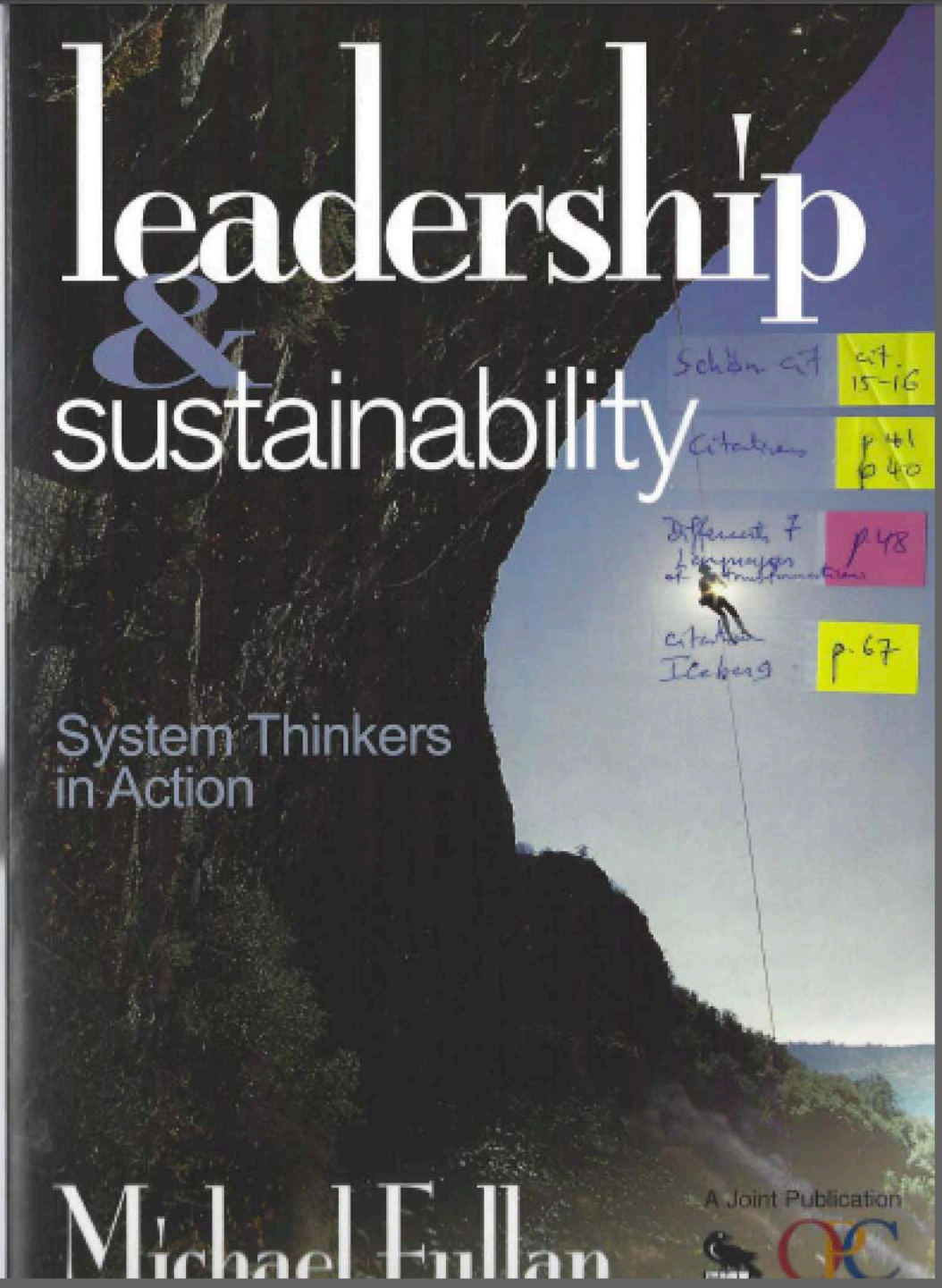
leadership & sustainability

System Thinkers in Action



Michael Fullan

A Joint Publication

Pursue long-term sustainability without jeopardizing short-term results!

As agencies have pushed for greater performance and public accountability over the past two decades, we have seen some incremental improvements. But all too often experience reveals that these improvements are temporary. ***Leadership & Sustainability*** provides a comprehensive examination of what leaders at all levels of the educational system can do to pave the way for large-scale, sustainable reform.

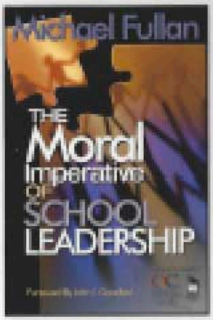
Building on ideas established in his best-selling publication, *The Moral Imperative of School Leadership*, author Michael Fullan confronts a question that has never been addressed before: How do you develop and sustain a greater number of system thinkers in action, or new theoreticians? These proactive system leaders are at the heart of the issue of sustainability, for they are the ones to bring about deeper reform while simultaneously helping to produce other theoreticians working on the same issues.

Linking abstract concepts to concrete examples, this groundbreaking work defines an agenda for the system thinker in action, including eight elements of sustainability that can be applied to any public service or corporate institution:

- Public service with a moral purpose
- Commitment to changing context at all levels
- Lateral capacity-building through networks
- Intelligent accountability and vertical relationships
- Deep learning
- Dual commitment to short-term and long-term results
- Cyclical energizing
- The long lever of leadership

Leadership & Sustainability is an engaging and powerful book from one of the world's leading authorities on school change. It provides clear ideas and strategies for achieving deep, sustainable reform in education.

Also Available From Corwin Press:



ISBN: 0-7619-3873-7

CORWIN PR
A Sage Publicatio
2455 Teller Road
Thousand Oaks, CA

ISBN 1-4129-0496-X

Contents

Preface

All the dilemmas in education reform are coming home to roost: top-down versus bottom-up; short-term versus long-term results; centralization versus decentralization; informed prescription versus informed professional judgment; transactional versus transformative leadership; excellence versus equity. And how does one achieve large-scale reform, anyway; reform that is characterized by serious accountability and ownership?

As it turns out, "sustainability" is at the heart of all these dilemmas. Its definition is not straightforward. It is not how to maintain good programs beyond implementation. It is not how to keep going in a linear, sustained fashion. It is not how to keep up relentless energy. For the moment, let's be satisfied with a general definition: *Sustainability is the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of human purpose.* There is a lot packed into this definition. It is not just the outcome of continuous improvement we need to observe, but we must also understand the key characteristics of systems that display dynamic sustainability.

My thanks in particular to my colleague, Andy Hargreaves, who has been working on the concept of sustainability over the last several years. His definition overlaps but is different from mine. As he and Fink put it: "Sustainability does not simply mean whether something will last. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment now and in the future" (Hargreaves & Fink, 2000, p. 30; Hargreaves & Fink, in press).

