



Robert E. Knowling Jr., CEO of the New York City Leadership Academy, and Carmen Fariña, deputy chancellor of the NYC Department of Education

**Management gurus and  
New York City's school system  
unite to prove that those  
who teach can do.**

# Leadership Principles for Public School Principals

by Andrea Gabor

**Jack Welch is pacing the floor of a large, windowless conference room in Brooklyn.** Occasionally leaning against a table, the straight-talking former chief executive officer of General Electric Company alternates between haranguing and cajoling his audience of 60 or so middle managers.

“Your job is harder than running a company,” Mr. Welch tells them. “’Cause running a company, you have all the bullets in your gun. Well, you have sort of a water pistol, I guess.” He pauses. “And it’s out of water.”

The room erupts in laughter.

“But you’ve got to find a way to put water in that pistol anyway,” Mr. Welch continues, almost shouting. “And eventually, put bullets in your gun.”

The would-be weapons experts in the room are no ordinary group of middle managers. They are New York

City public school principals attending the New York City Leadership Academy, a selective leadership training program for high-potential principals.

At a time of roiling debate about education’s role in the competitiveness of the United States economy — and about the efficacy of such reform strategies as school vouchers, education tax credits, and the privatization of public school systems — the leaders of one of the nation’s largest and most troubled school systems have declared that schools can be reformed from within, with the help of business. New York is declaring that principals, though rarely thought of as managers at all, at least not in a conventional sense, have the same need for managerial and leadership development skills as rising corporate executives.

The academy was established in January 2003 by

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Mayor Michael R. Bloomberg, the businessman-turned-politician and founder of the eponymous financial information company. It is a cornerstone of the Bloomberg administration's educational reform strategy for New York City's public schools, a program called Children First. Facing a chronic shortage of qualified principal candidates and immediate pressures to fill principal positions in a system with more than 1,200 schools and 1.1 million students, Mr. Bloomberg has set an ambitious three-year goal for the academy to recruit and train approximately 600 new principals by 2006. In addition to training new principals, the academy provides professional development for experienced principals.

The Leadership Academy is also a creative government-business partnership. The not-for-profit academy reports directly to the NYC Department of Education's (DOE's) chancellor, Joel I. Klein, but receives a large portion of its funding from corporations and other private sources. Approximately \$30 million of the Leadership Academy's \$75 million budget, which is expected to cover the first three years of operation, is being funded by the Partnership for New York City, a business-led civic research and advocacy nonprofit founded by David Rockefeller in 1979.

The academy's senior management team and boards are made up of a deliberately mixed group from education and business. The CEO is Robert E. Knowling Jr., a veteran telecommunications industry executive who developed leadership academies at Ameritech and U.S. West. Sandra J. Stein, an educator and instructional leadership training expert, serves as the academic dean. Board members include Carmen Fariña, the DOE's deputy chancellor for teaching and learning, and Sy

Sternberg, the chairman, chief executive, and president of the New York Life Insurance Company. Similarly, the advisory board includes a mix of business and education luminaries, such as Mr. Welch; Richard Parsons, the chairman and CEO of Time Warner; and Anthony Alvarado, a former New York City schools chancellor and pioneer in inner-city school improvement.

For the partnership and the academy's corporate backers, supporting the Leadership Academy is an economic imperative. "The future of America and the economy in the 21st century depends on a public education system rising to challenges far greater than in the past," asserts Kathryn S. Wylde, president and CEO of the partnership and a member of the academy's board.

## Crotonville Concepts

Although there are other privately funded public school reform efforts in the U.S. focusing on the linkage between principal leadership and student achievement, the New York initiative stands out, and not only for the financial support it is getting from the business community. What also makes the Leadership Academy singular is how it is building on the success of a highly lauded instruction and professional development program started in the 1980s by a handful of New York City school districts, and combining this experience with expertise gleaned from corporate leadership training. Indeed, the Leadership Academy is emerging as a model for how a public bureaucracy can adopt proven leadership training methods from business and combine them with best practices in education instruction.

In addition to recruiting Jack Welch as a board member and instructor, the academy has enlisted the noted business leadership teacher and consultant Noel

M. Tichy. Dr. Tichy, currently director of the Global Leadership program at the University of Michigan Graduate School of Business, was GE's manager of management education from 1985 to 1987 and one of the primary developers of the highly regarded GE Leadership Development Center (which is now called the John F. Welch Leadership Center) in Crotonville, N.Y. (See "Noel M. Tichy: The Thought Leader Interview," by Randall Rothenberg, *s+b*, Spring 2003.)

