# Seeking Practical Wisdom

#### Robert G. Lynch

Graduate School of Management
University of Dallas

The late W. Edwards Deming was fond of shocking his listeners with shoot-from-the-hip statements that were designed to destroy myths held dear by scholars and practitioners of American management. One of his favorite antics for opening a seminar was to boldly state, "We should export everything possible to a friendly nation, except American management methods" [Hodgson, 1987, p. 41]. Was Deming serious, or was he just a master of getting an audience's attention?

Most American business educators were not familiar with Deming's ramblings until the mid-1980s, and even then they tended to look the other way. They were busy teaching American methods, convinced that their theories and quick-fix techniques, properly applied, could solve any problems their students might face. After all, the demand for American management education was continuing to grow, and starting salaries for business school graduates were increasing every year.

Over the three decade period from 1960 to 1990 American universities granted more than four million baccalaureate degrees with majors in business subjects and more than one million Master of Business Administration degrees ["Degrees and Other Awards," 1995]. Eventually, these millions of business graduates would make up the largest portion of the middle-management pool that would provide all levels of leadership for America's businesses, hospitals, governmental agencies, and, sometimes, even its colleges and universities. With all of these hard working folks directing American businesses during the twenty-five year period from the mid-1960s to the early-1990s one would think that the nation's commercial affairs were in good hands.

But, Deming had a point! In many cases, American managers were not providing the level of leadership necessary to the task. During that same quarter century many American manufacturers saw their organizational capabilities erode. Many lost their can-do attitude, and, even worse, many gave up their positions of competitive leadership [Lazonick, 1990, p.46]. From the 1960s through the 1980s a number of key American industries such as electronics, automobiles, machine tools, and steel experienced a period of long-term relative decline.

At the time, economists described the problem as a natural maturing which would move the United States away from manufacturing to a strong serv-

ice base. This assumption would soon prove to be misleading as a number of American service industries (e.g. financial, consulting, and construction) also began to lose competitiveness. Many business leaders, of course, blamed their workers and what were described as "greedy" labor unions; some blamed high interest rates and a lack of action by the Federal Reserve Board. In the academy arguments pointed to a growing level of worker mobility and other cultural changes such as what was thought to be a general decline of the work ethic. Conservatives pointed to excessive government regulations; liberals thought it might be the social disruptions and the attitudinal changes brought about by the war in Vietnam. However, most of these excuses had to be thrown out soon after the federal government began using import quotas to put a cap on America sales of imported Japanese products such as steel, automobiles, and tires. These new restrictions caused Japanese firms such as Toyota, Mazda, and Bridgeport to begin buying and building factories in the United States. Japanese productivity and product quality would prove to be nearly as highsometimes even higher - when the manufacturing was done in the United States, using American labor with most of those American "handicaps," as when it was done in Japan.

It turned out that the problem with competitiveness in those troubled years was not the workers, or interest rates, or in any major way cultural differences in work ethic. American workers were not "too lazy to compete" as one of Japan's top political leaders had "sneered" in a 1991 speech. In fact, as a 1992 Fortune magazine article pointed out, just the opposite was true. During this period the American work force had more than done its job. "...When called upon, workers [had] measured up." When real wages declined, because of international competition, American workers responded by working harder and working more hours [Magnet, 1992, pp. 48-51].

What really happened in those key industries was that the Japanese and some Europeans began to apply a number of what had traditionally been American management approaches. They pursued strategies American executives no longer saw as important, and they created some new ones based on well known managerial principles. Like Rockefeller, Carnegie, and Singer in the nineteenth century and Ford, Sloan, and Rosenwald in the early twentieth century, Japanese and European managers set out to dominate specific industries through aggressive growth. Corporate leaders at Honda, Toyota, Sony, Panasonic, and Philips saw the value of such fundamental strategic ideas as economies of scale and brand identification. They realized that increased market share, even at the expense of the short-run bottom line, would usually provide long-run economies and would eventually result in a competitive advantage based on lower costs of production and strong brand recognition. And they discovered that at that particular time in history improved quality, brought about through the use of "new" operating processes, could generate the higher demand required to support the growth they sought.

