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# Management Education for the Twenty-First Century

by William R. Torbert

(Adapted from *Managing the Corporate Dream*,  
Dow Jones-Irwin, 1987)

Can management schools face more directly the difficult and paradoxical challenge of teaching leadership? Curtis Tarr and Harold Leavitt have both contributed articles to *Selections* in the past year urging that they do so (Tarr, "Can Leadership Be Taught? [Winter 1986]; Leavitt, "Management and Management Education: What's Right and What's Wrong?" [Spring 1986]). Leavitt distinguishes among three managerial tasks—*problem solving*, *implementing*, and *pathfinding*. He argues that management education over the past thirty years has been best at teaching problem solving, which is done through analytic methods, and worst at teaching pathfinding. He then argues that truly competent management requires all three of these disparate skills, which are often in tension with one another. More than that, he argues that competent management requires the integration of these skills. He suggests that the effective teaching of pathfinding and of the integration of pathfinding, problem solving, and implementing requires that a fundamentally new approach to teaching be adopted.

**T**his article carries the discussion further. First, it describes a theory called developmental theory, which indicates why it is so difficult to teach leadership. Next, it describes a school—the Boston College Graduate School of Management—that for the past six years has been experimenting with a new approach to organizing MBA education and conducting research on these experiments to determine what conditions promote development toward leadership vision and initiative. The experiences and data emerging from this effort illustrate the following points:

1. why it is so difficult to teach pathfinding and the integration of pathfinding, problem solving, and implementing;
2. what kinds of organizational structures support such teaching; and
3. why twenty-first-century organizations will increasingly require just this kind of leadership and just this kind of organizational structure.

1. Robert Kegan's *The Evolving Self* (Cambridge, Mass.: Harvard University Press, 1982) reviews the history of developmental theory and emphasizes the dynamic process of development. Torbert's *Creating a Community of Inquiry* (London: Wiley, 1976) originally applied developmental theory to organizations, and his *Managing the Corporate Dream* (Homewood, Ill.: Dow Jones-Irwin, 1987) references other recent applications.

## Developmental Theory as Applied to Managers

Developmental theory, which was originally elaborated by Piaget and has more recently been applied to organizations as well as to persons, underlies the experiment in management education at Boston College.<sup>1</sup> In brief, developmental theory holds that persons and organizations evolve through a definite sequence of stages. Each stage change represents a fundamental transformation in which the assumptions that framed the previous stage are dethroned and become variables within the more inclusive framework surrounding the new stage. The assumptions of the earlier stage are not wrong; they are simply not absolutely and always the primary truth. For example, at one stage a person's very identity is tied to meeting the expectations of others. At a later stage, identity is tied to meeting goals; others' expectations now become variables that may influence one's success on particular occasions but that do not directly and automatically determine behavior. Because stage changes are fundamentally unsettling, both people and organizations are inevitably ambivalent about approaching them and may remain at any given stage for an indefinite length of time.

The first three developmental stages for people are known as the *Impulsive*, *Opportunistic*, and *Diplomatic*. These stages usually take place during childhood and the early teenage years, and as a consequence they are relatively rare among adult managers. The Impulsive two-year-old usually becomes the Opportunistic, self-controlled nine-year-old, dedicated to turning each event to his or her advantage. In turn, this nine-year-old usually becomes a Diplomatic thirteen-year-old, capable of subordinating his or her immediate advantage in order to meet the expectations of peers and the norms of appropriate behavior within some larger group.

Three different studies of managers (see Table 1) have found most to be in the next three stages of development: the *Technician*, *Achiever*, and *Strategist* stages. These three stages seem to be closely related to Leavitt's notions of problem solving, implementing, and pathfinding. In all three studies, the modal stage for managers is the Technician stage. At this stage the person subordinates the ability to meet others' expectations and demonstrates a new dedication to the internal logic of some craft, sport, intellectual discipline, art, or profession. Problem solving is the supreme passion for a person at this stage, and more students may well enter MBA programs at this stage than at any other (such was the case with the Boston College MBA program at the outset of our research).