By borrowing the best leadership training methods from companies like GE, the academy is trying to bridge an important gap in the way principals have traditionally been trained and certified — a gap that education experts say divorces principals' training from the realities of public school life. School performance has suffered as a result of the "gulf between administrative training programs and the tools, skills, and knowledge necessary for successful practice," write Ms. Stein and Liz Gewirtzman, a lecturer at Baruch College, in their book *Principal Training on the Ground: Ensuring Highly Qualified Leadership* (Heinemann, 2003).

Much as Crotonville emphasizes real-life job challenges in teaching management techniques like Six Sigma, the academy frames its instruction around a school principal's real challenges in such areas as team building, communications, and time management. And much as Crotonville training communicates core GE values and strategies to its management ranks, the academy is trying to imbue in its up-and-coming school leaders a deep understanding of the core values and strategic objectives underpinning the desired teaching methods and management.

The academy's ultimate goal, however, is bigger than training principals to be more capable administrators and better teachers. Its mission is to create the leadership momentum that will transform the quality of educational instruction in the school system as a whole. The academy wants to equip its principals to be energetic change agents who elevate public school standards and expectations, motivate teachers, implement curriculum changes, and make lasting improvements in the classroom learning environment — a strategy endorsed by its business partners.

"Our business leaders feel that the quality of school leadership is crucial to the success of the schools," says Ms. Wylde of the Partnership for New York City.

### A Systemic Solution

The New York City school system's problems are formidable. The schools are so underfunded that the state legislature is under a court order to increase financial support. Budgetary constraints cause severe classroom overcrowding and a chronic shortage of teaching supplies. Successive waves of non-English-speaking immigrants entering the school system have created language barriers that are taxing to teachers and other students. And the large, factorylike high schools established at the beginning of the 20th century are considered neither rigorous nor flexible enough to train the knowledge workers needed by today's employers.

For years, the partnership had wrestled with the question of how best to support school reform. With other business organizations, it had provided funding for disparate projects, which helped pieces of the school system. From 1999 to 2002, the partnership partially financed a pilot program in the Bronx known as Breakthrough for Learning, which used such private-sector practices as signing bonuses and pay for performance to recruit better principals and teachers. Although many of these individual programs improved school performance in specific districts, the partnership was looking for a broader, systemwide solution for New York City schools.

"We didn't want another do-good, peripheral program," says Mr. Sternberg of New York Life, a partnership board member.

With the appointment of Joel Klein as schools chancellor in 2002, New York City had an education leader who related to the partnership's concerns and its members' larger ambitions. An assistant attorney general in charge of antitrust enforcement in the Clinton administration, and later chief executive of Bertelsmann Inc., the U.S. arm of the German publishing giant, Mr. Klein knew both business's needs and the challenges of government reform.

The chancellor quickly seized on a major systemic problem he needed to solve — the huge shortage of qual-

ified principals — and articulated it to the partnership in business terms its leaders immediately understood.

“He said, ‘I have a middle management problem, and unless I can solve it, I can’t make progress,’” Mr. Sternberg says. “And that resonated with us.”

The idea was to create a program that would support a systemwide effort to accelerate the recruitment of qualified principals and to improve the leadership capabilities of principals already working in the school system, many of whom lacked the training or the interest to spearhead major change. Putting business and educational minds together, the founders of the Leadership Academy developed a training strategy for principals that would couple the teaching of management techniques with a strong grounding in instructional leadership.

The academy also built on a principals’ training model that emerged in New York City almost two decades ago. Back in 1987, Anthony Alvarado, then a district schools superintendent in Manhattan, created the Aspiring Leaders Program (ALP), which also drew on leadership development practices used by corporate training centers. Covering a diverse district in Manhattan that includes poor schools in Chinatown and Hell’s Kitchen, affluent neighborhoods on Manhattan’s Upper East Side, and schools in the downtown financial district, the first ALP program is credited with raising its district’s citywide ranking in math and reading scores from 10th to second in less than a decade. The program was subsequently adopted by other districts and continues today.