I focus not so much on particular initiatives but on the system itself. My concern is not just whether system thinking is important (Senge, 1990). It is. Rather, I tackle a question that has never been addressed before: How do you develop and sustain a greater number

of "system thinkers in action." I call this breed of leader "the new theoretician." These are leaders at all levels of the system who proactively and naturally take into account and interact with larger parts of the system as they bring about deeper reform and help produce other leaders working on the same issues. They are theoreticians, but they are practitioners whose theories are lived in action every day. In fact, that is what makes their impact so powerful. Their ideas are woven into daily interactions that make a difference.

The agenda for the new theoreticians is laid out in Chapter 2 as eight elements of sustainability: public service with a moral purpose, commitment to changing the context, lateral capacity building, intelligent accountability, deep learning, dual commitment to short- and long-term results, cyclical energizing, and the long lever of leadership. The agenda is exceedingly complex and demanding. I show specifically why it will be hard to accomplish. But I also show what the new work looks like in practice, because it is now going on. This book is about identifying what leaders at all levels of the system can do to pave the way for greater sustainability.

One other matter. We are getting into complex territory. I undertake in the book, as the new theoreticians do in practice, to link every abstract concept with a concrete example of what it looks like in practice. You can't be a system thinker in action if you don't know what the action part looks like and feels like. Learning by doing has never been so thoughtful and so challenging.

The revolution I am talking about is under way in all of the public services: education, health, employment, transportation, crime, and in business, for that matter. As agencies have pushed for greater performance and public accountability over the past two decades, we have seen some incremental improvements, but it is obvious that these improvements are fragile and not deep. But we are reluctant to let go of the strategies that have brought us this far, in favor of strategies that are far more complex with many more unknowns. In this book, my goal is to portray where we are in public service reform, with education as the main example, and to outline how we might pursue longer-term sustainability without jeopardizing short-term results. Indeed, the public will insist on this reconciliation.

In the systems level work, I have benefited enormously from my association with Michael Barber, head of the Prime Minister's Policy Delivery Unit in Britain. Michael is one of the great theoreticians in action that I write about in this book.

Leadership (not "leaders") is the key to the new revolution. This book is about the two-way street between individual leadership and system transformation. They must feed on each other in a virtual cycle, even though at any given time they may be asymmetrical; that is, individual leaders in a given instance may find the system is less than helpful, and in another circumstance, system leaders may find individual leaders to be stumbling blocks to improvement. In any case, leadership is to this decade what standards were to the 1990s if we want large-scale, sustainable reform.

In education, the many initiatives in large-scale reform over the past decade have provided the foundation for challenging the future. We understand (and will review) what brought us incremental success in, for example, districtwide reform, as when the performance of most schools in the district improve. By looking closely, we can also see why the strategies that brought us initial success cannot take us the distance.

My colleagues and I have been fortunate to be partners, codevelopers, critical-friend observers of several significant large-scale reform initiatives around the world, but especially in Canada, the United Kingdom, the United States, and Australia. The ideas, translated into many languages, are in use around the globe, not only in education, but in the public service more broadly as well as in the corporate world.

We have learned a great deal from our evaluation of the National Literacy and Numeracy Strategies in England and now, in the aftermath in the more fundamental policy work, to go beyond improvements in literacy and numeracy.

My special appreciation to David Miliband, David Hopkins, and the scores of educators in England at all levels who are providing us with a living laboratory of educational reform on a grand scale. Thanks also to David Hopkins for very helpful comments on the manuscript.

In the United States, the work in Chicago; Greensboro, North Carolina; and in Louisiana with the Center for Development and Learning is producing powerful lessons about districtwide reform (as well as the research literature more broadly on district reform). My association with the Gates Foundation Leadership initiative, and now Microsoft's Partnership in Learning, adds significantly to the laboratories of large-scale reform.

I have been privileged over this past year to be the H. Smith Richardson Jr. Visiting Fellow at the Center for Creative Leadership

(CCL) in Greensboro, North Carolina. John Alexander and his colleagues at CCL have been an inspiration to work with in pushing the boundaries of new work on leadership.

In Canada, districtwide reform initiatives in Edmonton Catholic District, Toronto School District, and more recently and deeply, York Region School District are great examples of building system capacity. In Ontario as a whole, with the recent election of the Liberal government, we have a golden opportunity to swim in deeper waters as the Premier, Dalton McGuinty, and the Minister of Education, Gerard Kennedy commit to provincewide reform based on many of the ideas in this book.

In Australia, we are in the early stages of significant system level developments in the state of South Australia as the state has committed to system redesign, again based on the new work of capacity building. Virtually all of the states in Australia have started down the path of large-scale reform.

My point is not to limit the observations to these cases, but to say that these are only some of the ones where we have direct involvement. They are part and parcel of the larger revolution. I will also argue that it would be easy to fall back on strategies that are getting some short-term results, but this would be a fundamental mistake. The new breakthroughs are complex and sophisticated, and will require leaders who have more comprehensive conceptualization than most leaders of the present (more accurately, systems have not fostered and permitted the development of such leadership).

The new knowledge, as I have said, is being led not by academic theoreticians; the new theoreticians are certain policymakers and lead practitioners working with a wider set of ideas and interacting with academics who themselves are immersed in practical theorizing and doing. This is crucial because it means the ideas and strategies are being formed around real problems—big ones never before solved. Never before have we had such a change crucible at our fingertips.

In many ways, this book builds on the ideas that were set out in what I have come to call the "ad hoc trilogy on leadership." *Leading in a Culture of Change* (2001) demonstrated that successful leaders in education and business have much in common. The five core mind-action sets—moral purpose, understanding change processes, relationship building, knowledge building, and coherence making—characterize successful leaders in all learning organizations, that is, all organizations operating in complex times.

(CCL) in Greensboro, North Carolina. John Alexander and his colleagues at CCL have been an inspiration to work with in pushing the boundaries of new work on leadership.

In Canada, districtwide reform initiatives in Edmonton Catholic District, Toronto School District, and more recently and deeply, York Region School District are great examples of building system capacity. In Ontario as a whole, with the recent election of the Liberal government, we have a golden opportunity to swim in deeper waters as the Premier, Dalton McGuinty, and the Minister of Education, Gerard Kennedy commit to provincewide reform based on many of the ideas in this book.

In Australia, we are in the early stages of significant system level developments in the state of South Australia as the state has committed to system redesign, again based on the new work of capacity building. Virtually all of the states in Australia have started down the path of large-scale reform.

My point is not to limit the observations to these cases, but to say that these are only some of the ones where we have direct involvement. They are part and parcel of the larger revolution. I will also argue that it would be easy to fall back on strategies that are getting some short-term results, but this would be a fundamental mistake. The new breakthroughs are complex and sophisticated, and will require leaders who have more comprehensive conceptualization than most leaders of the present (more accurately, systems have not fostered and permitted the development of such leadership).