In that Fortune magazine writer's opinion, the problems with American manufacturing had become less and less difficult to identify.

...Management is the decisive variable in determining how good a given set of workers will be. As the world economy's tectonic plates shift, ways of organizing and managing work no longer differ from one another by nuances but by light years. ...Look through worker's eyes and [you] will see how deeply the way they are managed affects their sense of whether they can do their best [Magnet, 1992, pp. 54-58].

By the 1980s scholars and practitioners alike were beginning to believe that the difference between growth or decline in industries competing on a global scale was mostly a matter of managerial ability – on the shop floor and in the executive suite [Lazonick, 1990, pp. 48-49].

### A Critique of Management Education

It was in the late-1970s that I first began to question why American managers were struggling in their efforts to compete internationally. It was then, while serving as dean of a large urban graduate school of management, that I began to ponder whether those of us in management education were in some way responsible for the problem. I began to wonder—a feeling that quickly turned to fear—if the high correlation between the large number of business degrees held by American executives and the nation's competitive difficulties was due to a cause-and-effect relationship. To believe this relationship to be simply coincidental was becoming harder to accept.

In the 1980s, clear thinking executives in a number of American manufacturing companies began asking questions about traditional American management practices. Some also started to lay a portion of the blame at the feet of management educators. In a talk given to officials of the Massachusetts Institute of Technology, Donald Runkle, an alumnus and at that time vice president of advanced engineering at General Motors, asked "...how'd Japan get so smart and how'd we get so dumb?" He pointed out that in the 1950s the United States produced "...over 70% of the world's automobiles... by 1980 [Japan] blew by [America]." Runkle argued that after World War II the United States "turned right," and the Japanese "turned left." American manufacturers put nearly 70 percent of their research and development investment into product design and the other 30 percent into process design. We relied mostly on our prior manufacturing innovations, which at that time were making our factories "world class." American cars began to set the standard from the standpoint of innovative product ideas: overhead valve engines, air conditioners, independent suspension, power windows, and automatic transmissions. The Japanese, however, simply copied all of these marketing-oriented improvements through reverse engineering. But, according to Runkle, they did not copy our manufacturing processes. Instead, Japanese producers reversed the American investment pattern, putting 70 percent of their research and development efforts into process design [Runkle, 1991, p.68].

Because of their process emphasis, major breakthroughs in manufacturing began to occur in Japan during the 1950s. They started working on ideas they called "lean production." But American manufacturers were much slower at copying Japanese process designs than the Japanese were at copying our product designs. Runkle pointed out that General Motors finally got around to setting up a laboratory to study these ideas-they called it synchronous operationsin the 1980s. He blamed the lag, to a large extent, on the people who Americans depend on to be on the leading edge: the universities. Having been a Sloan Fellow at MIT in the mid-1970s, he questioned, "why one of the nation's great research institutions didn't uncover and teach the new legendary lean manufacturing techniques in the twenty years between the early 1950s, when they were developed, and the mid-1970s, when many of us were in business school." He pointed out that "...in the car business, we warrant our product. When we make a vehicle that's got a problem... we send out a recall notice. We ask the customer to bring our product back, and we fix it." As he ended his talk to these MIT officials he quipped, "I'm waiting for my recall notice" [Runkle, 1991, pp. 68-69].

By the mid-1980s I too had ceased to wonder about management education's part in this situation. My fears were substantiated. We had indeed played a part in creating the problem. Certainly, we were not the only ones to blame, but we had given the process its credentials.

How could this have happened? Had we been asleep at the wheel? Had America's economic successes after World War II lulled us into complacency? Were these problems the result of what we were teaching, how we were teaching it, or, perhaps, what we were neglecting to teach? In search of answers to these questions I began to examine the fundamental processes of learning and how they have been applied in the preparation of graduates for the practice of management.

