

Executive

Summaries

GE's Crotonville: A Staging Ground for Corporate Revolution

By Noel Tichy

In 1981 Jack Welch, the CEO of General Electric, undertook a complete revamping of the company's culture. The old "genetic code" — built around a core set of principles based on growth in sales greater than GNP, with many SBUs, and relying on financial savvy, meticulous staff work, and a domestically focused company — was broken, and replaced by a new code — to build shareholder value in a slow-growth environment through operating competitive advantage, with transformational leadership at all levels of the organization.

To do this, a new breed of leader was required, one who could not only transform the organization, but also develop global product and service strategies, strategic alliances, global coordination and integration, and global staffing and development. Welch gave this task to Crotonville, GE's Management Development Institute. Tichy, who led Crotonville in the final years of the institute's transformation, discusses how the overall Crotonville strategy and development stagecraft were developed over the years to meet this challenge, and provides lessons that CEOs from other companies can draw from the Crotonville experience. ■

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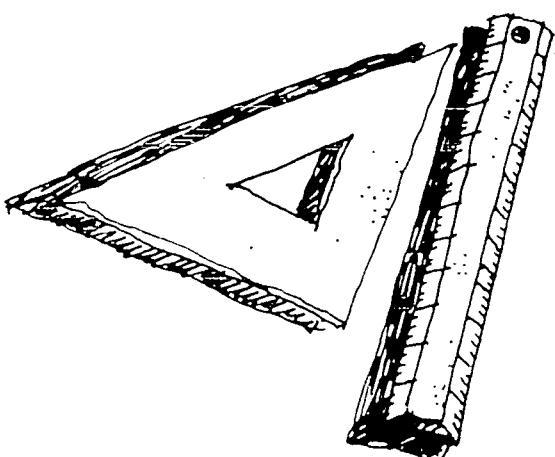
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Radically altering the genetic code of a large, successful corporation requires revolutionary action. Since 1981 John F. Welch, CEO of General Electric, has been struggling to break the company's old genetic code. This code was built around a core set of principles based on growth in sales greater than GNP, with many SBUs (strategic business units), relying on financial savvy, meticulous staff work, and a domestically focused company. The new genetic code is to build shareholder value in a slow-growth environment through operating competitive advantage with transformational leadership at all levels of the organization.

After five years of this effort — which included downsizing GE by over 100,000 employees, divesting \$6 billion and acquiring \$13 billion in businesses (RCA being the largest), doubling investment in plant equipment and R&D, and at the same time increasing earnings and shareholder value (GE moved up to #3 in the United States in market value from #10) — Welch was asked, "What was your biggest mistake?" He answered, "I was too timid and cautious. I did not move fast enough . . . bureaucracies need quantum change, not incremental change . . ." Three years later, in 1989, Welch was still accelerating change at GE.

To accomplish the quantum change in GE, a new breed of leader is required. These are leaders who can:

1. *Transform the organization*; that is, creatively destroy and remake an organization around new visions, supported by revamping the social architecture of the organization. This is needed at all levels of GE and is a continuous process.



2. *Develop global product and service strategies*. As GE more aggressively looks to world markets, it is faced with developing world-class products and services at world-class cost. This means changes in product and service design, production, distribution, and marketing. Leaders must be able to:

- Create new forms of design teams
- Make strategic use of sourcing
- Drive world-class standards for design, service, and performance.

3. *Develop strategic alliances*. To deliver on global strategies, more and varied alliances are emerging. These alliances are partnerships that are needed to gain market entry, achieve price competitiveness, gain technology, learn more about management, and so on. The success of these alliances will be determined by a set of leadership factors: skill and prescreening of potential partners, proper negotiation, the right condition for partnering, and good coordination and integration mechanisms.

4. *Global coordination and integration*. As the boundaries of GE span wider geopolitical and cultural diversities, it becomes increasingly difficult to integrate the organization. Better communication and cultural integration will be required since all human resource systems will be impacted by this development.

5. *Global staffing and development*. Growing world-class leaders will be the key to competitiveness. Staffing and development systems at GE are outmoded and are undergoing total revamping to develop a new brand of leader.

