THE COMMON ELEMENTS OF SUCCESSFUL SYSTEMS

They must often change who would be constant in happiness and wisdom.
—Confucius

Improving schools is hard work. Every year, school systems everywhere introduce myriad reforms—in curriculum or pedagogy, structure or governance, technology, and so on. The majority of these reforms fail to achieve the substantial changes that are really needed. Over the past 20 years, numerous reforms have been implemented in American schools, requiring significant investments of resources, yet overall school performance has remained essentially flat. Since the start of the effective schools research in the 1980s, we have learned a lot about which elements are most critical to creating effective schools—indeed, the United States has hundreds of excellent schools. The challenge now is to create effective *systems*. We must work on producing not just a relatively small number of effective schools but on improving thousands of them. The countries examined in Chapter 2 have all achieved this kind of success, bringing high-quality education to hundreds of thousands of students.

Each country's education journey is unique and continuing. The cultural traditions, demographic makeup, stage of economic development, and nature of the political system all influence the priority given to

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certain issues and the potential to bring about different kinds of change. On the other hand, as reported in Chapter 2, significant changes have been taking place in different parts of the world and across many different cultures and many different national and political systems. What are the commonalities in the successful efforts of countries to increase graduation rates, raise performance levels, and reduce achievement gaps? The following eight areas hold important lessons for U.S. educators to consider. While the examples are national ones, the lessons we can learn from them are applicable to those working at any level of an educational system—district, city, or state.

Vision and Leadership

There are no quick fixes in education. However, the countries described in Chapter 2 have shown that substantial improvement over a 5- to 10-year period is possible. Major change cannot be brought about just from inside the education system, however hard people try. Schools are deeply intertwined with their societies and economies, and reform requires political and societal leadership that understands the centrality of investing in education to the region's economic development. Leadership must also have a sense of moral purpose about the need to deal with inequities and promote a more just society. In Finland, for example, education reforms were driven in the 1960s by a dream of greater equality, and later by an economic crisis that led the country to reinvent its economy through education. In Singapore, the government saw smart and evolving investment in human resources as the way to rise from third-world status to first-world status. And in China, the government has used educational expansion to raise millions of people out of poverty and has a long-term plan to remake China as a prosperous middle-class society based on education and research.

In fact, as the role of human resources and talent becomes ever more central in modern knowledge economies, increasing numbers of societies are recognizing that education is critical to their future economic prosperity. Countries as diverse as Poland, Germany, Indonesia, Brazil, and Norway are making major reforms and raising student

achievement. Worldwide, there is growing public demand for education. Reforms are often started by a single strong leader. For this reason, the rapid turnover in political leadership in many jurisdictions, whether countries, states, or cities, makes sustaining the vision and reforms long enough to produce results (5 to 10 years) extremely difficult. One key lesson from the province of Ontario has been the importance of bringing together stakeholders to design reforms that would achieve enough buy-in from teachers, parents, school districts, and corporations to withstand challenges and changes in leadership. The Partnership Table brought together key stakeholders on a regular basis to monitor the progress of reforms and revise them if necessary to maintain forward momentum. In Finland, too, there have been painstaking, multiyear efforts to build consensus among the multiple Finnish political parties to support the steady ratcheting up of achievement over two decades, a consensus that was only finally solidified when Finland's success by international standards was proven.

The vision also needs to be broad enough to encompass the entire education system. Even though systems can only deal with a limited number of changes at a time, if one part of the system changes but others don't, reforms will not succeed. For example, if an effort is made to recruit high-quality teachers into the profession, but no improvement is made in the organization and leadership of schools, then the new recruits will leave. Leaders who advocate one or another "silver bullet" will not succeed.

Educational change is often precipitated by a crisis; certainly, the transformative changes brought about by the globalization of economies and the growth of educational excellence in many parts of the world has produced a "Sputnik" moment for the United States. The fact that the significant global economic growth is taking place *outside* the United States, and that there is increasing competition from well-educated people in formerly undeveloped countries, poses a challenge to American leadership and prosperity. President Obama has laid out a vision of increasing high school and college graduation rates and making U.S. education world-class. But given the multilayered system of education in the United States, the vision needs to be articulated by leaders

at every level. It needs to include effective attention to bringing up bottom-level performance, since a major factor in poor U.S. performance on international assessments is the high proportion of students who do not even score "below basic." But it also needs to include attention to top-level performances, since the proportion of our students scoring in the top levels on international assessments is not as high as that in top-performing nations, and we know that many bright students are bored in high school. Rather than acrimoniously blaming teachers or parents, leaders at state and district levels need to bring together a broad range of stakeholders, including business leaders, students, parents, and educators to define both a vision of what an educated American should look like in 2030 and the steps necessary to achieve that vision.