## The Learning Process

Mortimer Adler in his highly respected treatise on the problems of American education, *Reforming Education: the Opening of the American Mind*, describes in detail the three levels of knowledge to be sought through a curriculum designed for true learning:

Knowing "That:" the acquisition of organized knowledge;

**Knowing "How:"** the development of intellectual and applied skills; and

**Knowing "Why:"** the appreciation and understanding of fundamental ideas, values, and processes [Adler, 1988, p. 282].

It has been my observation, over thirty-three years of teaching, that most of us in management education recognize the need and importance of knowing "that" and "how." Some also realize the need to deal with the questions of "why," but seldom do we elevate the "why" to the level it deserves. Many, in

fact, do not recognize its true power in bringing about understanding and in supporting the retention of knowledge. Learning in any subject is greatly improved when questioning by students plays a role in the teaching methodology. It is my contention that the development of the *practical wisdom* necessary to becoming a truly excellent manager demands a constant search for "why."

Undeniably, it is important for a student to continue to increase his or her level of organized knowledge. This most basic of the three levels of knowing—the "that"—is usually taught by listing and explaining the facts, concepts, and rules of specific disciplines such as the languages, mathematics, the natural sciences, history, geography, economics, management, accounting, and psychology. Most of the time the methods used to teach this material are didactic: lectures and tests, supplemented with textbooks, computers, and video aids [Adler, 1988, p. 284]. This level of knowing and these methods of teaching are a necessary part of the learning process. The problem is that this is the least important material, usually taught through the least effective ways of learning; yet, in contemporary management education it is the principal way of knowing required by many professors.

In preparation for a professional practice, such as management, the development of skills (i.e. learning "how") is, of course, of great importance. But a significant shift in methodology, away from the usual lectures and short-answer tests, is required to provide this way of knowing. Adler explains that "...a skill, a [technique], or an art is a habit. You do not have an art except by having it through habit formation." And habits are established through drill. Thus, this kind of knowledge is best developed through the experience of practicing one's skills: reading, writing, speaking, presenting, listening, calculating, problem solving, programming, measuring, estimating, and making critical judgments. Here, the most appropriate means of instruction come in the forms of coaching, individual exercises, and supervised practice [Adler, 1988, p. 284].

In the better management programs, especially at the graduate level, one could argue that enough of the "how" is included - with the possible exception of writing. Some, in fact, believe that a number of MBA schools have gone overboard in teaching "how," even at the expense of teaching "that." Our most serious concern, however, should not be that skills might be overdone. What should worry us more is that the "how" can be dangerous when we do not at the same time teach students to question what they are being coached to do. Our biggest fear should be that few students are asking "why." It was, in fact, not questioning their strategic direction of travel that got many American managers in trouble during the 1970s and 1980s [Argyris, 1994, pp. 77-85].

This third of Adler's levels of knowing, the "why," requires yet another approach to teaching. It can not be accomplished effectively through didactic lecturing or through coaching. An understanding of "why" only comes through debate and investigation, through discussion and discovery. To actuate this questioning-based process the student must be allowed to discuss ideas and values; the student must experience the feeling of discovering fundamental first principles and cause and effect relationships. Discussions of important issues and

investigations that lead to intellectual speculation are important. Books filled with ideas and stories that lead to first principles should play a part; standard textbooks will not work—they are written to provide descriptions and definitions, not to support or lead discussions [Adler, 1988, pp.285-286].

## **Investigating Pathways Already Traveled**

Just what are the first principles of management, anyway? What are the strategies, systems, and tactics, built upon these principles, that lead to a successful practice of management? These fundamental ideas and effective methods are out there to be found; they are in the experiences, past and present, of successful managers; they are to be seen in the strategies successful firms have selected over time. But they can only be found by looking; they can only be known by asking "why."

However, taking students down such a pathway of discovery to an understanding of either "how" or "why" is not an easy task in today's business schools. Scientists and engineers use laboratories to provide students the opportunity to discover, and they do a fair job of replicating the real worlds of their disciplines. Medical school professors do relatively well through the use of real patients with actual injuries and illnesses in teaching hospitals. Even schools of cosmetology, auctioneering, and mortuary science provide situations and, oftentimes, real customers for their students to practice on. But students of business seldom have such opportunities; after all, if business students were to experience real-world conditions, real money might be at risk!