Table 1 Distribution of managers by developmental position in three empirical studies.<sup>2</sup>

Samples and Numbers			
	Study 1 First-Line Supervisors (37)	Study 2 Junior and Middle Managers (177)	Study 3 Senior Managers (66)
Developmental Positions	Percentage of Total Number	Percentage of Total Number	Percentage of Total Number
Impulsive	0.0	0.0	0.0
Opportunist	0.0	5.0	0.0
Diplomat	24.0	9.0	6.0
Technician	68.0	43.5	47.0
Achiever	8.0	40.0	33.0
Strategist	0.0	2.5	14.0
Later Stages	0.0	0.0	0.0
	100.0%	100.0%	100.0%

If MBA programs have in the past had an implicit developmental mission with regard to their students, this mission has seemed to focus on facilitating the transformation from the Technician to the Achiever stage. At the Achiever stage, persons subordinate their logical ability to achieve internal coherence (whether it be within a financial statement, a legal argument, or a piece of marketing research) to a commitment to achieving tangible results in wider environments. Such environments are characterized by multiple logics and multiple, often ambiguous forms of feedback. Whereas the Technician tends to dismiss negative feedback that does not match the logic of his or her craft, the Achiever responds to negative feedback from any constituency that may influence his or her ability to implement the predetermined goal. The person at the Achiever stage gives priority to the managerial task of implementation.

In the past, numerous aspects of the organization of most MBA programs have challenged the Technician's framework and rewarded the Achiever. The huge workload that MBA programs throw at their students often overwhelms the Technician's perfectionism. The Harvard case method subordinates the functional and disciplinary logics, which are attractive to the Technician, to a more pragmatic, general management approach. The practice of encouraging study groups and group projects within MBA programs also encourages students to recognize and negotiate among conflicting logics rather than remaining imprisoned within their own.

By contrast, Leavitt's pathfinding task of management—finding and pursuing the right goals for oneself and for the organization—begins to attract the attention of persons only as they develop beyond the Achiever stage to the Strategist stage. Only at this point in the developmental process do managers begin to appreciate that persons and organizations differ from one another not only in visible ways and in particular values but also much more fundamentally, in terms of the very frameworks or assumptions they use to interpret and

act on the world. The evolving Strategist begins to realize that all organizing frameworks, including his or her own, are created through a history of social negotiation and are, at best, relatively rather than absolutely valid. Because the different persons and organizations interacting at any given time are likely to enter that situation at different stages of development, the Strategist understands pathfinding—that is, the creation of a shared vision, mission, or framework—as a continuous process involving all the participants, whether or not they recognize its importance. Hence, the Strategist attempts to create an explicit framework, theory, or strategy to guide the process of pathfinding, whether this be Henry Kissinger's balance-of-power theory of international relations or William Norris's theory of creating markets to meet social needs.

Table 1 shows that very few managers—including very few senior managers—develop to this stage, even though one might assume pathfinding to be the quintessential senior-management task. But even the few Strategists who exist have still not reached the stage of integrating pathfinding, implementing, and problem solving. Kissinger separated the pathfinding process from the implementing process when he made the National Security Council powerful at the expense of the State Department, creating the conditions that eventually led to Reagan's Iran-contra debacle. Norris differentiated between social vision and profit making to the point at which his resignation as CEO of Control Data became a condition of the company's reestablishing financial credibility.

**T**he integration of pathfinding, implementing, and problem solving requires more than just a theory of how to frame and reframe events; it also requires a quality of active attention to what actions are simultaneously *efficient* (problem solving), *effective* (implementing), and *legitimate* (pathfinding). The transformation from reframing theory to reframing experience corresponds to the transformation from the Strategist stage to the later stages of development. As Table 1 shows, none of the three developmental studies of managers found any managers to be in the later stages of development.