Ambitious Standards

Countries that excel in education set ambitious standards for their students, typically at either the national or state/provincial level. Research has shown that the standards of high-performing countries are similar and that they differ from most American state standards in several ways. According to research by Bill Schmidt, world-class content standards have greater focus than U.S. state standards; they cover a smaller number of topics in greater depth, enabling students to learn something well before they move to more difficult content. By contrast, U.S. state standards cover a large number of topics in each grade level, resulting in a curriculum that is famously "a mile wide and an inch deep." World-class standards also have greater rigor. The math and science curriculum studied by a typical American 8th grader is two years behind the curriculum being studied in the highest-performing countries. Finally, math and science standards in high-performing countries have greater coherence. Topics follow the logic of the discipline, as compared to the arbitrary "laundry list" of topics found in most U.S. standards documents, which revisit many topics too frequently across grades (NGA et al., 2008).

It is important that high standards be universal and transparent so that everyone understands what students are expected to achieve.

One reason U.S. performance is low relative to other countries is that standards and expectations vary wildly across the country, with some states and local districts setting high expectations for their students and others holding much lower standards. This analysis from international research about the need for high universal standards is leading to major changes in a number of countries. In Germany, where standards have historically been set at the state ("land") level, the states have come together to create common standards that are national but not federally controlled. Australia, another federal system, is developing not just national standards but a national curriculum, with states and the federal government working together. This remarkable development reflects an understanding that in a globalized age, the differences between states are less important than the fact that no student should have an education that is less than that provided by other states or other countries. On the other hand, in Canada, another high-performing country, the federal government has no role in education, so the standards are set at the province level (although information about each province's standards are shared through the nation's Council of Ministers). Despite the U.S. tradition of local control, it seems that local setting of standards, while perhaps appropriate for an earlier era, leads to unequal opportunity and low achievement compared with either state or national standards. Once standards are in place, it is critical that they not sit on a shelf but be clearly communicated to educators, parents, and students alike.

In the United States, the growing understanding of the importance of more rigorous and focused standards has been taken up by the Common Core State Standards movement, which is discussed in more detail in Chapter 5. In the highest-performing countries, standards are set across the whole curriculum. In contrast, the United States' tactical strategy is to focus on reading and math only, with the promise that standards for other subjects might come later. The danger in this approach is that it will further narrow the curriculum, as No Child Left Behind legislation already has by deemphasizing subjects that are not linked to standards and high-stakes assessments. Common standards are a good start, but they are only the beginning.

Standards are not self-implementing. Most, though not all, countries and provinces develop curricula to go with their standards to ensure greater consistency of implementation and teacher training and professional development that take these standards and curricula into account. External examinations focused on these curricula, often at the conclusion of lower or upper secondary school, or at the end of both (see Chapter 5), create strong incentives for teachers and students to work toward meeting the standards. Although the 1980s and 1990s saw an attempt in the United States to set standards for certain subjects, the standards were too broad and unfocused, and there was not enough effort in curriculum development, teacher training, or professional development to make these standards a reality in classrooms.

Commitment to Equity

The long-term costs of educational failure are high for both individuals and societies. An equitable and inclusive educational system is one of the most powerful tools that a society has for increasing social equality. Leaders in most countries proclaim their commitment to equity in education, but successful education systems focus on achieving equity in a strong and deliberate way. The United States performs very poorly on international assessments compared with other countries in large part because it has such a large proportion of students scoring in the bottom quarter of the performance distribution. In every country, children of wealthier and better-educated parents do better in school than children from poorer or less-educated parents, but high-performing systems use a number of approaches to reduce the impact of social background on student achievement, creating a society that is open to talent from wherever it may come.