In contrast to ALP’s one-district-at-a-time approach, though, the academy is aiming to touch principals throughout the system. It’s a “very risky” program, but its philanthropic and corporate sponsors are giving

it “the time and resources” to make it work, says Darlyne Bailey, dean of Columbia University’s Teachers College. That money, she notes, would have been difficult to muster through public funding.

### Reality Teaching

The New York City Leadership Academy has three program tracks. The Aspiring Principal Program is designed for education professionals, such as former teachers, assistant principals, and guidance counselors who want to become principals. The New Principals On-Boarding Program supports the professional development needs of newly promoted New York City principals and of those hired from outside the system. The Principals Leadership Development Program, for principals who have been in the job for at least one year, is a series of two- to three-day development workshops spread over six months.

All academy participants are organized in cohorts, whose members experience the curriculum together, and later serve as a support network for one another. There are also continuing education courses for more experienced principals.

One of the hallmarks of the Leadership Academy is its use of the “action learning” and case study training methods that are staples of business education. Just as the best business training for aspiring executives stresses relevance and practicality, the academy’s curriculum is organized around authentic problems and situations that novice principals encounter in their workplace. This emphasis on reality teaching, combined with the cohort structure, is designed to encourage principals to learn as much from each other as they do from instructors.

“We try to build in these layers of action learning,

## Noel Tichy taught the principals process mapping. “I’ve never seen a group grab a tool so fast,” the leadership guru said.

to go back and apply it, and coach and mentor each other,” says Dr. Tichy.

At one summer workshop in 2004, principals in the academy’s on-boarding program were anxious about the impending delivery of 6 million textbooks, part of the new math and literacy curriculum. These textbooks had to be ready for students by the start of school in September. The Leadership Academy decided to use this single largest delivery of textbooks to introduce and develop a case study about process mapping, the analytical technique used in business to analyze the efficiency and effectiveness of management and operational processes.

“Who will move them? Who will stamp them? It was a great way to teach process mapping,” says Dr. Tichy, who led those workshops. “I’ve never seen a group grab a tool so fast.”

Every session serves as a networking opportunity and a chance to share best practices with cohort members. Dr. Tichy recalls the enthusiastic response from the colleagues of one principal who told of his novel solution for liberating himself from transactional tasks in his office so he could do the big-picture thinking of an “instructional leader.” The reformers’ mission is for principals to spend more of their time in classrooms, observing instruction, modeling lessons, and developing teacher capabilities. So this principal hung a “do not disturb” sign on his office so he could slip out the back door to wander the halls and drop in on classes unexpectedly. Although finding time to observe students and teachers is important in developing new ideas for a school, it is precious time most principals don’t have.

Other peer-to-peer learning assignments are designed to spread best practices related to the new teaching curriculum. For example, at one session, a

handful of principals pored over a fourth-grade math assignment they agreed was a good model for the everyday math and balanced literacy approach, because it required students to develop a word problem and articulate a strategy for solving it. More significantly, the principals were impressed by one teacher’s scoring rubric for the assignment’s pedagogical goals, such as manipulating whole numbers and writing a narrative account using correct grammar and spelling. Several of the principals said they would take the concept back to their schools.

Working with the reality-based problem scenarios, aspiring principals collaborate in teams to craft solutions to complex school challenges. For example, one typical exercise involves a fictitious scenario to “transform an intermediate school.” The scenario assumes an environment fraught with tensions between transient, immigrant students (many of whom don’t speak English well) and local minority students, and skeptical teachers and parents who are used to a “revolving door” in the principal’s office. A typical assignment might involve developing communication materials — speeches and letters — for parents that outline the school’s goals and the expectations of students and parents. Teams critique one another’s approaches.

“We’re trying to develop their collaboration skills, their negotiation skills, their conflict-resolution skills, and their distributive leadership skills,” says Leadership Academy academic dean Sandra Stein.

Although it is the training that most distinguishes the academy’s curriculum, the institution also emphasizes diversity. About two-thirds of the 2004 graduates were women. And a majority were black or Latino — a significant change in a system in which most students

## To learn how to build a case for change, principals study Martin Luther King’s “I Have a Dream” speech.

are minorities and, traditionally, principals have been white men. Also, the average age of the new recruits is 40, compared with 52 for current principals. For the 90 places available in this year’s class, the Leadership Academy had 1,300 applicants.