Some management schools have made an effort to provide consulting-team experiences in advanced courses by making arrangements that allow students to work on real problems with top executives from local firms. Some schools provide internship programs that allow younger students to at least experience being in a business environment before graduation. Most professors use case studies to walk students through quasi-real-world situations. Each of these types of exercise provides an excellent way of developing the skills, the "hows," a manager needs; in a few instances they even inspire students to ask "why." But it is clear that actual real-world experiences at a level that would lead management students to begin, through questioning, to discover the foundations required for the development of *practical wisdom* are presently few and far between in the academy. This requires a different path to discovery than most business schools have furnished to date.

Nearly a decade ago I began to consider the possibility that business history could provide the pathway that is needed. Seeing the experiences of others over time and examining the ideas they have put forward is one practical way of leading students to the habit of questioning. What better way is there to gain an understanding of change, its creation and consequences, than to question why it happened in the lives of real organizations and real people over time? What better way to discover the cause and effect relationships faced by management strategists than to search for the historic causes that have influ-

enced real-world results (i.e. effects)? Following the thoughts and actions of leaders, managers, and scholars through their writings and from narratives of their endeavors is not the same as being there, but it could be a valuable substitute—a substitute that can be applied in a classroom environment.

To discover important principles and cause and effect relationships using this methodology students would walk paths previously followed. They could debate the reasons behind the directions taken. In this way they would begin to see that individuals reaching out, sometimes *proactively* in pursuit of their dreams and sometimes seeking to find new strategic or tactical solutions as they *react* to situations, play an important part in creating the history of events. By experiencing the excitement of past dreams, by feeling the pressures of the problems these individuals faced, and by making some of the errors in direction previously made, present-day students would begin to uncover some of the same possibilities these earlier searchers discovered.

This approach to the study of management, through an examination of important historic segments from original documents and discussions of the actions of the people who were at the center of events, brings with it the opportunity to see change as it occurs and to ask "why." It provides the student a chance to see and question the principles espoused by Henri Fayol, the systems instituted by Mr. Ford, and the arguments posed by Dr. Deming. It condenses the process of discovery—of many discoveries—into a pathway that students can walk using successful managers from the past as mentors or guides. It presents values and allows for their debate; it hides, between its lines, first principles and primary strategies, giving students the opportunity to find them for themselves. Taught properly, it almost demands that questions play a part in the classroom experience. When discussants learn something of "how" things are done today they improve their skills; but when they discover "why" things are done in a certain way today, based on the evolution of concepts derived from past experiences, they gain a degree of practical wisdom.

Acting as a laboratory of actions and reactions, history defines an integrated, dynamic picture of human nature and organizational life. It helps the student identify patterns, directing the mind back to the fundamental principles and providing a basis for triangulating the past, present, and future in our thought processes [Tedlow, 1986, pp. 82-83]. As Kierkegaard once observed, "life is lived forward but understood backward" [cited in Thompson and Strickland, 1992, p. 291]. History prepares us to meet the future, because it marks off a base line for recognizing change [Wren, 1987, p. 347]. It shows that those firms that succeed live on the edge of the future, and that the changes they make, in fact, help create the future.

## Teaching Management Through History

But, is the idea of using history to teach management realistic, or is it just another academic dream? Will business students involve themselves in discovering first principles along these pathways or will they close their eyes and dream of bottom lines? These were questions that had to be answer as quickly as possible when I made the decision five years ago to redesign my Strategic Management course by integrating two teaching approaches: one covering contemporary strategic ideas, the other following the historic evolution of these strategic concepts from their early use. Theoretically, this new methodology seemed to make sense, but if it was not acceptable and beneficial to the students I had to know before too much damage could occur. Therefore, as I began to change the course material, I also began to gather semester-by-semester feedback.

To bring this new direction into line with the original course objectives meant doing more than just lecturing on interesting events in business history. It meant using history to highlight business strategies; it meant motivating students to discover why certain paths were successful in specific situations and others were not. My goal in leading a discussion on key strategies became one of following their evolution from first use to present application. With this in mind I began to gather and prepare material based on the history of those strategic topics contemporary management courses ordinarily cover. A number of well recognized textbooks in strategic management were queried to develop an outline of the concepts to be considered, and an historic investigation of each was integrated into the syllabus.