This article chronicles the evolution of a revolutionary agenda at GE. Crotonville, GE's Management Development Institute, is increasingly being used by Welch as a key lever in the radical transformation of the company's culture. The overall Crotonville strategy and particular developmental stagecraft will be discussed. Finally, lessons for other CEOs are articulated. This article is based on my two years as leader of the last phase of Crotonville's transformation. I was the manager of GE's Management Development Operation from 1985 through 1987.

The Crotonville Heritage as a Lever for Change

In 1956, when Crotonville launched its first 13-week advanced management program Ralph Cordiner, who became CEO in 1950, was using development as a direct lever for change. Cordiner believed that decentralization by product line would best position GE to capitalize on the post-World War II market opportunities. He hired Harold Smiddy, a former Booz-Allen consultant, to engineer a massive restructuring. Cordiner and Smitty quickly saw that GE did not have the managerial talent — that is, multifunctional general managers — to run a decentralized company. A major effort was launched to design an advanced management curriculum and build Crotonville, a campus-like setting in Ossining, New York. The design of the curriculum drew on the expertise of academicians from around the country and resulted in the creation of a multivolume set of books on how to be a multifunctional general manager in GE. These books were referred to as the "GE blue books," which became Crotonville's "catechism." The critical point here is that Crotonville's birth was as a CEO-driven lever for change. This continued under the next CEO, Fred Borch, as Crotonville was used to introduce strategic planning to GE. Borch's successor, Reginald Jones, used Crotonville to round out the strategic planning effort and improve cash management and inflationary accounting practices. In the Welch era, Crotonville again became a centerpiece for the CEO's efforts to make change happen at GE, but on a scale unheard of since Cordiner's days.

The Early Welch Effort

The first act of a transformation is creating a sense of urgency for change and dealing with the inevitable resistance to a new order.¹ From 1981 to 1985 Welch worked closely with Crotonville and its leader, James Baughman, to delay, downsize, and change GE's portfolio. Baughman revitalized the curriculum, faculty, staff, and the facility to get the message across to thousands of managers, to try to impact their hearts and minds. Baughman joined GE after years on the Harvard Business School faculty. He had taught at Crotonville since 1968 and was aware of its shortcomings as well as its potential. As eager as Baughman was to revitalize Crotonville, he was not prepared for the passion of Welch's challenge to him when they met for the first time in January 1981: "I want a revolution to start at Crotonville. I want it to be part of the glue that holds GE together."

Under Baughman's leadership, the first moves were to do a program-by-program upgrade of the faculty, curriculum, and staff, and set the stage for a total ravamping of the Crotonville strategy. This resulted in the top-level executive

programs being tied directly to the GE succession planning process; thus, there was much more selectivity with business heads accountable to the CEO for seeing to it that Crotonville development experiences were carefully planned and carried through for their managers. New programs were targeted for populations previously unserved by Crotonville. The first of these was a New Manager Program, targeted to those managers who hire, train, and supervise the vast majority of GE employees. If Welch was to "drive a stake in the ground" for the new GE culture, this was a critical population to win over.

Another very significant, substantive, and symbolic event was the change in the physical facilities at Crotonville. As GE was going through a very dramatic set of changes, including downsizing, delayering, and divesting, Welch was investing in the future not only in terms of business but also of leadership. The new facilities would provide living and development space in the 21st century. This development was Welch's second stake in the ground.

The New Manager Program began the process of shifting Crotonville's focus back toward the new college hire. In addition, during this period horizontal integration began with Crotonville's acquisition of the functional development responsibilities in marketing, finance, computer information systems, and human resources.