### Leader as Teacher

Another seminal leadership training concept the academy borrows from business is one Dr. Tichy developed at Crotonville: The notion of leader as teacher. “Teaching is at the heart of leading,” Dr. Tichy affirmed in *The Leadership Engine: How Winning Companies Build Leaders at Every Level* (HarperBusiness, 1997), which he wrote with Eli Cohen. “It is not enough to have experience; leaders must draw appropriate lessons from their experience, and then take their tacit knowledge and make it explicit to others.”

In the spirit of the leader as teacher, the academy tries to show principals how to create a “vision” for their school and invokes Dr. Tichy’s notion of the “teachable point of view,” which includes four key elements:

- **Ideas.** In business, “ideas” are akin to strategic goals, such as Mr. Welch’s mandate to keep GE focused on being No. 1 or No. 2 in every business. An equivalent key “idea” for New York City schools is the Children First reform agenda launched in January 2003.

- **Values.** At GE, the importance of leaders’ teaching and fostering personnel development is a core value. Similarly, schools will decide on a set of values and expectations for teachers, students, and parents that can include everything from standards for punctuality and cleanliness to language and dress codes.

- **Emotional energy.** To help institutionalize the ideas and values, it is not enough to write a rule book.

Leaders need to find ways to motivate all of their constituencies to buy into the ideas and values. In a school, these constituencies include students, teachers, parents, and support staff. Even in a unionized school system, principals have a range of motivational techniques and nonmonetary incentives that they can use, such as extra prep time and flexible schedules.

- **Edge.** In an institution stymied by red tape, principals are taught how to make tough calls under pressure, such as deciding when to suspend students and, within the constraints of work rules, when to bring disciplinary action against recalcitrant teachers.

Edge also means knowing when and how to buck the system. For example, during Mr. Welch’s visit to Brooklyn, one principal recounted how, on the Saturday before school was to begin that fall, he found 200 bags of garbage strewn across the sidewalk in front of the school. The principal contacted the department responsible for garbage removal, but got no response. He called the Mayor’s 311 help line. Still no response.

“Monday the kids were coming to school; I didn’t want them stepping on the garbage,” said the principal, who decided to go straight to the top. He sent an e-mail to Mr. Klein.

The chancellor responded immediately, and the next day the garbage was gone. But the principal worried that the e-mail had gotten him into hot water with his supervisor, who let him know that he had better never go over the supervisor’s head again.

The principal shouldn’t take such threats too seriously, countered Mr. Welch. “Do you think the next time you e-mail [your supervisors] they’ll respond to you?” Mr. Welch asked. He answered himself: “They will. They don’t want you to go to Joel Klein again.”

The leadership lesson is clear: Do the right thing for your school and its students — even if it means breaking the rules of the bureaucracy.

Of course, battling a bureaucracy can be daunting. For example, several principals responded positively to the efforts of deputy chancellor Carmen Fariña to find nonmonetary rewards for good teachers, such as developing teaching schedules that build in more time for preparing lessons during the school day and finding ways to structure classes to fit a teacher's commuting schedule. However, several principals also commented that it is hard to do this for enough deserving teachers so that the effort is perceived as a reward for good work, not as favoritism.

Although the principals have to develop their visions within the framework set out by the school's chancellor and manage by the rules, Dr. Tichy argues that good leadership also has to be personal. "Leaders lead through stories," he says, stories that derive from life experiences and from all of the ups and downs and tough times that shape the leader's ideas and beliefs.

At the Leadership Academy, Dr. Tichy asks participants to study and deconstruct Martin Luther King's "I Have a Dream" speech. He uses it as a universal benchmark for how leaders can build a compelling case for change. The speech, which Dr. Tichy references repeatedly in his books and in his discussions with aspiring leaders in the education and business worlds, provides a way to understand what he considers the three fundamental elements of an effective call to action: A case for change; an outline for where the organization is going; and a road map for getting there. He holds the speech up as a model for simple wording and structure and narrative techniques, such as the short, repetitive phrases that convey King's passion.

"What makes you a leader and not just a storyteller is that people sign up for it," says Dr. Tichy, who points out that Dr. King gave parts of his speech dozens of times, constantly refining the message, before presenting the famous version in 1963 at the Lincoln Memorial, in Washington, D.C.

