishing. But these financial pressures, met, in part, by having each professor teach more students in a given classroom encounter, almost preclude the type of clinical instruction that one sees in medical schools or in some of the newer MBA programs described above. The Center for Creative Leadership limits its leadership programs to enrollments in the mid-20s. Many business schools would cancel programs, including executive programs, if they consistently ran at that size.

The second barrier to fundamentally altering MBA programs is that few if any of the current business school faculty are particularly well equipped to staff new models of business education that link education to practice. Unlike other professions such as medicine, law, architecture, and even business schools of the distant past (and a few today that employ more clinical faculty), many full-time faculty have not practiced the profession or craft of management. The shortage of faculty means more business schools are hiring from social science departments such as economics, psychology, or sociology. These faculty, who derive power from their scarcity, are able to focus importance on disciplinary-based research and publication in traditional scholarly journals, rather than emphasizing managerial concerns. Therefore, faculty who have been hired and promoted for their theoretical and analytical skills and for their ability to generate and, one might hope, impart knowledge are not as able to apply the knowledge that they teach.

Third, as with any status-based system, it is scarcely in the interests of those schools winning the competitive war for status to change the rules of the game that have put them on top. Therefore, it is not surprising that much of the innovation in business education and in MBA programs comes from either new schools or programs that are not so much in the status mainstream, such as Case Western Reserve, or from corporations that are not in the MBA status contest at all. As Podolny (1994) has argued, status is achieved partly through the status of the organizations with which one associates. So, although schools can start innovative educational programs, their ability to compete successfully for status and prestige—and recall that prestige does have a real effect on MBA salaries—will be limited.

In other words, we have a self-reinforcing system that will be difficult to change. The most prestigious schools attract the best students who have the best job opportunities and the highest salaries and attract the highest status recruiters. Because the status of the schools derives in part from the achievements of their graduates, those that obtain the best students retain their prestige. Schools that win in this status-based competition, and for that matter, their students, have little incentive to change. Schools that have an incentive to innovate, the ones that are newer or for other reasons are interested in experimenting with different models of MBA education, begin with the disadvantage of not necessarily being able to attract the most applicants or the best students, and therefore, are not as attractive to corporate recruiters. Mintzberg's (Reingold, 2000) new program is insightful in this regard, as by focusing on people already working in companies, the competition for the best jobs and the best students is nicely avoided.

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And finally, the status quo is maintained by the taken-for-granted aspect of so much of business education, the fact that what we do and how we do it has become truly institutionalized. Institutionalization of existing practices and models legitimates them and insulates them from both competition and change and even from serious questioning. "Every treatment of institutions emphasizes their contribution to social stability" (Scott, 1995: 49). Accrediting organizations such as the AACSB and the various disciplinary professional associations constitute the institutional field of business schools and business education and act, in a mutually reinforcing way, to maintain the status quo. Moreover, most business school faculty are too busy doing their work of teaching and research to consider the broader environment in which they are working, and even if and when they do so, their ability to change that environment is severely constrained.

Consequently, the likelihood of profound change or reform in contemporary management education, at least in the United States and at least as practiced by university-based business schools, seems limited. We do not foresee the appearance of forces or actors that can reasonably be expected to overcome the inertia that derives from the factors dis-

cussed in this article, and others, that maintain the current model of business education and research.

WHERE DO BUSINESS SCHOOLS GO FROM HERE?

Our depiction of business education, its evolution over time, and the problems that have emerged, shares features with other studies of schools that have emphasized their institutionalized elements (e.g., Meyer & Rowan, 1977). Institutionalization leads to ritualized practices that assume a taken-for-granted quality and little attempt to connect technical rationality to actual structures and policies. In particular, it is striking that business education and business schools can be so large and so prominent for such a long time without attracting much outcome evaluation or assessment. At a minimum, much more research is needed to address the various questions posed here, as well as other questions that speak to the organization and effects of business school curricula, faculty staffing patterns, and research practices.