The new knowledge, as I have said, is being led not by academic theoreticians; the new theoreticians are certain policymakers and lead practitioners working with a wider set of ideas and interacting with academics who themselves are immersed in practical theorizing and doing. This is crucial because it means the ideas and strategies are being formed around real problems—big ones never before solved. Never before have we had such a change crucible at our fingertips.

In many ways, this book builds on the ideas that were set out in what I have come to call the "ad hoc trilogy on leadership." *Leading in a Culture of Change* (2001) demonstrated that successful leaders in education and business have much in common. The five core mind-action sets—moral purpose, understanding change processes, relationship building, knowledge building, and coherence making—characterize successful leaders in all learning organizations, that is, all organizations operating in complex times.

In *Change Forces With a Vengeance* (2003a), I advocated the tri-level reform model, namely, what has to happen at the school/community, district, and state levels, and in their interactions across levels. We will see that concerted tri-level developments are central to system transformation, to changing the very contexts within which people work.

In *The Moral Imperative of School Leadership* (2003b), I took the ideas further by arguing that not only must moral purpose guide and drive our efforts, but moral purpose must also go beyond individual heroism to the level of a system quality.

What is exciting is that there are new, fundamental attempts at systems thinking, strategizing, and doing that give us much more to think about and build on—again, the purpose of this book.

I would be remiss if I did not say that we could identify examples that are mired in the old pattern of incremental inertia at best and compliant dependency at worst. At their extremes, incremental inertia and sustainability are mutually exclusive. However, I will argue that it is possible, and necessary, to pursue a dual strategy that pays attention to short-term results while simultaneously laying the groundwork for sustainable engagement. We need to have our cake and eat it, too.

I thank Robb Clouse of Corwin Press, who is constantly pushing the envelope; the Ontario Principals' Council for its entrepreneurial leadership and support; and Claudia Cuttress for producing this book, and the many training materials and books that have fed into it, all with amazing quality and speed.

I dedicate this book to the new theoreticians—doers with big minds, who treat moral purpose as a cognitive as well as an emotional calling.

Chapter One

The Starting Point

> So hope for a great sea-change. . . .
> It means once in a lifetime that justice can rise up
> And hope and history rhyme.
>
> —Seamus Heaney

Where are we in large-scale reform? It is a bit unfair to characterize the best success as incremental inertia, but in terms of sustainability, that label is not too far off the mark. In the first part of this chapter, I consider examples of large-scale reform that have been successful, concluding that progress has been made but that it is neither deep nor sustainable. I also identify some reasons why we should be concerned about the inadequacies of these strategies.

Apparent Success

Nearly all of the success stories involve improvements in literacy and numeracy at the elementary level, with some closing of the gap between high- and low-performing schools. The findings are consistent across many studies. Togneri and Anderson's (2003) study of

success in five high-poverty districts identified six strategies for improvement. These districts

1. Acknowledged publicly poor performance and sought solutions (building the will for reform)
2. Focused intensively on improving instruction and achievement
3. Built a systemwide framework and infrastructure to support instruction
4. Redefined and redistributed leadership at all levels of the district
5. Made professional development relevant and useful
6. Recognized there were no quick fixes. (p. 13)

In another study of four successful high-poverty districts, Snipes, Doolittle, and Herlihy (2002) found that these districts in comparison with other districts

1. Focused on achievement, standards, and instructional practice
2. Created concrete accountability systems in relation to results
3. Focused on the lowest-performing schools
4. Adopted districtwide curricular and instructional approaches
5. Established districtwide professional development and support for consistent implementation
6. Drove reform into the classrooms by defining the role for central offices of guiding, supporting, and improving instruction at the building level
7. Committed themselves to data-driven decision making and instruction
8. Started the reform at the elementary level
9. Provided intensive instruction in reading and math to middle and high schools students. (p. 5)

Similarly, and at a more operational school level, a study by the Council of Chief School Officers (2002) found that school principals who were successful employed nine improvement strategies by

1. Setting high expectations for all students
2. Sharing leadership and staying engaged
3. Encouraging collaboration among staff
4. Using assessment data to support student success
5. Keeping the focus on students
6. Addressing barriers to learning
7. Reinforcing classroom learning at home
8. Employing systems for identifying interventions
9. Defining special education as the path to success in the general education program. (p. 8)

In all of the above cases, leadership at the school and district levels was identified as crucial to success. As consistent as these findings seem, there are many problems with them, but let us first consider other large-scale reforms.

The most celebrated case of large-scale reform is the National Literacy and Numeracy Strategies (NLNS) in England. We had the privilege of evaluating the strategy over a 5-year period, from 1997 to 2002 (Earl, Levin, Leithwood, Fullan, & Watson, 2003). The main elements of the implementation strategy were summarized by Michael Barber (2002), head of the government initiative:

- A nationally prepared project plan for both literacy and numeracy, setting out actions, responsibilities, and deadlines through to 2002
- A substantial investment sustained over at least 6 years and skewed toward those schools that need most help
- A project infrastructure involving national direction from the Standards and Effectiveness Unit, 15 regional directors, and over 300 expert consultants at the local level for each of the two strategies

- An expectation that every class will have a daily math lesson and daily literacy hour
- A detailed teaching programme covering every school year for children from ages 5 to 11
- An emphasis on early intervention and catch-up for pupils who fall behind
- A professional development programme designed to enable every primary school teacher to learn to understand and use proven best practices in both curriculum areas
- The appointment of over 2,000 leading math teachers and hundreds of expert literacy teachers who have the time and skill to model best practice for their peers
- The provision of "intensive support" to circa half of all schools where the most progress is required
- A major investment in books for schools (over 23 million new books in the system since May 1997)
- The removal of barriers to implementation (especially a huge reduction in prescribed curriculum content outside the core subjects)
- Regular monitoring and extensive evaluation by our national inspection agency, OFSTED
- A national curriculum for initial teacher training requiring all providers to prepare new primary schoolteachers to teach the daily math lesson and the literacy hour
- A problem-solving philosophy involving early identification of difficulties as they emerge and the provision of rapid solutions or intervention where necessary
- The provision of extra after school, weekend, and holiday booster classes for those who need extra help to reach the standard. (pp. 8–9)

England used a combination of "pressure and support," or what we now call "accountability and capacity building," to mobilize leadership for literacy and mathematics. New literacy and math leadership roles were established at the school, district, regional, and national levels and later were supplemented by direct professional development for school principals and initial teacher education. So, leadership was central to success. Capacity building involves developing the collective ability—dispositions, skills, knowledge, motivation, and resources—to act together to bring about positive change.

David Hargreaves (2003) also makes the point that the school curriculum is seriously out of step with what is needed in present and future society, where new knowledge and skills are at a premium:

> The ability to learn how to learn and other meta-cognitive or "thinking" skills; the ability to learn on the job and in teams; the ability to cope with ambiguous situations and unpredictable problems; the ability to communicate well verbally, not just in writing; and the ability to be creative, innovative, and entrepreneurial. (p. 30)

Similarly, Bereiter (2002) argues forcefully that we need far deeper learning than hitherto imagined for both students and teachers. Indeed, as we shall see, "deep learning" is one of the eight elements of sustainability.