By 1985, the Crotonville transformation was well on its way. Two significant changes occurred that year. First, the reporting relationship of Crotonville was shifted from the employee relations organization to the executive management staff. This enabled Crotonville to be better integrated with the succession planning process and the CEO's office. Second, Baughman was promoted to broader responsibilities on GE's Executive Management Staff, and it was his suggestion that his successor be brought in from the outside to keep up the momentum for change and new perspectives. Furthermore, it was proposed that this individual would take on the assignment as a two-year leave of absence from the academic world. Baughman would retain GE oversight of Crotonville, but the person hired would be in full charge of all educational and development programs. Thus, when my two-year assignment began, the revolution was well along the way and a new vision was emerging for Crotonville. This was a vision that embodied much more than a development agenda; it was a centerpiece in the transformation agenda for GE and its culture. The challenge of leading Crotonville during this historic period was what led me to take a two-year leave of absence from the University of Michigan and join GE.

Welch's Second Act: Crystallizing the Vision

By 1985, Crotonville was well on its way to becoming once again a lever for change at GE. Ironically, a series of evolutionary experiments and changes led to a revolutionary agenda. Although the following premises were never made explicit by Welch or senior executives in GE, they were clearly implicit, based on the behavior and actions taken regarding the role of Crotonville.

Premise 1: Revolutionaries do not rely solely on the chain of command to bring about quantum change; they carefully develop multichannel, two-way interactive networks throughout the organization. So did Jack Welch.

(a) The chain of command, with its vested interests, is where much of the resistance to change resides. Therefore, there is a need to stir up the populace of the organization and begin developing new leaders for the new regime.

(b) There is a need for a new set of values and templates in the organization.

(c) There is a need for mechanisms to implement all of these changes. Therefore, new socialization and new development processes are required.

Premise 2: Revolutionary change occurs by blending the hard and the soft issues.

(a) Welch understood this blending of hard and soft issues quite well, since it was the hallmark of his experience in building the plastics business in GE. On the one hand, he was a tough person, while on the other he invested a great deal of time and energy in coaching and developing team players and team building. He insisted those who had to depart be treated compassionately; that is, "a soft landing." Thus, the cornerstone of Welch's strategy for building an organization and a winning team is this blending of the hard issues (budget, manufacturing, marketing, distribution, headcount, finance, etc.) and the soft issues (values, culture, vision, leadership, style, innovative behavior, etc.).

(b) Welch felt that U.S. leadership in general and GE leadership in particular were weak on both the hard and the soft issues from World War II through the late 1970s, until increased competition from Japan and elsewhere led to a rude awakening.

(c) Since the early 1980s, GE has been very aggressive about getting strong leadership on the hard issues, such as downsizing, reducing levels of management, and driving productivity. However . . .

(d) Driving solely on the hard issues will only work so long as the primary focus is on bottom-line improvement — and you can only squeeze so far. The long-term need is for top-line growth via new markets, products, innovations, and so on. Driving on the hard issues also takes the excitement out of the organization and can suck the psychological reserve out of people. Thus, the challenge for GE by the mid-1980s was to be strong on the soft issues as well as the hard.

(e) Welch uses Crotonville as a lever for blending the hard and soft, for getting at the hearts and minds of thousands of high-leverage middle managers to test, revise, and inculcate new GE values. It enables him to cut through the chain of command and get at the grass roots, from new college hires up to officers.

Premise 3: Revolutionaries rewrite the textbooks and revamp the education systems. Welch did the same.

(a) The GE "blue books" — the 25-year-old Crotonville bible — were symbolically burned. Welch has said repeatedly that there are no more textbook answers; leaders must write their own textbooks.

The New Crotonville — GE's Giant Workshop for Staging Revolution

Starting in the early 1980s under the leadership of Jim Baughman, the focus at Crotonville moved from the Ivory Tower end of the training spectrum toward the practical; thus, it became a workshop for wrestling with real organizational and people issues. During this period, more and more live cases from GE were brought into the curriculum; Outward Bound-type activities were introduced for team building; and there was increased personal involvement on the part of the CEO and officers in teaching the programs.

In 1985 this trend was explicitly recognized. A new mission statement and a new management and OD strategy were articulated for Crotonville, followed by the aforementioned rapid shift toward the workshop end of the development spectrum.