At the classroom level, there are a wide range of interventions that have been shown to increase academic achievement for low-income students, especially in the area of reading, the best-researched curricular area. Ontario raised the percentage of students reaching 6th grade standards in reading significantly by applying these strategies to every school in the province, rather than just a few pilot schools,

as so often happens elsewhere (Levin, 2008). Finland has an early and systematic approach to intervention. Every teacher is trained to differentiate instruction for students with different skill levels. In addition, every school has a special education teacher and student support team to help the classroom teacher and catch any student who is struggling before he or she can fall too far behind. As discussed in Chapter 2, this approach to ensuring that all students reach high standards is a major reason why there is so little gap between the top- and bottom-performing students in Finland, despite a locally managed school system with only a light national hand (Sahlberg, 2011). Singapore, which has a multiethnic and multilingual population, uses structured small learning groups that meet daily for all children who require additional support in learning to read or do mathematics, starting in 1st grade. The curriculum includes English language development because, although English is the language of instruction in Singapore, there are many students who do not speak English at home.

Reforms of school structure can also enhance equity. Early tracking in elementary and lower secondary schools, for example, create greater inequity. Finland and most other European school systems have moved away from their traditionally separate academic and vocational schools at the lower secondary level, recognizing that the practice primarily reproduces the existing socioeconomic structure. When Poland abolished its separate general and vocational secondary schools in the 1990s after the end of Communist rule, it saw significant increases in its students' achievement on international assessments between 2000 and 2003, especially among lower-performing students. The United States has long had a common high school, but American high schools often have strong internal tracking systems with low-quality education in the less academic tracks and little mobility between the tracks (Oakes, 2005).

Out-of-school supports are also essential to increasing equity. Research all over the world has clearly shown the importance of cognitive and emotional development in the preschool years and the benefits of high-quality early childhood education for later success in schools (Hamburg, 1992). Most countries are therefore expanding early childhood services, either universally or for lower-income families (Kagan & Stewart, 2005).

Family structure and family engagement with education are also important. The United States has a relatively high proportion of single-parent families, and children from single-parent families score lower on average than those from two-parent families. One benefit that most Asian education systems have is a more stable family structure than exists in many Western countries; typically, two parents, and sometimes grandparents as well, are focused on a child's education. But as urbanization and modernization change societies, this family structure cannot be taken for granted. In Singapore, for example, schools work with community organizations from the three major ethnic groups to create family-like supports for areas where there are poorer or single-parent families. In the United States, community schools and Promise Neighborhoods provide such supports in some districts.

Finally, resources are necessary for providing equitable educational opportunities. Although high education expenditures don't necessarily lead to high performance—and, in fact, many of the high-performing countries have relatively modest expenditures—resources do matter. Most of the countries have relatively equal expenditures across schools. Many also have policies that permit less income inequality than in the United States and have a range of universal health and social safety net systems for families. From a research point of view, it is hard to parcel out the effects of these policies on educational achievement, but the job of school is undoubtedly more challenging when health and social supports are lacking.

Heroic teachers and principals show every day that children from disadvantaged backgrounds can achieve well in school and beat the odds, and efforts to turn around low-performing schools in American cities and rural areas are proving what targeted resources and reforms can do. But to observers from other countries, highly variable academic standards and inequalities in school structure and funding, a patchy health and social support infrastructure, and large income inequalities outside school are major reasons for the large gaps in academic performance in the United States.

High-performing countries do not fund schools from local property taxes, as the United States does, a practice that leads to more

advantaged students having more resources and less advantaged students having fewer resources (OECD, 2011b). Canada used to have a system similar to that of the United States, but a few years ago, province governments responded to concerns about high property taxes and began to fund schools primarily at the province level. This has enabled provinces to develop provincewide approaches to raising achievement (Tucker, 2011). Most high-performing countries also have mechanisms for targeting additional resources to disadvantaged students or geographic areas. For example, in Shanghai, the province has worked to equalize facilities for schools serving lower-income families, and each "strong" public school in Shanghai is paired with a weaker school to strengthen leadership and teacher professional development with the goal of raising that school's achievement.

High-Quality Teachers and Leaders

Vision and societal leadership, ambitious standards, and commitment to equity are crucial starting points, but unless they affect teaching and learning in the classroom, they will not bring about significant change. This is the heart of school improvement and the most difficult part to change.