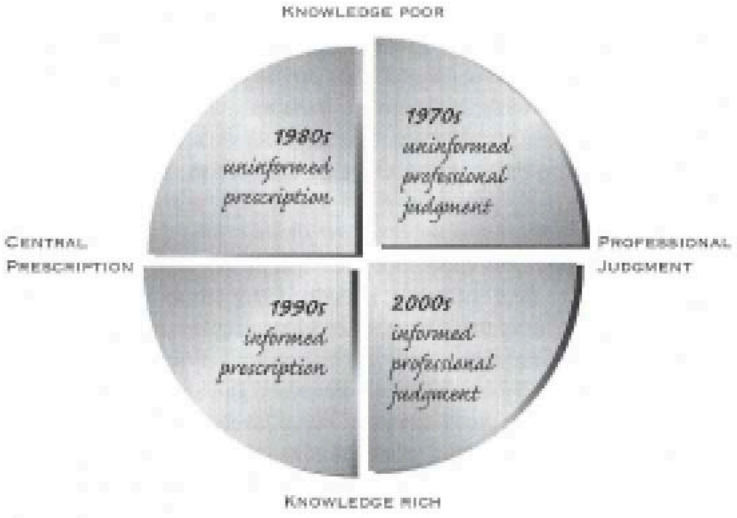
Sixth, and finally, note that in all cases, the strategy is heavily centrally directed at the district or state levels (one group above proudly claimed that it "drove reforms into the classrooms"). Soon, we will see that centrally driven reforms can be a necessary first start (when performance is seriously unacceptable) but can never carry the day of sustainability.

To nudge our thinking in the direction of sustainability, I take Michael Barber's response to the fact that an apparently successful strategy was plateauing. Figure 1.2 displays the framework he used to characterize the evolution of needed strategies for reform.

Barber (2002) argued that some conditions for reform can be described on a continuum from "knowledge poor" (quality knowledge is not being generated and accessed on an ongoing basis) to "knowledge rich." The other dimension is whether the strategy is centrally driven or is based on local capacity or judgment. The result is a helpful (but an incomplete) transition toward a sustainability paradigm. Interpreting the figure itself, we can say there was a time when teachers worked autonomously "behind the classroom door" (there is still much of that). As a loosely coupled *system*, it can be described as "uninformed professional judgment." There were some excellent teachers, but there was no culture in place to systematically extend and deepen quality teaching.

As anxiety about the performance of schools became more public in the 1980s—think "A Nation at Risk" in the United States—new accountability schemes were introduced, but these were not

Figure 1.2 Knowledge Poor Versus Rich, Prescription Versus Judgment Matrix



SOURCE: Barber, 2002.

based on sound or comprehensive knowledge: hence, uninformed prescription.

As evidence accumulated about how to improve student achievement (both with respect to curriculum and instruction and in terms of change strategies), some jurisdictions locked on to a more centrally driven (and supported) set of strategies. They did their homework, with the result being "informed prescription." England's NLNS is a prime example. Barber (2002), then, acknowledges that such prescription, no matter how wise, cannot solve the leveling-off problem. To go beyond initial plateauing, one needs a great deal of "informed professional judgment."

For my own part, it is important to clarify from the work on professional learning communities that informed professional judgment must be understood to be a *collective* quality, not just an individual

Chapter Two

The Intriguing Nature of Sustainability

As the struggle to achieve large-scale reform evolves, sustainability is becoming a rallying concept, one that contains the elaboration of strategies essential for whole-system capacity building on an ongoing basis. This chapter attempts to lay out the emerging nature of what sustainability is, especially what built-in strategies simultaneously constitute and promote it.

Looking for Solutions

The starting point is to observe that nothing tried so far really works. Local autonomy, whether it is the "let a thousand flowers bloom variety" or site-based management within a framework of external accountability, does not produce results on any scale; the command, control, and support strategy of informed prescription takes us some distance, but it is still surface stuff without any likelihood of lasting.

Any solutions must be efficient, sophisticated, powerful, and amenable to action. As we move into more powerful concepts, the paralysis of excessive analysis will make matters worse, as will deep critiques without equally deep ideas for transcending identified problems. The solution will require us to use complexity and systems theory, but in my use of it, every abstract concept must be accompanied by a practical strategy that illustrates the concept in action. Solutions, in other words, must be theoretical and practical.

This is why I dedicate this book to the new theoreticians—people working on the real problem of transforming real systems, learning by doing it.

I start by discussing eight main elements of an evolving sustainable system, but let's be humble. Addressing the problem of sustainability is the ultimate, adaptive challenge, to use Heifetz's words (Heifetz, 2003; Heifetz & Linsky, 2002):

> An adaptive challenge is a problem for which solutions lie outside the current way of operating. We can distinguish technical problems, which are amenable to current expertise, from adaptive problems, which are not. (Heifetz, 2003, p. 70)

Eight Elements of Sustainability

Sustainability is an adaptive challenge par excellence. As I see it, there are at least eight elements of sustainability:

1. Public service with a moral purpose
2. Commitment to changing context at all levels
3. Lateral capacity building through networks
4. Intelligent accountability and vertical relationships (encompassing both capacity building and accountability)
5. Deep learning
6. Dual commitment to short-term and long-term results
7. Cyclical energizing
8. The long lever of leadership

These eight elements are introduced in this chapter and pursued throughout the book. While I use them in relation to education, these very same strategies can be applied to any public service and to corporate institutions.

1. Public Service With a Moral Purpose

Chapman (2003) talks about the new agenda for public value. Public value, he says, is increased when

- The level of service provision is improved.
- The quality of service is increased.
- The equity or fairness with which service is delivered is increased.
- The service provision is more sustainable and takes into account the needs of future generations.
- The provision of the service is done in a way consistent with the expectations of a liberal diverse society.
- The service provision enhances the level of trust between government and citizens. (p. 128)

Barber (2004) advocates "the enabling state" (in contrast to "the minimalist state") in which strong public services:

- Are universal and diverse
- Respond to the needs and aspiration of citizens
- Compete with the private sector on quality

In Barber's model, quality of implementation and short- and long-term outcomes are just as crucial as purpose.

In examining moral purpose (Fullan, 2003b), I talked about how it must transcend the individual to become an organization and system quality in which collectivities are committed to three aspects of moral purpose: (1) raising the bar and closing the gap of student learning; (2) treating people with demanding respect (moral purpose is supportive, responsive, and demanding, depending on the circumstances); and (3) altering the social environment (e.g., other schools and districts) for the better.

Public value and moral purpose have always been the mission statements of democratic governments. This time it is different because the eight elements of sustainability, once pursued in combination, compel all levels of the system to take moral purpose seriously.