Principals are called on to imagine that, three years hence, change at their schools has been so successful that they have been chosen to grace the cover of *Time* magazine. The principals must write the narrative of that transformation and then present their vision to their academy cohorts. The presentations are videotaped and critiqued on how clearly they capture a central idea or vision, whether the story conveys the values that are

needed to support the vision, and the likelihood that the presentation will excite the members of the principal's school community.

### Teaching Accountability

In a unionized work environment, the conventional wisdom that principals have little leverage to use against underperforming teachers has often served as an excuse for principals to abdicate the role of personnel development and performance evaluation. At the Leadership Academy, faculty from education and business are brought in to impress on principals that rigorous performance management matters. And creating an activist culture of accountability and performance improvement starts with the principals.

Performance management experts from business highlight best practices and discuss how to handle the worst cases. First-year principals develop a comprehensive strategy to improve teacher performance.

"Assessment is not something you do annually or once every six months — it's constant," Mr. Welch told the principals in Brooklyn last fall. "You're no longer an expert in teaching, you're an expert in *building teachers*. Your job is to build a winning team."

But to really convince principals that performance management is possible in the school setting, the academy relies on an educator who has been a principal, Carmen Fariña. The first step, Ms. Fariña tells first-year principals convened at an academy workshop, is for the principal to get to know his or her troops. "You need to have one-on-one conversations with everyone in your school," she says. With the same intense demeanor that Mr. Welch has, the diminutive Ms. Fariña paces the floor, firing off her counsel: "Knowing your team is crucial... You have to know their strengths and weaknesses... and develop a 'sociograph' of your building."

She advises the principals to focus their "get to know you" interviews with teachers on three questions. "What are you most proud of? Where do you need more help? What do you need me to do?" The principal's follow-up support for the teacher is as important as the initial interviews. Ms. Fariña tells principals to take notes on each conversation and to use those notes to develop new goals and plans.

Before hearing Ms. Fariña's lecture, Steve Boyer, who graduated from the Leadership Academy in 2004 and is the new principal of P.S. 251 in Brooklyn, had interviewed all the teachers in his school. "But I didn't document the conversations," says Mr. Boyer,

a veteran math teacher with 32 years as a teacher and assistant principal. Now, he says, he will.

One key purpose behind Ms. Fariña's interview strategy for new principals is identification of the best and the worst teachers. The interviews can also reveal which teachers to include on a strategic planning team. Just as a CEO will want to get input and buy-in from managers on important initiatives, Ms. Fariña says a principal should use his or her teachers to develop the school's "comprehensive education plan" — essentially a strategic plan that outlines goals for everything from science and math education to interventions that will improve the academic performance of struggling students.

The academy also seeks to strengthen the ability of principals to get rid of bad teachers by bringing in lawyers to discuss the fine points of a teacher's contract and the specific steps involved in removing weak teachers, which can typically take one to three years.

"This is not about how to fire teachers," insists academy CEO Bob Knowling. "The real issue is how do you upgrade the skill of teachers. How often in this school system do you think they really sit down and have honest discussions about performance?"

In a beleaguered bureaucracy as large as the New York City public school system, a common response to new ideas is suspicion. So it is not surprising that the latest reform effort, and the active intervention of the business community, has been met with skepticism by some educators.

They note that companies — even those with unions — have much more freedom to hire and fire workers than do school principals. And they argue that whereas companies can pick and choose the suppliers they work with and the products they make, schools don't choose the students they teach. They have a responsibility to educate all students, no matter how poorly prepared they are or how troubled their backgrounds.

Beneath all this deep-seated suspicion is a sense among many educators that the academy and its business-oriented sponsors do not respect their knowledge. Some educators' complaints target Mr. Knowling, who concedes he knew little about the New York City school system before joining the Leadership Academy. "There is no modesty, deference, or respect for the expertise of experienced educators," says one highly respected New York City principal, referring to Mr. Knowling.

There was also widespread concern among educators that the project would fail if the organizational leadership skills taught by the Leadership Academy were not

balanced by an at least equal emphasis on instructional leadership. So, in 2004, during its second year, the academy's curriculum for new principals included a greater focus on instruction.

Mr. Knowling says he has embraced Carmen Fariña's efforts to beef up the instructional component of the curriculum. However, he staunchly defends the academy's focus on leadership. "I've never, ever felt that the problem in this system is that we don't have instructional excellence," says Mr. Knowling. "The easiest thing to teach these candidates is the instructional depth. The harder thing to teach, quite frankly, is the leadership, the judgments, the situational calls."