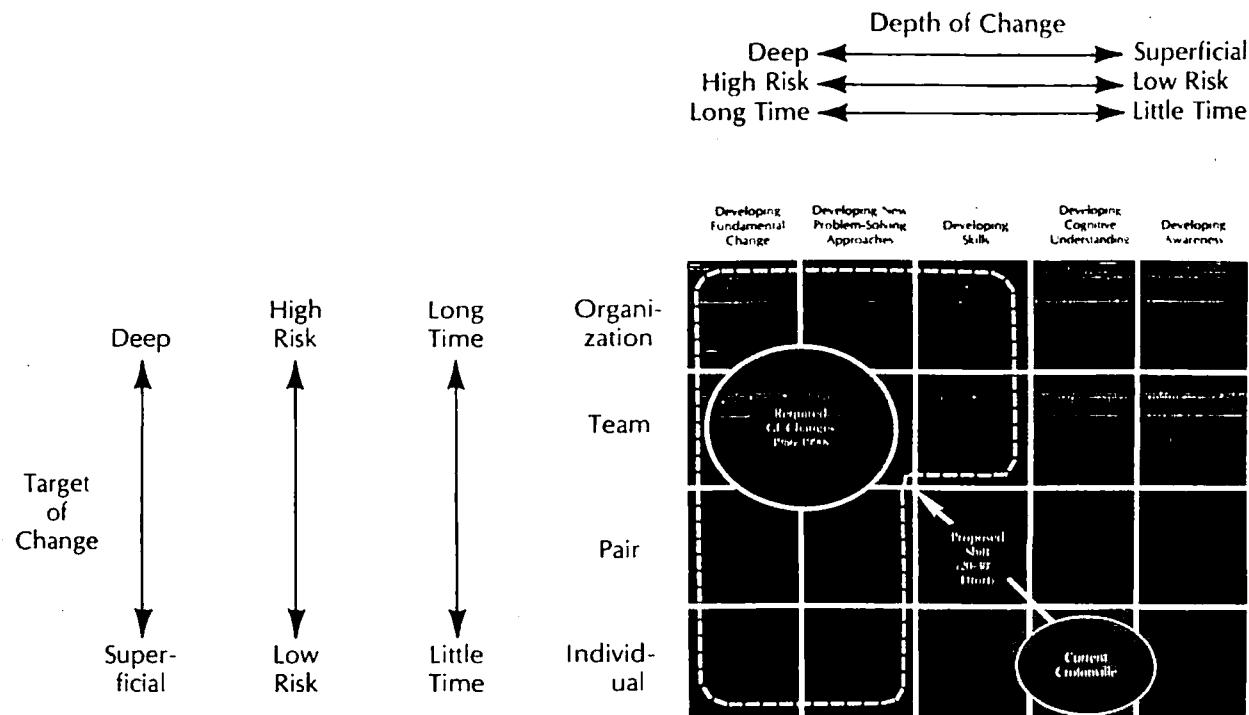
The mission for Crotonville was spelled out thus:

"To leverage GE's global competitiveness, as an instrument of cultural change, by improving the business acumen, leadership abilities and organizational effectiveness of General Electric professionals."

The management and OD strategy built on a new set of concepts concerning the depth and impact of management and organization development. Out of this effort came a framework, later known as the "Tichy Development Model," which provided the concept and rationale for shifting much of the curriculum and emphasis at Crotonville.

Exhibit 1 lays out the strategic framework used to transform Crotonville. This framework conceptualizes development along two dimensions. Along the top of the matrix the focus is on depth of development experience. This ranges from one end of the spectrum, which entails developing awareness, to the opposite end, which entails developing fundamental change. The other dimension refers to the target of the development experience. Here it ranges from change targeted at individuals to change targeted at the organizational level. Historically, at Crotonville, as is true of most university schools of business, the primary focus was on the cognitive understanding of the individual. Managers from all over GE attended Crotonville programs as individuals and participated in classrooms where they learned finance, marketing, accounting, and organizational behavior