2. Commitment to Changing Context at All Levels

David Hargreaves (2003) reminds us of Donald Schon's observation, more than 30 years ago:

> We must . . . become adept at learning. We must become able not only to transform our institutions, in response to changing

situations and requirements; we must invest and develop institutions which are "learning systems," that is to say, systems capable of bringing about their own continuing transformation. (cited in Hargreaves, p. 74)

for the better. It is not as impossible as it sounds, although it will take time and cumulative effort. The good news is that once it is under way, it has self-generating powers to go further.

Many of the new network strategies in England are being developed by the National College of School Leadership (NCSL). In two publications, NCSL describes "networked learning communities." In *Why Networked Learning Communities*, NCSL (2003b) states

> Collaboration rather than competition is the motivation for hundreds of schools in this pioneering programme that will transform learning experiences for children, teachers and school leaders. (p. 1)

connecting the dots, capturing valuable emerging ideas and patterns. Coherence-making makes complexity simpler. Gathering and paying attention to quality data is learning toward coherence.

5. Deep Learning

Sustainability by our definition requires continuous improvement, adaptation, and collective problem solving in the face of complex challenges that keep arising. As Heifetz (2003) says, adaptive work "demands learning," "demands experimentation," and "difficult conversations." "Species evolve whereas cultures learn," says Heifetz (p. 75).

There are three big requirements for the data-driven society: drive out fear; set up a system of transparent data-gathering coupled with mechanisms for acting on the data; make sure *all* levels of the system are expected to learn from their experiences. Deep learning is for students, teachers, schools, districts, and governments if sustainability is to have any chance.

First, then, is to reduce the fear factor. One of W. E. Deming's (1986) prescriptions for success was "Drive out fear." In the *Education Epidemic*, David Hargreaves (2003) argues

> Government must give active permission to schools to innovate and provide a climate in which failure can be given a different meaning as a necessary element in making progress, as is the case in the business world. . . . Mistakes can be accepted or even encouraged, provided that they are a means of improvement. (p. 36)

Hargreaves quotes

> The fastest way to succeed is to double your failure rate. (Thomas Watson, IBM)
> Fail often to succeed sooner. (Tom Kelley, IDEO)
> You must learn to fail intelligently. Failing is one of the greatest arts in the world. One fails forward towards success. (Thomas Edison) (p. 35)

Or if you like, try the title of Farson and Keyes's (2002) *Whoever Makes the Most Mistakes Wins.*

Hyperbole aside, the point is to not fail stupidly (you are not allowed to keep making the same mistake) but to fail intelligently (forgive and remember). The latter is very much linked to sustainability. Pfeffer and Sutton (2000), in *The Knowing-Doing Gap*, devoted a whole chapter to "When Fear Prevents Acting on Knowledge." In organization after organization, they found that an atmosphere of fear and distrust prevented knowledge from being translated into action (p. 109).

Significantly, Pfeffer and Sutton (2002) identify two other "pernicious effects." One is that "fear causes a focus on the short run [driving] out consideration of the longer run" (pp. 124–125). The other problem is that "fear creates a focus on the individual rather than the collective" (p. 126). In a punitive culture, if I can blame others or others make mistakes, I am better off. Need I say that both the focus on the short run and excessive individualism are fatal for sustainability?

We also see why heavy-handed schemes like No Child Left Behind (NCLB) in the United States and a prescriptive preoccupation with targets in England during the 1990s are bad for sustainability.

Second, capacities and means of acting on the data are critical for learning. Thus "assessment for learning" has become a powerful, high-yield tool for school improvement and student learning (see especially Black, Harrison, Lee, Marshall, & Wiliam, 2003; Hill & Crevola, 2003; Stiggins, 2001). Critical aspects of the move toward more effective data use include (a) avoiding excessive assessment demands (Miliband (2004) talks about reducing necessary paper and information burden, which distract schools from their core business); (b) ensure that a range of data are collected—qualitative as well as quantitative. In *Leading in a Culture of Change* (Chapter 4, "Knowledge Building," Fullan, 2001), I cite several examples, including the U.S. Army's "After Action Reviews," which have three standardized questions: What was supposed to happen? What happened? And what accounts for the differences? This kind of learning is directed to the future, that is, to sustainable improvements.

Third, deep learning is for all levels of the system. At schools and districts, it means collaborative cultures of inquiry that alter the culture of learning in the organization away from dysfunctional and non-relationships toward the daily development of culture that can solve difficult or adaptive problems (see especially Kegan & Lahey, 2001; Perkins, 2003). The "curriculum" for doing this is contained in Kegan and Lahey's seven languages for transformation (e.g., from the

> In reality, the system is truly transformed when its central bureaucracy is also transformed, itself becoming an example of the learning organization that it advocates for schools. (D. Hargreaves, 2003, p. 87)

Governments thus would have to rethink their relationships to districts and schools (combining intelligent accountability and lateral-capacity-building strategies, for instance), *and* they would have to develop habits and mechanisms for learning from their actions (internally in the organization and externally). In other words, they need to learn how to constantly adjust, revise, abandon, expand strategies, and so on, according to their efficacy.

6. Dual Commitment to Short-Term and Long-Term Results

"energy, not time" is the fundamental currency of high performance. They base their work on four principles:

> Principle 1: Full engagement requires four separate but related sources of energy: physical, emotional, mental, and spiritual. (p. 9)
>
> Principle 2: Because energy capacity diminishes both with overuse and with underuse, we must balance energy expenditure with intermittent energy renewal. (p. 11)
>
> Principle 3: To build capacity, we must push beyond our normal limits, training in the same systematic way that elite athletes do. (p. 13)
>
> Principle 4: Positive energy rituals—highly specific routines for managing energy—are key to full engagement and sustained high performance. (p. 14)

Loehr and Schwartz (2003) are talking about individuals, whereas we are interested as well in systems, but the same logic applies. They contrast the old paradigm with the new:

> Manage time versus manage energy.
>
> Avoid stress versus seek stress.
>
> Life is a marathon versus life is a series of sprints.
>
> Downtime is wasted versus downtime is productive time.
>
> Rewards fuel performance versus purpose fuels performance. (p. 6)

If we want sustainability, we need to keep an eye on energy levels (overuse and underuse). Positive collaborative cultures will

Chapter Three

Leadership to the Fore

As society places higher and higher expectations on the performance of public and private agencies, leadership is bound to come to the fore. The question is, what kind of leadership is needed for sustainability? In a nutshell, we need a critical mass of leaders at all levels of the system who are explicitly cognizant of and committed to pursuing in practice the implementation of the eight elements of sustainability described in Chapter 2. Systems change on an ongoing basis only if you have enough leaders who are system thinkers. This is what is meant by "thinking outside the box." If you think context, you change context. Let's be very careful here: You can't think precisely enough about context unless you are also *acting* in this enlarged arena. When great thinking and action go hand in hand, the concepts get larger and they also get more meaningful because they are grounded in concrete strategies and actions.