When countries are first creating school systems, they are focused primarily on the transmission of fairly basic skills and are less concerned with the quality of the teaching force than with just getting enough teachers into schools. However, as countries seek success in the global knowledge economy, the roles set for teachers and the demands placed on them change rapidly. These countries need teachers who can prepare students with the kinds of higher-order thinking skills that knowledge workers require; help every child succeed, not just the easy-to-teach; work effectively with an ethnically diverse student population; and harness new technologies. There seems to be a broad consensus that no matter what reform strategy is being pursued, the overall quality of a school system rests on the quality of its teachers, and the quality of teachers depends on the system in place to support them. In modern diversified economies, teaching has to compete with other sectors for

talent. Therefore, successful countries are placing great emphasis on the recruitment, preparation, support, distribution, compensation, and evaluation of teachers—the front lines in education (Asia Society, 2011).

But the effective deployment of high-quality teachers requires capable people up the line, as well. As higher-performing systems devolve more responsibility to the school level, they are rethinking the recruitment, training, and role of school principals. Schools cannot be turned around or driven to higher achievement without strong and effective leadership focused on results. The different strategies that countries like Australia, Canada, Singapore, England, and Finland are pursuing to elevate the teaching profession and develop effective leadership are described in more detail in Chapter 4.

Beyond the school level, leadership in city, state, or national departments of education must be strong as well. In Singapore, the high levels of expertise in the Ministry of Education are a critical ingredient in the focused design, careful implementation, and nuanced assessment of successful education quality improvements. Educated at some of the world's best universities and deeply experienced in school practice, leaders at the ministry demonstrate knowledge of education policy and practice that is second to none. In Canada, Ontario's Literacy and Numeracy Initiatives were driven by expert capacity in a new unit within the provincial Ministry of Education, as well as by the development of literacy and numeracy teams and specialized student success personnel in districts. In contrast, the United States has been losing expertise in state education departments, in district offices, and within the U.S. Department of Education for many years. The functions of most staff in these organizations have become focused more on monitoring compliance with program regulations than on providing expertise and helping schools implement significant improvement efforts.

Alignment and Coherence

One of the big differences between the United States and high-performing countries is the United States' lack of alignment between the goals of the education system (expressed at the national, state, or district

level) and actual practice in schools and classrooms. High-performing countries demonstrate that there are various ways to produce alignment and coherence.

Singapore, for example, has a "tightly coupled" system in which the Ministry of Education, the teacher training center known as the National Institute of Education (NIE), cluster superintendents, principals, and master teachers all work closely together to bring about any change in practice. Finland's very different system has lots of local autonomy but ensures consistency of teaching approaches and practice through government-funded university teacher preparation programs, all of which share a common philosophy and approach to education; high-quality teachers; and networking among schools to share best practices. Many high-performing countries have coherent instruction and examinations systems in which the standards are developed into curricula and syllabus-based examinations and also serve as the basis for teacher preparation and professional development (Fuchs & Woessman, 2004). In East Asian systems, teachers work together every week to improve lessons and routinely open their classrooms to other teachers. These practices produce consistent instruction and a way to disseminate new curricula that produces consistent practice across large numbers of schools.

The United States, in contrast, is a "loosely coupled" system—so loosely coupled that it is almost incoherent. By the time a reform from the federal government reaches the schools, it may be unrecognizable. Too often, schools lack the systematic supports they need to enact these reforms, meaning there is a large "implementation gap" between policies and the classroom (Fullan, 2001). And the elements of the system are not aligned. At one level, U.S. educators might establish an ambitious goal like teaching higher-order thinking skills but then go on to measure student achievement with tests that assess only basic skills. A further problem is the lack of alignment between K–12 education and university-based teacher preparation institutions, where the curriculum is determined by faculty who often have little regular interaction with schools. In recent years, the United States has been trying to address this lack of alignment through the use of test-based accountability in reading and math, such as that addressed by the No Child Left Behind

legislation. While this practice has improved alignment, it has produced another set of problems through the side effects of narrowing the curriculum, use of inappropriate tests, and so on. High-performing systems take pains to ensure that all of the elements—standards, curriculum, teacher preparation, assessment, and professional development—contribute to the goal of raising standards and closing achievement gaps.

Management and Accountability

All education systems struggle with the balance between centralization and decentralization, between top-down prescription and bottom-up responsibility. In recent years, more traditionally centralized systems, like China and Singapore, have been devolving more responsibility to the school level while other systems, like England under Tony Blair's government, Australia, and the United States through federal legislation, have been asserting more central control in order to try to drive performance and create more accountability.