2. The three empirical studies, conducted by different scholars, all used Jane Loevinger's well-validated measure of ego development (Loevinger and Wechsler, *Measuring Ego Development*, vols. 1 and 2 [San Francisco: Jossey-Bass, 1978]). The names for the stages are this author's own, in an effort to be descriptive of data on managers. Further reference to these related studies can be found in K. Merron, D. Fisher, and W. Torbert, "Meaning Making and Managerial Action," *Journal of Group and Organization Studies* (forthcoming, 1987).

### Developmental Theory as Applied to Organizations and to Management Education

If we accept Leavitt's notion that MBA programs should seek to teach pathfinding and the integration of pathfinding, implementing, and problem solving, and if we accept the theoretical correlation between his concept of the three managerial tasks and the concept of different developmental stages, the question arises of what kinds of curricular and organizational arrangements would encourage MBA students to develop beyond the Achiever stage to the Strategist and later stages. In order to address this question, we must first briefly introduce the notion of stages of organizational development, which parallel the stages of managerial development (see Table 2). Only an organizing process at a relatively late stage of development encourages persons to develop toward the Strategist and later stages.

Just as we do not often find managers in the first three stages of development, we do not often see organizations until after they have successfully completed the first three stages of organizational development. These stages can be termed *Conception*, *Investments*, and *Incorporation*. During these stages, the dream for the organization develops, personal and financial investments are attracted, and delivery of a service or product generates net revenues.

As in the case of managers, most publicly visible organizations are found at the next two stages of development, which can be called *Experiments* and *Systematic Productivity*. In the Experiments stage, the organization is typically fast growing and fluid. The organization that is in the Systematic Productivity stage has institutionalized and bureaucratized a logic of success that was discovered during the previous stage.

Again like managers, very few organizations go beyond the Systematic Productivity stage to the *Collaborative Inquiry* stage. At this stage, organizations produce their goods or services in ways that allow members to continually reexplore the organization's identity and mission, with regular processes in place for amending structures, strategies, and systems. In other words, at this stage the organization becomes capable for the first time of deliberately restructuring to meet unforeseen market or political conditions, which might include the following: opportunities for the organization to initiate acquisition, merger, or divestiture activities instead of being victimized by others' initiatives; opportunities to operate across national and cultural boundaries; and the manufacture of

products (such as software) and services that move rapidly through their life cycles, demanding frequent restructurings. Companies face more and more such conditions as the twenty-first century draws near.

Only those organizations at the Collaborative Inquiry stage create an environment that systematically nurtures managers to develop toward the Strategist stage. Yet, in theory, only pathfinders at the Strategist or later stages of development can provide the kind of leadership that systematically nurtures organizations to develop toward the Collaborative Inquiry stage. The paucity of this type of leadership seems to determine and explain the paucity of such organizations, and vice versa. Here, we seem to be at the frontier of social evolution.

If professional schools of management wish to meet Leavitt's challenge of teaching pathfinding, they will have to move from the stage of Systematic Productivity to that of Collaborative Inquiry. The transformation of the Boston College MBA program offers one illustration of what such a transformation may look like (although this program is by no means unambiguously successful in promoting student development, as the data will show).

Table 2 The first six stages of development for people and organizations.

	People	Organizations
I.	Impulsive	Conception
II.	Opportunist	Investments
III.	Diplomat	Incorporation
IV.	Technician	Experiments
V.	Achiever	Systematic Productivity
VI.	Strategist	Collaborative Inquiry

### **The Restructured Boston College MBA Program**

The Boston College MBA program embarked upon a self-reexamination in 1977 that led to a unanimous faculty vote in 1979 in favor of thirteen major curricular changes. These curricular changes were complemented by a series of administrative and physical changes, with the result being a completely 'new look' for the entering class of fall 1980. The new curriculum required that students spend 40 percent more time in class each week than had previously been the case. New courses—in international management and in the history and philosophy of management—were introduced. The main effect of the changes, however, was to make more explicit the faculty's commitment to teaching students not just how to *think* about management (that is, how to solve problems intellectually) but also how to actually *manage* (how to pathfind and implement in addition to solving problems).