Almost 20 years ago, Peter Block (1987) argued that "cultures get changed in a thousand small ways, not by dramatic announcements emanating from the boardroom" (p. 98). Not fully true. It requires the thousand small ways *and* boardroom policies. Sustainability is a team sport, and the team is large.

In this chapter, I take up where we are now and set the stage for what individuals can do and what systems can do to bring the right kind of leadership to the fore. Subsequent chapters zero in on the new work of leaders as it plays out at the school, district, and system levels.

In addition to individual effort, we need, as I have argued, a more direct and explicit focus on changing *systems.*

What Systems Can Do

Systems consist of individuals, so what does it mean to say that systems must change, and, furthermore, that they must change toward sustainability? My answer is that you do this through leaders at the system level and all other levels, becoming *explicitly conscious* that they are engaged in widening people's experiences and identification beyond their normal bailiwicks. The proposition is that the key to changing systems is to produce greater numbers of "system thinkers." If more and more leaders become system thinkers, they will gravitate toward strategies that alter people's system-related experiences; that is, they will alter people's mental awareness of the system as a whole, thereby contributing to altering the system itself.

> [Systems thinking] is the discipline that integrates the disciplines, fusing them into a coherent body of theory and practice. It keeps them from being separate gimmicks or the latest organization fads. Without a systemic orientation, there is no motivation to look at how the disciplines interrelate. . . .
>
> At the heart of a learning organization is a shift of mind—from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something "out there" to seeing how our own actions create the problems we experience. A learning organization is a place where people are continually discovering how they create their reality *and how they can change it.* (pp. 12, 13; my emphasis)

With at least a decade of work, I don't think we have made any significant gains on defining the problem, let alone doing anything about it. The fifth discipline "fieldbook" takes up the issue of application (Senge et al., 2000). We see once again that "the discipline of

systems thinking provides a different way of looking at problems and goals—not as isolated events but as components of larger structures" (p. 78). There is then a discussion of how the term *systems thinking* has been used in a confusing manner, with the new suggestion that there is actually a continuum of seven approaches: "system-wide thinking," "open systems thinking," "human systems thinking," "process systems thinking," "living systems thinking," and "feedback-simulation" (Senge et al., 2000, p. 79).

This doesn't seem to be a "continuum," and more important from the perspective of the new theoretician seeking system impact, there is nothing practical to go on. If anything, the situation seems more confusing.

In the fifth discipline fieldbook, systems thinking is applied to staff development:

> All too often there is little communication across grade levels and across content areas. A child gets an experience in one year that might not relate to the next year's experience. This situation makes the school particularly vulnerable to tests, because each year's instructor feels that he or she alone must prepare the kids for assessment. But aligning curriculum across levels requires using the skills and technologies of systems thinking and mental models; you have to get agreement among all the teachers about where the starting level for students exists and how fast to carry them along the development path. . . .
>
> If you're a systems thinker in school planning, then you focus not on particular practices but on building collaborative relationships and structures for change. You need mechanisms and a process that allow people to talk, across grade levels, departments, and schools within a system. (Senge et al., 2000, p. 394)

It is not so much a criticism of Senge's (1990) work as it is a commentary on the field of system thinking to note that we are not making any progress at fostering it in practice. Here is my take:

1. Yes, we know that current systems are working in isolation with terrible results, but we have known that for years.
2. Yes, collaboration is key, and "you have to get agreement among all the teachers," but how do you do that, not to mention among districts, governments, and the public?

3. Systems thinking is not just a cognitive endeavor in order t discover the whole picture and long-term trends. As my italic from Senge's quote emphasize, the goal is to understand th system and change it for the better.

4. Systems thinking means not only that given individuals o organizations can appreciate and take into account the large system but also that individuals and organizations can b engaged with others outside themselves in order to chang the very system that surrounds them.

5. For systems thinking to have its intended affect, it can't b for a small group of specialists; it must be made practicall accessible to the large group of new and emerging leaders.

Chapter Four

The New Work of Leaders

In essence, the new work entails leaders immersing themselves in the eight elements of sustainability. We have just seen some of the general implications of this work at the individual and system levels. In this chapter, I probe more deeply into the nature of this work. In subsequent chapters (5, 6, 7), I apply the ideas to the work of leaders at the school/community, district, and system levels.

We talked earlier about Heifetz and Linsky's (2002) critically important distinction between technical and adaptive solutions. Technical solutions involve solving problems that can be addressed through current knowledge or know-how; adaptive challenges concern problems whose solutions are not known. Moving literacy achievement scores up to 75% for 11-year-olds, as they did in England, is a technical solution; going beyond this plateau is an adaptive challenge. Of course, working on the eight components of sustainability in Chapter 2 is an adaptive challenge of the highest order.

The portal to this new arena of learning can be found readily by considering four of Heifetz's (2004) properties of an adaptive challenge:

1. The challenge consists of a gap between aspiration and reality, demanding a response outside our current repertoire.
2. Adaptive work to narrow the gap requires difficult learning.
3. The people with the problem are the problem, and they are the solution.
4. Adaptive work generates disequilibrium and avoidance.

1. From the language of complaint to the language of commitment.
2. From the language of blame to the language of personal responsibility.
3. From the language of "New Year's Resolutions" to the language of competing commitments.
4. From the language of big assumptions that hold us to the language of assumptions that we hold . . .
5. From the language of prizes and praising to the language of ongoing regard.
6. From the language of rules and policies to the language of public agreement.
7. From the language of constructive criticism to the language of deconstructive criticism. (pp. 8–9)

clusion. We need fundamental changes in the cultures of organizations and systems; the new work is harder to do, requiring much more sophistication—leaders working to change conditions, including the development of other leaders to reach a critical mass. This is the new work of leaders for sustainability. King Arthur's roundtable has been set. Enter the new leaders, starting at the school level.

Chapter Five

Leadership at the School Level

I have spent some time setting the stage for school leadership because effective school leadership does not mean much unless it is cast in a context that matters. The particulars in this chapter concern how the principal (or school leadership) relates to teachers, students, parents, and the community and to other schools within *and* beyond the district.

The new work of school leaders is a mixture of technical and adaptive work. A technical problem would be teaching a child to read, or raising literacy proficiency scores from 57% to 75%, as was the case in England. Not that technical problems are easy to solve, but we do know how to approach them. An adaptive challenge is one in which we do not have the answers. Engaging alienated or unmotivated students, involving parents and the community at large, addressing social inclusion of special needs students, moving from 75% literacy to 90%, and reforming high schools are all examples of current adaptive problems.

If you want a shorthand criterion to determine whether a problem is technical or adaptive, try Heifetz's (2004) "the person with the problem is the problem, and the solution." Put another way, adaptive challenges require the deep participation of the people with the problem; that is why it is more complex and why it requires more sophisticated leadership.