Exhibit 1
The Tichy Development Model



largely through case studies, reading, discussions, simulations, and so on. The major impact was cognitive understanding with some skill development. The problem with this approach, as with executive education in business schools, is that when the individuals return to their organizations, they have difficulty translating their classroom experiences into the work situation because they haven't fundamentally changed and, just as importantly, their organizations often resist individuals with new ideas. These people do not have a support system — a group of co-workers — that has gone through the experience with them. This was the challenge facing Crotonville: How to move development toward the upper left-hand part of the matrix to help deal with the revolutionary agenda of transforming GE. The challenge was to take a large number of participants a year — approximately 8,000 — in a 53-acre, 145-bed residential educational center and move the development experience as far as possible toward the workshop end, while at the same time dealing with the economies-of-scale issue — which meant that customized workshops were not the answer.

The shift in the Crotonville mindset from a training to a workshop mentality has led to a totally new program design: An increasing number of teams attend sessions whenever possible. Participants bring with them real business problems and leave with action plans, and representatives from various GE businesses bring unresolved live cases to Crotonville for participants to help solve. Leadership behaviors are rated by participants' direct reports, peers, and boss before the program so the change can be linked back to the work setting. Executives consult to real GE businesses on unresolved strategic issues; teams also spend up to a week in the field consulting with these businesses on these issues. As mentioned above, members of the CEO and officers come to Crotonville to conduct workshops on key GE strategic challenges.

Along the way, participants find the development experiences increasingly unsettling and emotionally charged. They feel uncomfortable with feedback from their back-home organization; they wrestle with very difficult, unresolved, real-life problems, not case studies; and they make presentations to senior executives, argue among themselves, and work through intensive team-building experiences, which include a good deal of Outward Bound-type activity. The measure of program success shifts from participants' evaluation of how good they felt about the learning experience to how the experience impacted on their organization and their leadership behavior over time.

Who Gets Developed?

The other key strategic issue was deciding what populations are to participate in the Crotonville experiences. At GE, the assumption is that over 80% of development is through experience; i.e., on-the-job learning. The remaining 20% consists of highly leveraged, formal development activities. With its diverse, large businesses, at GE most of this 20% of formal development occurs out in the various businesses. Therefore, Crotonville represents only a small percentage of the formal development resources. The critical question thus is, "Who gets to come to Crotonville and at what point in their career?"

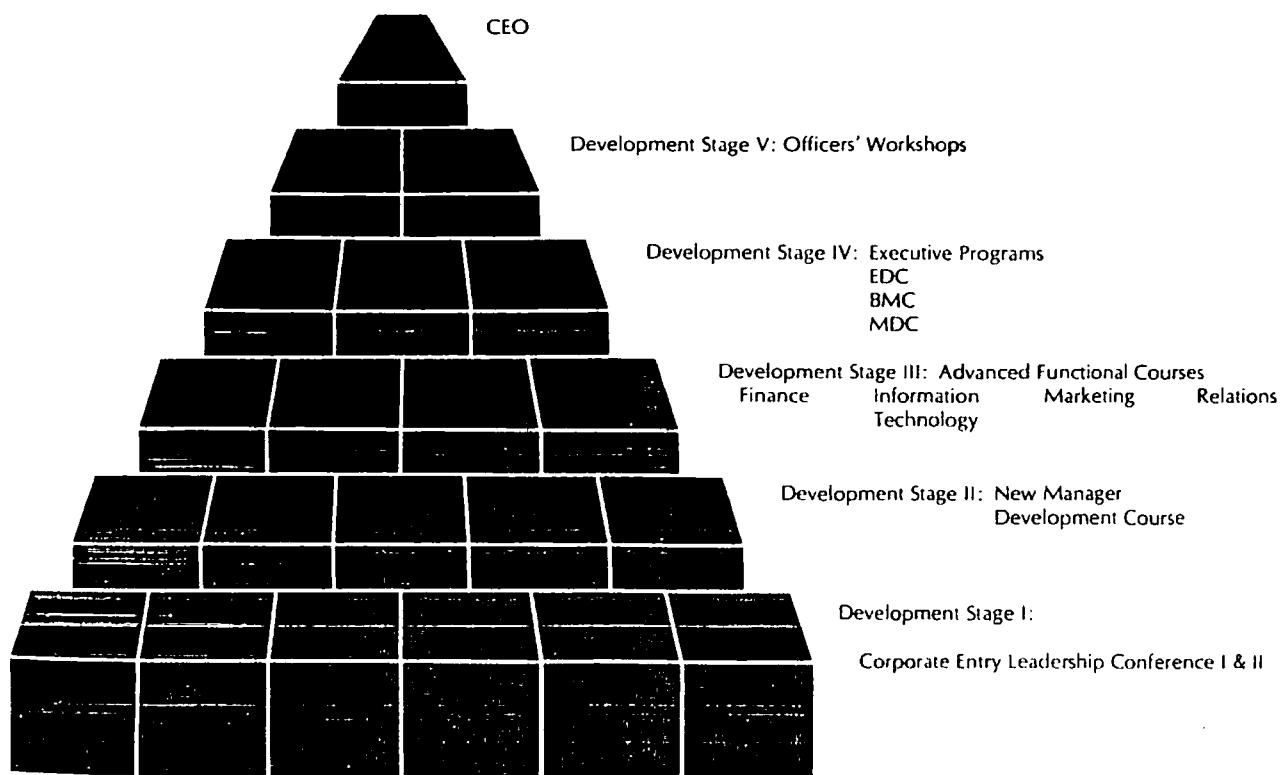
This challenge resulted in a reevaluation of leadership development in the 1990s and beyond, from new campus recruits up through the CEO. The CEO and others worked on the career model for leadership development to identify key transition points in people's careers — that is, "moments of opportunity" (joining GE as a new recruit, becoming a manager for the first time, and so on) — where they could and should be impacted by a set of shared values and leadership characteristics. The result: By 1986, a core development sequence was implemented. This sequence extends from new college hires up through the officer population. A result of rethinking the strategy was the new, core Crotonville curriculum, shown in Exhibit 2.