Midterm examinations were eliminated in favor of five "discovery essays" evenly distributed throughout the semester. These take-home questions require the student to walk the historic pathways followed by firms seeking strategic solutions in important decision situations. For example, my students now learn how to analyze the external factors faced by an organization, how and why they affect strategic decision making, by investigating the environmental changes that came before and during the British Industrial Revolution. They search for those opportunities and threats that external changes brought to companies in the British cotton industry by developing a SWOT analysis for a late-eighteenth century textile manufacturer. To discover the nuances of vertical integration they walk the pathways followed by Andrew Carnegie and R. E. Olds; to investigate the use of mergers, acquisitions, and horizontal integration they visit the worlds of John D. Rockefeller and J. P. Morgan. Mass production strategies are discovered by following the trials and tribulations, the successes and failures, of Captain John Hall, Henry Leland, and, of course, Mr. Ford. Moving along these pathways, the students not only begin to ask why certain strategies were selected and why certain consequences occurred, but they also begin to get a feeling for the history of their profession - an extremely important side effect to the process.

Student feedback gathered since these changes in methodology were initiated provides important information regarding attitudes toward this approach to the study of management – an approach that put some of the students into shock when they were introduced to the course syllabus. In the first class each semester, before history is even mentioned, each student completes a Base-Line Questionnaire. Demographic data is collected from this survey and, most impor-

tantly, the student's disposition regarding the study of history is measured. After completing the course a *Finish-Line Questionnaire* is answered by each student to see if their attitude toward history has changed and to gather individual opinions regarding the use of history to teach strategic management. The base-line and finish-line questionnaires are tied together through the use of a code, but individual student names are not identifiable by the professor. A total of 132 students who have completed the Strategic Management course over the past two years have been surveyed to date. The results from this feedback have been both interesting and gratifying.

Demographically, all of the students questioned were pursuing an MBA degree; about three-quarters were employed Americans following a part-time, evening curriculum. Because the University of Dallas serves a large number of high-technology firms, 39 percent of the students held undergraduate degrees in engineering. The remaining 61 percent were distributed as follows: 27 percent BS degrees, 20 percent BBA degrees, and 14 percent BA degrees. Eighteen percent had already completed a graduate degree in another field – most in engineering.

On average the students had 7.2 years of work experience in professional or managerial roles before enrolling for the Strategic Management class, and the average student had waited 4.5 years after completing his or her undergraduate degree before beginning the MBA program.

These students had earned an average of 4.7 credit hours of history in their prior college work, but, surprisingly, nearly one-third had not taken a course in history since high school. Of those who had taken at least one college-level history course, nearly half rated this experience as mixed (Chart 1).

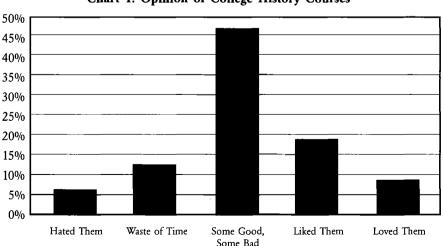


Chart 1. Opinion of College History Courses

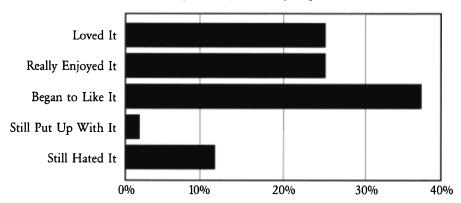
To determine if there were any attitudinal changes with respect to the student's interest in reading and hearing history while pursuing this course a question on this topic was included on both the Base-Line and Finish-Line questionnaires. The results of these two questions (Chart 2) show that before taking the course the largest number expressed a mixed opinion, with 32 percent stating that they "liked [history] some" and more than 30 percent stating that they "enjoyed it." However, one-quarter of the class simply stated that they "dealt with it." After completing the course the numbers shifted dramatically with 40 percent now saying they "loved it" and only 15 percent in the mixed opinion category. Interestingly, this data also shows that the percentage hating history increased from about 2 percent to 7 percent. Obviously, something happened to cause 5 percent of the students to move in the wrong direction.