Getting accountability right is crucial, and there are many different forms of it to consider. Managerial accountability is similar to that found in companies, where an upper level of management requires evidence of performance and obtains that evidence from inspection systems or output scores. The No Child Left Behind legislation focuses on this kind of managerial, test-based accountability. While this kind of accountability has brought attention to groups that had previously been neglected, it has also led to the distortion, downgrading, and narrowing of the curriculum and has not done much to develop lower-performing schools' capacity to progress toward high achievement. At the other extreme, in Finland, the highest performer in Europe, there is no external inspection of schools or external testing until the secondary school leaving exam. Instead, accountability rests on the trust placed by families and government in the high quality and professional skill of the teachers. Singapore has a system in which multiple types of accountability come into play. The performance management system for teachers and principals centers on the setting of annual goals and their assessment by a wide range of professionals and on a wide range of indicators, including

student performance as well as contributions to school and community, relationship with parents, and successful completion of professional development, but it also invests considerable resources in building capacity in schools through attracting and retaining high-quality teachers and allowing them to exercise professional judgment.

Change processes invariably need a mixture of carrots and sticks. Overreliance on simple, test-based accountability does not move schools to high standards. "You cannot bludgeon people into greatness," says Ben Levin, former Deputy Minister of Education in Ontario (Asia Society, 2011, p. 13). However, uninformed professional judgment is no more effective. What systems that are high performing or significantly improving do is combine intelligent, multifaceted, transparent accountability with initiatives that build professional knowledge and capacity to implement and evaluate best practices at the school level. Doing so creates a culture of continuous improvement and ever-higher expectations.

Student Motivation

Anyone who has ever visited classrooms in Singapore or China cannot help but be impressed by the intense engagement of students with the lesson and by the sheer amount of time students study outside school. Dating, television, and sports all take a backseat to schoolwork. An intense belief in meritocracy—the idea that effort, not ability, is the prime determinant of success—combined with an examination system that creates a strong incentive to work hard and the value placed on education by families as a route to social mobility in societies where there is or has recently been real poverty all create a powerful motivation to study hard.

In Finnish classrooms, students are also intently engaged, albeit through different means. Finnish education is rooted in ideas of discovery and self-directed learning. Students work on their own or in groups on problems and projects, often of their own design, from elementary school on. In addition, each school has a range of mechanisms, including

special teachers and pupils' care groups, designed to ensure that every individual student feels able to succeed academically.

However, every country has students with varying degrees of motivation. An educational leader in Shanghai told me he had two kinds of parents: "the overbearing and the uninvolved." It is the schools' job to engage and support students even when they may not initially be motivated to succeed. In Singapore, for example, the government supports community groups to help children and families who are not successfully engaged in school, and the evaluations of all Singaporean teachers address their work with and relationships to the parents of the students in their charge. Multiple paths to success and schools with many different themes have been created to engage all students. For example, a strong and well-funded vocational education system keeps less academically inclined students engaged with school, enabling some of them to later go on to university. In Ontario, a new data system enables the school to identify students at risk of dropping out, and schools assign student success officers to work individually with each student to help them find a path to graduation. The province also developed new "high-skills" majors. Countries that are successful with all students are designing multiple pathways to graduation and to achieving high standards.

Why is it so hard to motivate all students? After reviewing the research on student motivation, Goslin (2003) argues that there are four things we need to do to increase student motivation and engagement: (1) modify our belief in the importance of effort versus ability; (2) increase the distribution of rewards for academic achievement so that so that they go to more than just the top students; (3) ensure that teachers have access to the best classroom practices on instruction and engagement; and (4) rebalance the time devoted to competing demands like television, social activities, or employment after school versus studying. High-performing countries employ both intrinsic and extrinsic incentives for students and expect more time on task than is typical in many American schools.