Stage 1: Corporate Entry Leadership Conferences I and II

Close to 2,000 new off-campus hires come to Crotonville within three months of joining GE to learn about global competition, what it takes to win on that global playing field, GE's strategy for winning, and the changing GE values, as well as to undergo a personal examination of their core values vis-à-vis GE values. They come in groups of 100. Officers, senior human resource executives, and young managers teach and lead these programs. At the end of each year, 200 facilitators, 30 officers, and 30 human resource executives have taught in this program. All of them are the target of change. As many senior officers comment, "There is nothing like teaching Sunday School to force you to confront your own values."

Three years later this group of new hires returns for a program on total business competitiveness. They have real projects to work on, are taught by GE executives, and have to return to their organization with change agendas. These young professionals are again inculcated with a total GE strategy and value mindset. In 1989, the CELC-II program moved out to the businesses as a joint venture with Crotonville.

Exhibit 2
Core Development Sequence



Stage 2: New Manager Development Program

Over 1,000 new managers a year come to Crotonville to learn how to manage and lead in GE. Through a leadership survey they get feedback from their direct reports to help them plan ways of improving their leadership skills. The focus at this stage is making sure that these managers have the right "soft" people skills for hiring, appraising, developing, motivating, and building the high-performing teams that are needed by this critical group.

Stage 3: Senior Functional Programs

Senior functional managers come for several weeks of leadership development in their specific areas — marketing, finance, information systems, human resources, engineering and manufacturing, among others. All the programs involve change projects and some actually require the participants to invite senior line managers (their bosses or major clients) to spend several days at Crotonville to tackle these change projects. Obviously, making real change happen and leadership are the agendas.

Stage 4: Executive Programs

There are three four-week executive programs for GE managers, which are taken over a five- to eight-year period. These programs integrate outdoor leadership challenge experiences, consulting team projects and CEO projects.