This qualitatively new mission was to be accomplished through a series of inquiry systems interwoven into productive systems. For example, most management schools encourage informal student study groups for the preparation of daily assignments or term projects. The MBA program at Boston College formalized the study-group process by assigning a heterogeneous collection of students to each group and giving each group two semester-long projects. The study groups were thus made more analogous to actual business settings through the use of assigned colleagues and multiple, competing projects.

Several inquiry systems surrounded these five-member groups. Each member was required to assume a leadership role. In every group there were two project leaders, a meeting leader, an evaluation leader (whose function was to help the group evaluate itself systematically), and a process leader (who would help to redirect the group whenever it appeared to be becoming unproductive during meetings). These roles helped to assure systematic evaluation and feedback of individual and group performance. In addition, a second-year student with special training was assigned as a consultant to each group to provide the members with an external perspective on their efficacy as leaders. Several different course papers required students to study their own actions in the study groups, to evaluate their leadership effectiveness from different theoretical perspectives, and, later, to experiment with new actions that promised greater effectiveness.

Thus, young managers were not simply thrown into difficult, sink-or-swim situations. Rather, they were surrounded by organizational systems that encouraged inquiry, documentation, feedback, and experimentation—in other words, they were exposed not only to hard knocks but also to a *school* of hard knocks. They were being taught not just how to problem solve but also how to implement.

In their second semester, students were required to take still more responsibility for their actions. This time, they selected their own consulting teams, formed their own internal leadership structures, developed their own research and consulting relationships with local businesses or not-for-profit organizations, and contracted for support from a faculty adviser and a second-year consultant. They were now being taught how to pathfind.

These teams were to be responsible for presenting the client with a valid diagnosis of whatever problems they had originally contracted to study, in ways that encouraged implementation and greater effectiveness on the part of the client. In addition to the traditional academic paper, the projects ended with a public oral-presentation competition. Judging was done on the bases of analytic credibility and presentational effectiveness, with visiting executives and scholars serving as judges. The teams were provided with both video and verbal feedback.

**T**hus, students were being asked to face directly the paradox that most academic settings avoid—namely, how to wed reflection and action, inquiry and productivity, eternal validity and immediate effectiveness, and self-subordination and leadership. In short, they were being taught how to integrate pathfinding, problem solving, and implementation.

So much for the microorganizational pedagogy of the program. On the macroorganizational level, the program as a whole was treated as an ongoing process of inquiry. Faculty who taught in the program participated in public course program evaluations in mid-semester. The faculty team discussed the results of these evaluations together within a week after they had been received and made a decision as to how the results could best be discussed with the students. The formal and informal discussions of the data—along with the subsequent changes or lack of changes in both student and faculty attitudes and actions—would highlight the stakes, difficulties, and the skills involved in acting effectively to generate organizational change.

On a still larger, or longer-term, scale, the Boston College MBA program planned to avoid territoriality and to institutionalize inquiry by appointing a new faculty team every two years to review the program and amend its structures. Such frequent role turnover is not, of course, unusual in institutions. What was unusual in this program was that longitudinal research was conducted to determine student response to the new mission, structures, and activities; to test whether these new conditions generated developmental changes in students toward later developmental perspectives; and to test whether such movement correlated, in turn, with greater managerial effectiveness once graduates had entered (or reentered) the work force.

In all these ways, the program transformed itself from the Systematic Productivity stage to the Collaborative Inquiry stage. It institutionalized a self-educating process that encouraged all participants to reflect in the midst of action, to do research and seek feedback on their performances, and to develop greater pathfinding and implementing effectiveness.