The studies of business education in the 1950s (e.g., Gordon & Howell, 1959) and the accompanying foundation support to "improve" business education, came to define a normative structure for what business education should be—research-based, analytical, and founded in economics and other social sciences, teaching people general knowledge that they could use throughout their working lives. The best business schools thus attracted people from social science departments and had faculty that won awards in the social sciences, including the Nobel Prize in Economics.

In implicitly or explicitly rejecting the so-called trade-school model, business schools gained respectability and approval on their campuses by conforming to the norms and behaviors of arts and sciences departments. Just as institutional theory would suggest, this evolving model of business education soon assumed a taken-for-granted quality that came to be valued in and for itself, and is seldom, if ever, confronted with data about its actual effects. However, every so often, the lack of connection between institutionalized organizational practices and the activities they are expected to enhance forces us to examine whether business schools are doing their jobs of enhancing MBA careers and providing useful knowledge.

Our review of the evidence suggests potential problems for business schools. For the most part, there is scant evidence that the MBA credential, particularly from non-elite schools, or the grades earned in business courses—a measure of the mastery of the material—are related to either salary or the attainment of higher level positions in organizations. These data, at a minimum, suggest that the training or education component of business education is only loosely coupled to the world of managing organizations. A similar disconnection is observed when we consider research. Again, the small amount of available evidence suggests a modest effect and limited linkage between the research on management and management practice.

But as this situation is scarcely new, why should we suddenly anticipate problems that could threaten the existing order? For several reasons. First, management has become the subject of popular books and popular discourse. Decades ago, biographies of business leaders were seldom written and were even scarcer on best-seller lists. Special business publications, business media, and business magazines have proliferated. In short, business, not just the stock market, has become a spectator sport in the United States. So, business, business education, and by extension, business schools are coming under increasing scrutiny.

Second, management and managerial skill has been identified as a core competence required for economic prosperity and possibly even economic development. In an increasingly knowledge-based economy, the ability to mobilize and use knowledge is a critical skill. With the privatization of industries and companies all over the world, the ability to manage large-scale private sector organizations effectively is a sine qua non for economic well-being. So, business and business education are increasingly the topic of conversation, and managerial skills are accordingly important for society. In this environment, the fact that business schools apparently have not done a better job in either the educational or research missions leaves them more vulnerable to focused criticism, attack, and competition.

Yes, competition. The demands for better managers and more and better leaders, and the demands for business knowledge are inexorable, and these demands have already generated numerous alternative sources of supply. Greater numbers of educational and research organizations exist separately from business schools (e.g., Gaddis, 2000). Indeed, one can view the short courses offered by consulting companies as alternative business schools, and the research conducted and published by various professional service firms as alternative sources of business research. Executive education is now offered not only by business schools but also by consulting companies and various training and education firms. In every domain in which they operate, busi-

ness schools face competitors that, for the most part, are not necessarily playing by the same rules because they don't operate in the same normative environment with the same history as most business schools (Gaddis, 2000).

For business schools to lose this coming competition would be unfortunate and unnecessary. The research capabilities, and particularly the rigorous thinking and theoretical grounding that characterizes business school scholars and their research, actually offer an advantage over the casual empiricism and hyping of the latest fad that characterizes much, although not all, of the research that comes out of nonacademic sources. And business school faculty have spent years honing the craft of preparing and delivering educational material in ways that are at once accessible and intellectually sound. There is no reason that, in a world seeking both knowledge and training, business schools can't succeed in doing both well.

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To do so, all that is required is for business schools to model themselves more closely on their other professional school counterparts and less on arts and sciences departments. This entails focusing research on phenomena and problems of enduring importance, and building curricula that are evaluated, in part, by how well they actually prepare students to be effective in practicing the profession. At a minimum, it would seem to require systematic assessments of business school products and more attention to the competitive environment. If business schools don't change in this way, competitive institutions may pose a substantial and growing threat to their continued prosperity, if not to their very existence.

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