One program, the BMC (Business Manager Course) is organized around consulting projects. The head of a GE business presents a difficult, unresolved strategic business problem that is carefully packaged prior to the start of the program; market and industry analysis, financials, and other data are pulled together along with a clear project statement, and set of deliverables specified by the head of the business. Teams of BMC managers spend the third week of the program in the field interviewing customers, managers, and competitors, and collecting background information to make recommendations. During the fourth week of the program the heads of the businesses involved with projects come to Crotonville for the presentations. The sessions are electric; the teams, the heads of the businesses make hard-hitting business recommendations as well as advise on how to implement the recommendations, and they specially emphasize the soft, human side of change.

The participants are also given feedback on both the hard and the soft issues. They debrief their own team members, providing each member with concrete behavioral feedback, based on the intense four weeks of teamwork, on how to be a more effective GE leader. The participants and business clients reconvene six months later to follow up on the progress of the implementation, recommendations, and each participant's leadership agenda.

Stage 5: Officer Workshops

Officer workshops, which are held periodically, consist of groups of 20 to 30 officers who wrestle for several days on unresolved, companywide issues. The CEO actively participates in these sessions.

Elective Programs

In addition to the core sequence described above, Crotonville provides a portfolio of elective programs ranging from courses on leading change — similar to the experienced manager program — to functionally specific courses on information systems, marketing, and human resources. This portfolio is constantly changing as the needs of the corporation change.

The Continued Transformation of Crotonville

Since 1987 Crotonville has played a key role in both transforming GE and developing a new pipeline for human resources for the future. When I left in 1987, Crotonville's portfolio was enlarged again. All the technical education at GE was brought under Jim Baughman's direction, along with the campus recruiting and early corporate training programs for targeted new college hires. Crotonville thus becomes GE's integrating device for coordinating developing from off-campus up through the office level.

Exhibit 3 summarizes the agenda for Crotonville as it enters the 1990s. The agenda has three primary development objectives: (1) help develop "global" maturity and sophistication, (2) help develop technical and business know-how, and (3) help develop leadership abilities. These objectives are worked on differently at each stage of development, from the entry-level college hire up through the head of a business.

In 1989 Crotonville is being used by Welch to spearhead an effort to liberate middle management at GE. The "old way," hierarchical bureaucracy needs to be radically altered to create the "new way," nonhierarchical, fast-paced, flexible organizations of the future. The transformation must be led from the middle. A series of workshops will provide the catalyst for mobilizing 30,000 to 40,000 middle managers, removing unnecessary carryovers from the past bureaucracy — processes, reports, approvals, measures, and meetings. These workshops will be run in every business and involve the business heads and all their middle-level managers. The process is called "work out."

Exhibit 3
The Development Challenge — Who and What?

	Developing "Global" Maturity and Sophistication	Developing Technical and Business Know-How	Developing Leadership Abilities
For Business Leaders			
For Functional Leaders			
For Experienced Managers			
For New Managers			
For Functional Contributors			
At Entry-Level			

Lessons for Other CEOs

Crotonville is not unique. It does not require a large campus and bricks and mortar investment to use development as a tool for both bringing about quantum change in an organization and developing future generations of leaders. For this to happen, the leadership challenge for a CEO must entail the following:

Vision. For the CEO to leverage change via development, he or she must have a reasonably clearly articulated future vision for the company. This vision must include the organization culture and shared values that will likely be needed in the future. Such a vision must go well beyond the faddish articulation of values triggered by the "excellence" fad of the early 1980s, when everyone had a list of company values that read like the Boy Scout Handbook. The values must be closely integrated with the imperatives of winning in the marketplace.

Leadership characteristics. The CEO must be able to articulate the appropriate characteristics of leaders; that is, the characteristics that will fit with the culture and shared values of the future organization. All too often, companies undertake competency studies focusing on who are the successful managers and leaders of today. This will only ensure that development is focused backward on yesterday's successes, not on the harder task of thinking through what is the new template for leadership in the future. This is not a task to be delegated to human resource staff people, who often have little idea of where the industry, the business, and the company are headed. Only the CEO can lead this effort, albeit with strong staff support.