50% 45% Prior to Course 40% During Course 35% 30% 25% 20% 15% 10% 5% 0% Hated It Dealt With It Liked It Loved It Enjoyed It

Chart 2. Level at which the Students Enjoyed Reading and/or Hearing History

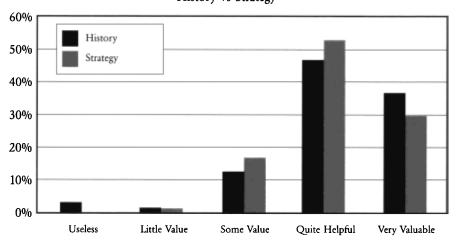
Many of the students in the 27 percent who began the course stating that they either "hated" or just "dealt with" reading and/or hearing history changed their view by the time they had completed the semester. The Base-Line and Finish-Line questionnaires for each of these students were matched to determine the changes occurring by individual. After completing the course a total of 50 percent had moved to "loved it" or "enjoyed it," while 37 percent now stated that they were beginning to "like it" (Chart 3).

Chart 3. Post Strategy Course Opinions About Reading and/or Hearing History by those who previously hated or put up with it



The historic and contemporary reading assignments in the course were varied as to author and subject so as to reduce any bias that might occur if only the best books and articles on the most popular subjects were required. When asked about the learning value of these reading assignments the students rated those that examined the history of strategy as slightly lower in the first four categories than those discussing contemporary strategy, but the history based readings rated the highest in the fifth, "very valuable," category (Chart 4).

Chart 4. Learning Value of Required Readings
History vs Strategy



Of course, the most important question to be resolved if this teaching methodology is to prove itself worthy of being applied in an MBA program should center itself on whether the historic approach facilitates the students understanding of strategic issues. Does it cause them to ask why and, therefore, to begin to develop a base for the practical wisdom they will need if they are to be exceptional management practitioners. On a part of the Finish-Line questionnaire, students were asked to rate the value of the history they had experienced through the readings, discussions, lectures, and discovery exercises in developing an understanding of strategy. The results of this question (Chart 5) were more than gratifying. Nearly 60 percent stated that following historic pathways had been "very valuable." Only 12 percent felt that this approach had been of "no help" or had "detracted" from their management studies.

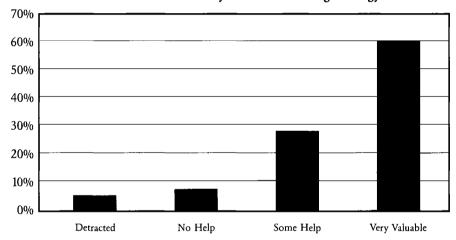


Chart 5. Value of History to Understanding Strategy

A great deal still needs to be known. More data needs to be collected, data that will investigate the reasons behind the positive inputs reallized to date. Studies of the variety of ways historic material can be presented and which approaches instigate more questioning and discovery need to be performed. More needs to be known about any differences in opinion that might exist between engineers and business majors. But there is little doubt, with the information now available, that following the pathways of history in the study of strategic management is worthwhile travel.

#### References:

Adler, M., Reforming Education: The Opening of The American Mind (New York, 1988).

Argyris, C., "Good Communications That Blocks Learning," Harvard Business Review, July-August (1994), 77-85.

- Hodgson, A., "Deming's Never-Ending Road to Quality," *Personnel Management*, July (1987), 39-44.
- Lazonick, W., "Organizational Capabilities in American Industry: The Rise and Decline of Managerial Capitalism," *Business and Economic History*, 19, 2 (1990), 35-54.
- Magnet, M., "The Truth About the American Worker," Fortune, May 4 (1992), 48-58.
- Runkle, D.L., "SMR Forum: Taught in America," Sloan Management Review, Fall (1991), 67-69.
- Tedlow, R., "Why History Matters to Managers," A.M. Kantrow, interviewer, *Harvard Business Review*, Jan.-Feb. (1986), 82-87.
- Thompson, A. and A.J. Strickland III, Strategy Formulation and Implementation (Homewood, 1992).
- Wren, D.A., "Management History: Issues and Ideas for Teaching and Research," *Journal of Management*, 13, 2 (1987), pp. 341-347.
- "Degrees and Other Awards Conferred by Institutions of Higher Education: 1994-95," National Center for Educational Statistics (Washington, 1995).