School leaders need to keep working on technical problems. There is much more to be done in literacy and mathematics, for

reasons why districts or comparable regional structures are essential. First, decentralized schools will have variable capacities to engage in continuous improvement, and therefore some agency has to be responsible for helping develop capacity and for intervening (with a goal to developing capacity) when performance is low. The second reason is even more fundamental for sustainability: We can't change the system without lateral (cross-school and cross-district) sharing and capacity development. It is very much the district's role to help make the latter happen.

We have been working with several districts in Canada, the United States, and the United Kingdom to help develop capacity building across the district as a first step toward sustainability. In this chapter, I briefly review the lessons from this work to once again demonstrate that powerful abstract concepts can and must be evident in strategic practice. These lessons are followed by a case review of a district in order to illustrate the systemic nature of this work. Finally, I revisit sustainability.

Lessons Learned

We recently completed a review of our district work and linked it to other findings in the literature (Fullan, Bertani, & Quinn, 2004). Ten key lessons stood out:

1. Leading with a compelling, driving conceptualization
2. Collective moral purpose
3. The right bus
4. Capacity building
5. Lateral capacity building
6. Ongoing learning
7. Productive conflict
8. A demanding culture
9. External partners
10. Growing financial investments

2. Collective Moral Purpose

The moral purpose of educators may seem universal, but it has too often emerged as an individual phenomenon: the heroic teacher, principal, or superintendent who succeeds for brief periods of time against all odds. This moral martyrdom is great for the individual soul, but it does not lead to sustainable reform. We need instead to think of the moral imperative as an organizational or system quality (see Fullan, 2003b).

To recall our definition of moral purpose, it consists of (a) a commitment to raising the bar and closing the gap of student achievement for all individuals and schools; (b) a commitment to treat people ethically—adults and students alike (which does not mean being soft; see Lesson 8, on demanding cultures); and (c) a commitment to improving the whole district, not just one's own school.

In the districts we are talking about, district leaders constantly communicate the moral purpose. They make it clear that everyone has a responsibility for changing the larger education context for the better. These leaders foster a culture in which school principals become "almost" as concerned about the success of other schools in the district as they are about their own. They know that competition among schools within districts leads to counterproductive behaviors—what Pfeffer and Sutton (2000) refer to as "internal competition [that] turns friends into enemies" (p. 180), thereby undermining interdependence, trust, and loyalty. Cultivating identity beyond one's own school to other schools in the district is an act of system thinking that contributes to changes in the overall context toward greater sustainability. As in all successful organizations, the "cause" is more important than quotas or targets.

3. The Right Bus

In his discussion of great companies, Jim Collins (2001) talks about the critical importance of getting the right people on the right bus and in the right seats, and the wrong people off the bus. Here, we take one step back and ask: What is the right bus (structures and roles)? The lesson from our districts is that some reorganization of

4. Capacity Building

New structures are sterile without corresponding capacity building for those inhabiting the new roles. This is where building the new culture comes in. In complex, uncertain environments, where roles are often not well coordinated (in other words, in schools and schcol systems), a major, explicit effort is required to develop new capacities, which, above all, involve capacities to work together. Districts in the forefront of development promote "learning in context"—not just through workshops but also through daily interactions in cultures designed for job-embedded learning.

In Chicago, for example, people learn in weekly meetings, study groups, focused institutes, and walk-through site visits, in which teams visit schocls to learn from and react to leadership and teaching and learning strategies. These comprehensive, multiyear strategies involve school teams and district level leaders in weeklong institutes and multiple-day follow-ups. The transfer of skills and ideas to classrooms and schools is enhanced by cycles of application and regular examination of student results.

Capacity building, as I said, is an abstract concept, and it is easy to get it wrong. It is not just workshops and professional development for all. It is the daily habit of *working together,* and you can't learn this from a workshop or course. You need to learn it by doing it and having mechanisms for getting better at it on purpose.

Finally, capacity building means constantly developing leadership for the future. There is plenty of turnover in systems these days, and as I said earlier, it is not turnover, per se, that is the problem, but rather discontinuity of direction. Because sustaining districts foster leaders who also develop other leaders, there is a constant pool and pipeline of people who can push further and deeper.

Chapter Seven

Leadership at the System Level

If the key to the future success is the increase of system thinking in action, system leaders have a dual role. One is to make system coherence more and more evident and accessible, the other is to foster interactions—horizontally and vertically—that promote system thinking in others. They also have to engage in a highly sophisticated balancing act. On one hand, there need to be strategies and resources devoted to the exploration of solutions to adaptive challenges. This is a politician's nightmare because it provides no clear answers at the beginning of the process. On the other hand, they must regularly focus on solutions. This is a practitioner's nightmare: hard hierarchies that push for and impose solutions.

If they are successful at turning the ship around, system leaders are helped by the presence and involvement of more and more school and district leaders of the kind discussed in Chapters 5 and 6.

Networking and Intelligent Accountability

I frame the problem of system leadership around two competing (but not necessarily mutually exclusive) strategies, which I will call "networking" and "intelligent accountability." Let's start with the former, because it is increasingly coming on the scene. It has its strengths, especially with respect to lateral capacity and increments of system

1. Raise the floor in literacy and numeracy in those schools, districts, states, and countries where performance is unacceptably low.
2. Raise the bar and close the gap, and when levels of performance improve, keep going toward proficiency levels that are in the 90% range.
3. Make sure that literacy (English) and numeracy (the maths) are equally pursued in middle and high schools—otherwise, early gains will be lost.
4. Use increasingly powerful strategies so that literacy and numeracy are used in the service of deep learning (Claxton's, 2002, "building learning power," for example).

The unfolding of the basics is not without its controversy, so keep the channels open and the debate alive. Can some forms of teaching literacy and numeracy raise test scores but turn students off learning? Can targets dominate in unhelpful ways? Is there sufficient attention to capacity building? How do you keep a relentless focus on the basics when there are many competing priorities? Whatever—but if you don't get the basics right, there is little foundation for doing all the other things that matter.

4. Communicate the Big Picture

Assuming the big picture is coherent (Lesson 1), driven by moral purpose (2), and prioritized (3), system leaders must become preoccupied with communicating the overall purpose and plan. A perennial complaint that locals have is that they don't understand "the big picture." Put positively, when local leaders do connect with larger-system purposes, they are much more effective within their own organizations and certainly across organizations when they step out.

The advice to system leaders is to communicate, communicate, communicate. Written words are not enough. Lots of interaction will be required. There are two purposes to these exchanges. One is that good system leaders will have a lot to say, and it helps enormously if leaders are transparent, coherent, and inspiring about the short-

become clearer and to take into account objections and suggestions from the field. If they are connected with practice, they also discover examples of local success that connect to the bigger picture.

This has aspects of top-downness in the sense that system leaders forcefully present a compelling agenda, but it is shaped and reshaped because leaders with system thinking act in ways that bring them close to the problems on many occasions. Some of the other lessons, such as lateral capacity building and leadership development, provide additional checks to undue dominance from the center.