Career transition points. To maximize the impact of any formal development experience, timing is critical. The challenge here is to have a clearly articulated "theory of the case." This enables the organization to deal with the 80/20 dilemma; that is, the 80% of development that really takes place as a result of life experiences and on-the-job development, and the 20% that takes place via formal development programs. Again, this is a responsibility of the CEO, with strong human resource support. The company must have a framework that provides guidelines in blending on-the-job development and other developmental tools, such as secondary assignment activities and coaching and counseling emphases, with formal development experiences. At each career phase, what tools are to be used for what purposes must be identified.

CEO involvement. For development to leverage the kind of change and impact discussed in this article, the CEO must visibly lead the development process by participating in the overall design and architecture, delivery, and integration of the development process as it gets tied to succession planning and rewards. This is not a voluntary, open university-type approach to development. It is a very personal tool of the top leadership of the organization as well as a very central part of organization effectiveness.

CEO role model. No CEO should undertake the challenge of using development as a lever for change and as a creator of the new shared values in leadership without also understanding that such a process will put more pressure on the senior leadership to demonstrate personal adherence to those values. An open-dialogue, interactive development process also means that top management must be able to take criticism. Hypocrisy will be uncovered and a great deal of subtle pressure placed on leaders to overcome the schizophrenia often found in changing cultures; that is, where people in the middle rightfully point out that top management gives a great deal of lip service to change but in reality their practice is "Do as I say, not as I do." The CEO must lead a critical group of senior executives to undergo the same kind of rigorous self-examination as do participants in the development process. For example, if middle managers are being asked to have subordinates fill out surveys on their management practices, the CEO and the top team must also do the same.

Organizational resistance. Perhaps the final and real test of the CEO is how he or she deals with resistance to change, as well as how he or she handles the transition from the more comfortable awareness and cognitive learning portion of the matrix in Exhibit 1 to the area of fundamental change, in which a great deal of emotion and turmoil are stirred up. This means that the development and human resource staff will have to deal with the fact that the daily "smile sheet"—that is, evaluation of how happy participants are with each day of the program—tends to go up and down during a real transformation experience. Not everyone is always happy; officers have to wrestle with business problems with participants and are made to feel uncomfortable (and sometimes accused of hypocrisy), and there is a tendency for some people to think that things are getting out of hand. It is here that the CEO must stay the course. At times such as this, it might serve well to remember that no one ever gave a high rating to his drill sergeant during the middle of boot camp.

Conclusion

In this article I have laid out a challenge to those CEOs who are wrestling with the transformation of their organizations for global competitiveness. It is my contention that one of the most underutilized levers for change is the rather elaborate investment in development that most large corporations make. One reason why it is so underutilized is that there is little or no personal commitment or involvement by the CEO. Obviously, the challenges laid out here are not for everyone. Once the CEO decides to use development as a lever for change, he or she must make the commitment and follow through on the six principles outlined above. Doing so will be a real test of leadership for all involved. ■

Endnote

1. *The Transformational Leader*, Noel Tichy and Mary Anne Devanna, Wiley, 1986.

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Professor Tichy is the author of several books, including *Organization Design for Primary Health Care* (Praeger, 1977), *Managing Strategic Change* (Wiley, 1983), *Strategic Human Resource Management* (Fombrun, Tichy, and Devanna, Eds., Wiley, 1984), and *The Transformational Leader* (Tichy and Devanna, Wiley, 1986). He has written numerous articles on organization theory, development, and change, appearing in various journals (including *Journal of Applied Behavioral Science*, *Organizational Dynamics*, *Administrative Science Quarterly*, *Human Relations*, *Columbia Journal of World Business*, *Sloan Management Review*, and *Journal of Business Strategy*). He has served on the editorial boards of the *Academy of Management Review*, *Organizational Dynamics*, *Journal of Business Research*, and *Journal of Business Strategy*. He is a past chairman of the *Academy of Management's Organization and Management Theory division* and is a member of the *Board of Governors of the American Society for Training and Development*.

Professor Tichy consults widely in both the private and public sectors. Among his clients have been Exxon, General Motors Corporation, General Electric Company, Honeywell, CIBA-GEIGY, Chase Manhattan Bank, Imperial Chemicals, Inc., 3M, Lockheed and IBM.