*Table 3* Changes in developmental position of entering students in Boston College MBA program.

Developmental Position	Entering Class	
	1980	1983
Prior to Achiever Stage	58%	25%
Achiever	40%	50%
Strategist	2%	25%

### Longitudinal Research Findings on the Boston College MBA Program

In its first four years, the longitudinal research uncovered several facts of particular interest. Most concretely, this information tells us something about how the program actually operated and how students responded to the changes. Standing back a little further, we can learn something about how an organization generates change in the developmental perspectives of its members.

The research disclosed that the first two classes to go through the restructured program registered much higher overall satisfaction at graduation than had prior classes. Second, it showed that students operating at the later developmental stages of management performed managerial tasks more effectively (i.e., they were more likely to reframe problems and to act collaboratively) than did those who were operating at earlier stages. Also, project groups that were composed of more students who were at later stages of development received better grades on projects and better ratings from their consultants with regard to efficient use of time, effective decision making, and support for one another's learning processes.

The research also showed that no student ever made more than one developmental transformation during the two years of the program, and that on average the program generated no developmental changes in its students. Furthermore, it showed that almost all of the (relatively few) students who moved toward later developmental perspectives during their two years in the program were those who, in addition to completing all of the first-year activities, voluntarily took an intensive course in developmental theory and consulting practice during the summer between the two school years and served as consultants during the second year to first-year project groups.

Finally, the institutional research showed a dramatic change in the developmental position of students choosing to enter the program, as shown in Table 3.

Taken together, these findings indicate that the restructured MBA program at Boston College came to be perceived very differently by applicants than had the former program, that it attracted a different group of students, and that it was experienced as more satisfactory by students than the former program had been.

The findings are also consistent with the notion that pathfinding and the integration of pathfinding, implementing, and problem solving are associated with development beyond the Achiever stage as well as with the notion that organizational inquiry systems can support development of those abilities. At the same time, the findings seem to offer a clue about how long and intense an individual's commitment to acquiring pathfinding and integrative managerial skills must be before a measurable change in developmental position is likely to occur. One year of occasional, more-or-less required participation in organizational inquiry systems of the sort described here is *not* enough. However, two years of highly committed participation, such as that exhibited by the MBA candidates who became project-group consultants during their second year, can be enough to promote transformation from one developmental stage to the next.

### Conclusion

Together, developmental theory and the data collected from the educational experiments at Boston College suggest that the answer to the question "Can leadership be taught?" is a qualified "Yes." Leadership *can* be taught, if graduate business schools (or other organizations) can move beyond the Systematic Productivity stage of development to the Collaborative Inquiry stage. Only such an organizational transformation will result in an environment that is existentially as well as academically educational. Such an environment is necessary in order to systematically nurture students (and faculty members and managers) in their development beyond the Technician and Achiever stages, common among today's managers, to the Strategist and still later stages. As we have seen, it is only at these more advanced stages of development that managers exercise the pathfinding and integrating skills that we associate with the notion of leadership vision and initiative. Because a sort of reframing inquiry in the midst of ongoing activities is central to managers and organizations at these stages, it seems particularly appropriate that professional schools of management should experiment with their educational processes to see what is required in order to create a climate not just of reflective, academic inquiry but also of active, existential inquiry.

If graduate management schools move in this direction, they may succeed not only in teaching leadership to their students but also in teaching other organizations how to learn. In moving toward the Collaborative Inquiry stage of organizing (presupposed by the collegial organization of the professoriat), professional schools of management will be modeling organizational structures and processes that will be relevant to other organizations in the twenty-first century.

**T**he scale of the challenge is immense. As the data in this article suggest, the Boston College program has not been an unqualified success. However, the fact remains that while no school is perfectly prepared to meet this challenge, any graduate business school wishing to prepare students to be effective managers in today's rapidly changing business environment must give serious attention to the task of transformation.