There are at least three audiences at play, with the format for communication different in each case. One is the general public, so that legitimacy, accountability, and related feedback are processed, especially critical vis-à-vis Lesson 10. The second is special interest groups (special education associations, teacher unions, administrator councils, labor and business leaders, and so on). The third concerns local practitioners, superintendents, principals, and teachers, who are the frontline agents of success or failure.

5. Opportunities for Locals to Influence the Big Picture

Part of this activity occurs in the previous lesson. As system leaders communicate, they are being influenced by the responses they receive. Here, I am talking about something more explicit. The hypothesis is that as locals understand and identify with the big picture, they increase their system-thinking capacity, which is part and parcel of system change. To do this requires three interrelated activities: (1) putting the content and underlying principles and strategies out there for public consumption; (2) establishing learning opportunities for interaction around the plans for people to internalize the deeper meaning of the plans (it is especially important that people see their roles in the context of a bigger agenda and not just as a fragmented cog); and (3) providing periodic occasions where plans are assessed and reviewed in order to generate recommendations for revising policies and strategies.

All of this is critical for what we have called "adaptive challenges," where the solutions are not known and where progress

grounded and workable from respected peers who have successfully grappled with difficult problems. Second, people begin to identify with larger parts of the system beyond their narrow interest groups. We have seen it time and again in our work. When people get out to do something worthwhile with peers in other schools or jurisdictions, the sense of community and commitment enlarges. One's identity to a larger common purpose amplifies. Third, if enough people get out where "system concerns" form the substance of the exchanges—such as the content of the previous six elements, for example—the collective capacity to system think, and thus to system change, is advanced.

It is important that collaboration and networking, as I have said, are not pursued as ends seen as automatically good in and of themselves. Like each of the 10 elements here, they must be crafted and assessed as part of a complex of forces that creates new synergies that enhance the continuing performance of the system as a whole.

8. The Long Lever of Leadership

The title of this book says that the longest lever we have at our disposal is leadership: leadership at all levels, leaders who leave behind a legacy of leaders who can go even farther, leadership succession that provides continuity of good direction, leaders who step out to make wider contributions, and a pipeline of leaders developing their dispositions and skills well before they take their first full-time formal positions of authority.

An important but partial aspect of this strategy involves establishing standards and related qualifications frameworks that potential leaders must meet in order to be certified or qualified for leadership positions. These standards can orient leaders in the right direction and give them individual experiences and development. They suffer from what I call the "individualistic bias." The assumption is that if you produce enough individual leaders with the new desired characteristics, then the system will change. Not so. Systems quickly blunt or socialize new members. This is why we need to work simultaneously on individual development and system change.

A second matter is that the new standards are likely biased toward what Heifetz (2004) called "technical solutions"—important ones, such as improving literacy and numeracy, but not the tough ones concerning adaptive challenges.

Third, and in addition to strengthening qualifications frameworks, systems can stress leadership development, provide support for leadership councils, and fund and endorse leadership growth through lateral capacity-building projects. What system leaders should want to see is the proliferation of leadership of the kind I identified in Chapters 4 through 6, where the lead leaders are creating intensive opportunities for new leaders *to learn in context*—job-embedded learning that is specific to the organization and is learned on the job through mentoring and related opportunities to engage in reflective practice, working with others on significant school and district priorities. This learning in context can be widened so that the context is other schools in the district and beyond.

Fourth, and I do not have the space to do this justice, the revamping of the teaching profession should be designed to provide expectations and opportunities for every teacher to become a leader from day 1 on the job (and before during teacher preparation). Teachers' experience during the first 5 to 7 years of teaching determines the quality and quantity of the pool of future leaders.

Most strategists now recommend that organizations invest in generating a continuous, broad-based *pool* of leaders rather than particular earmarked succession leaders. This is consistent with the above points. Every teacher is a leader, and the more that leadership is fostered for everyone, the larger the natural system pool. Incidentally, these ideas apply to district level strategies as well as system level sponsorship. Two recent books with almost identical titles capture this new emphasis. Fulmer and Conger's (2004) *Growing Your Company's Leaders* says that the old way was to identify replacements for senior executives, and "companies rarely considered the possibility that it might be deployed for genuine development or for retention of talented individuals" (p. 4). The new way is developmentally oriented.

Byham, Smith, and Paese's (2002) *Grow Your Own Leaders* makes a similar argument. Most companies lose talent because they fail to provide opportunities for "personal growth and job challenges" (p. 1). They advocate the "acceleration pool" approach, which is "more developmental," "more involving," "more flexible," and "more tailored to specific organization situations and needs" (p. ii).

We already know that searching for external savior leaders hardly produces short-term results and is dysfunctional for sustainability. Business books advocate internal development of leaders for

Epilogue
It's Going to Be Hard

Moral purpose, charging context, lateral capacity building, intelligent accountability, deep learning, short-term and long-term results, cyclical energizing, the long lever of leadership: It all sounds so damn virtuous and irresistible. Try it, and you will find that the forces are not with you. Why? If we integrate the insights of Perkins (2003) and Heifetz and Linsky (2002), we can see how hard this job of paving the way for sustainability is going to be. (The quoted material in this section comes from these two sources.)

Perkins (2003), it will be recalled, says that for systems to be habitually smart, they have to dramatically increase the number of "progressive interactions" and minimize the amount of "regressive interactions." Progressive interactions maximize quality knowledge and social cohesion. He calls these two aspects "process smart" (good exchange of ideas, good decisions and solutions, farseeing plans) and "people smart" (interactions that foster cohesiveness and energize people to work together). Our previous three chapters are about leadership at the school, district, and system levels that are process- and people-smart. They are not the norm. Regressive interactions don't get at ideas, or do so poorly; plans don't get made, or followed if they do; people are dissatisfied, at loggerheads, or opt out because it is easier to do so. There is more regression than progression in daily life.

System or organizational intelligence is very hard to come by, says Perkins (2003), for at least six big reasons:

1. *The five brain backlash*—too many voices making things unproductively complicated;
2. *Cognitive oversimplification*—the human tendency to oversimplify cognitive processing;

3. *Emotional oversimplification*—the equally human tendency to oversimplify emotions;
4. *Regression in the face of stress;*
5. *The domino effect* in which one person's regressive behavior tips others in the same direction; and
6. Power advantage—the fact that power figures sometimes take advantage of regressive interactions. (p. 75; his emphasis)

It has always been hard enough to be good at theory or good at practice. Sustainability is asking for more: system thinkers in action who don't thrive in armchairs or in trenches are at their best when they are on the dance floor and the balcony on the same day. There is nothing so theoretical as applied practice in addressing complex problems. There is nothing more satisfying than seeing hordes of people engaged to do good together because of the leadership you helped produce.

Mission impossible? Maybe. But don't give it another armchair thought. To the new theoretician, mission impossible is just another hypothesis to be tested. Go for it.