### **Dynamic Model**

Less than two years into the Leadership Academy's pioneering efforts, it is too early to predict its long-term success. But the early signs are promising.

The academy's first years have been marked by expected growing pains. Yet the academy is demonstrating that it is — as any promising institution must be — a teaching and learning organization.

"This is a dynamic model," says New York Life's Mr. Sternberg. "And they are learning from experience," especially about how to meld the leadership and practical components of the curriculum.

The Leadership Academy is also getting some qualified endorsements from its toughest critics among New York educators. "I think the Leadership Academy is one of the best things the Bloomberg administration is doing," says Anna Switzer, a highly respected former principal in District 2 who headed the City Hall Academy, a professional development laboratory for teachers, before retiring last year. At the same time, Ms.

## “You’re no longer an expert in teaching,” Jack Welch told the principals. “You’re an expert in building teachers.”

Switzer concedes she is “worried about pumping up expectations.”

Indeed, although systemic, transformative change is the aim, not all problems can be solved by the Leadership Academy. For example, one principal at the session with Mr. Welch complained that, through “creative budgeting,” she had saved \$250,000 from her previous year’s budget so that she would have extra money to cover necessary expenses at the start of the new school year. However, in the fall, she found that the money had been “zeroed out” by the DOE. Moreover, her new budget was cut. Now she had a huge outstanding bill for football uniforms and no way to pay it.

The principal’s lament touched a nerve with Mr. Welch, who commented immediately that managers should be rewarded, not penalized, for meeting operating goals and saving money.

As he got ready to leave the academy session in Brooklyn, he asked the woman whose \$250,000 surplus had disappeared for her name and contact information. “I have three takeaways that I’ll be discussing with Joel Klein,” Mr. Welch assured the principals before leaving, ticking off two other grievances they had voiced.

One benefit of the Leadership Academy and the steady stream of celebrity CEO lecturers is that they provide a pipeline of information from principals to the chancellor’s office. Ultimately, though, the future of the Leadership Academy is tied to the Bloomberg administration. The academy’s initial three-year funding will come to an end during the 2005–2006 school year, when Mr. Bloomberg will be up for reelection. His reform plans may not survive if he fails to win.

But even if he does hold onto his office, the Leadership Academy doesn’t have to become a perma-

nent fixture. Whatever the fate of the academy itself, its success may ultimately be measured by how effectively it puts itself out of business: perhaps by setting a new, and better, standard for training principals that is eventually adopted by local universities, or by having its training programs absorbed into the city’s Department of Education.

Just as important, the academy experience in New York City validates public–private sector collaboration on a social issue where the goals of both parties strongly intersect.

“We have a lot to learn from business,” says Carmen Fariña. “But I think that business also has a lot to learn from us. We’re very community-minded. We’re about nurturing and nesting. Sometimes there is a conflict between those two cultures.” But the aim, she believes, should be to combine the best of both worlds. +

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### Resources

Art Kleiner, “GE’s Next Workout,” *s+b*, Winter 2003; [www.strategy-business.com/press/article/03403](http://www.strategy-business.com/press/article/03403)

Randall Rothenberg, “Noel M. Tichy: The Thought Leader Interview,” *s+b*, Spring 2003; [www.strategy-business.com/press/article/8458](http://www.strategy-business.com/press/article/8458)

Anthony Alvarado, Richard Elmore, and Lauren Resnick, “Final Report: High Performance Learning Communities Project,” Sept. 15, 2000, University of Pittsburgh Learning Research and Development Center; [www.lrdc.pitt.edu/hplc/Publications/HPLC\\_FinalReport\\_Sept2001.pdf](http://www.lrdc.pitt.edu/hplc/Publications/HPLC_FinalReport_Sept2001.pdf)

Sandra J. Stein and Liz Gewirtzman, *Principal Training on the Ground: Ensuring Highly Qualified Leadership* (Heinemann, 2003)

Noel M. Tichy with Eli Cohen, *The Leadership Engine: How Winning Companies Build Leaders at Every Level* (HarperBusiness, 1997)

The New York City Leadership Academy: [www.nyleadershipacademy.org](http://www.nyleadershipacademy.org)