Global and Future Orientation

Recognizing the kind of interconnected world into which we are moving, high-performing countries are trying to develop a global orientation among their teachers, school leaders, and students in their teaching, curriculum, and international school partnerships and exchanges. Countries that have high-achieving educational systems have all also used international benchmarking studies as a way to improve their systems to move up the educational value chain. How do countries learn? The education departments in some countries have specialists whose job it is to understand and follow developments in other countries and assess the potential of those developments for local application. Others send teams around the world to study some high-performing countries or to analyze different approaches and experiences with a specific education question that confronts them. China, for example, sent teams to 30 countries to study their curricula before introducing their curriculum modernization effort. The Ontario premier visited England to examine the workings of their literacy and numeracy strategies, and afterward, the Ontario Ministry of Education took the limitations of the English experience into account when designing Ontario's approach to literacy and numeracy education. Singapore has looked at assessment systems in Australia, Hong Kong, Scotland, and Australia. All of the countries in this book have been very active in conducting these types of exercises. Some countries have brought in experts from other countries to act as a kind of "visiting committee" to provide input to proposed reforms or have hired short- or long-term advisors when redesigning some aspect of their systems.

Until recently, American education leaders have not been very active in seeking out innovations and successful experiences in other countries, but this is starting to change. North Carolina is one state that has studied education systems internationally as a way to inspire and drive its own education reforms, taking delegations of district

superintendents, members of the state board of education and legislature, and state business leaders to visit countries that have a close relationship with North Carolina or use best practices relevant to its system. Mayor Bloomberg held a global cities conference in New York City in 2010 to share best practices and implementation challenges faced by the world's largest cities. Most prominently, Secretary of Education Arne Duncan, together with the National Education Association (NEA), American Federation of Teachers (AFT), OECD, Education International (EI), Council of Chief State School Officers (CCSSO), Asia Society, and the New York public television station WNET, held the International Summit on the Teaching Profession in March 2011, reflections on which appear in Chapter 4.

Finally, high-performing countries are oriented more toward the future than the past. Singapore, for example, regularly conducts visioning exercises, scanning the global horizon in order to create "future school designs," and Alberta engaged in a provincewide public dialogue as to what an educated Albertan in 2039 should look like as a backdrop for revised education goals and legislative initiatives.

There is no one way to run an effective national or state system of education. All systems must struggle with finding the right balance between top-down and bottom-up, between uniformity and diversity, between central control and local autonomy. In general, when achievement is low and uneven, strong government intervention is needed. But moving a system from good to great—making every school a great school—entails going beyond top-down, prescriptive interventions that have dominated many reforms and narrowed the curriculum to a small range of subjects and lower-order skills. It means focusing on building the capacity of schools and generating a professional knowledge culture in which best practice is codified and shared. It is essential to design polices and structures that address performance deficits among low-income and minority children while providing for all children the higher-order thinking skills and broader curriculum needed in a global, knowledge-based economy. Success requires a clear vision and sense of moral purpose, a guiding and persistent political coalition, ambitious

standards and a commitment to quality, effective leadership at every level, a focus on building teacher capacity to make the needed improvements, engagement of students, and broader community support.

Reflection Questions

As you consider the ways in which Singapore, the Canadian provinces of Alberta and Ontario, Shanghai, Australia, and Finland have each raised their student achievement to the top of the world and the key elements they all share, here are some questions to stimulate a discussion of how your state or district could meet world-class standards. How does your state or district stack up on these elements of high-performing systems?

1. *Vision and leadership:* What is your state's or district's vision for what an educated American should look like in 2030? Can you engage your students, parents, teachers, and business leaders and community organizations in reaching consensus on what knowledge and skills will be essential and form an ongoing leadership coalition to take and monitor strategic steps toward that new vision?

2. *Ambitious standards:* High-performing countries have ambitious standards across the curriculum that are understood by students, parents, and teachers alike. To start, can you construct an implementation plan for the curriculum, instructional, and professional development supports that would be needed to get all students to achieve the Common Core standards in reading and math? (See Chapter 5.)

3. *Commitment to equity:* How well would your lowest-performing students do on the PISA science assessment? (Sample questions are available from the OECD PISA website at www.oecd.org/data-oecd/47/23/41943106.pdf.) What would it take in terms of classroom interventions, changes in school structure, multiple pathways, out-of-school supports, professional development, and targeted resources for low-performing schools to set a high floor of achievement in your state or district?

4. *High-quality teachers and leaders:* What steps can your state or district take to raise the quality of teaching and leadership to match the new challenges? (See Chapter 4 for a detailed discussion of how

high-performing countries recruit, prepare, support, reward, and retain high-quality teachers and leaders.)

5. *Alignment and coherence:* High-performing countries perform well because all parts of the system work together toward achieving their standards. In the United States, there is typically an "implementation gap" between a state's or district's goals and what happens in classrooms. What are the causes of the implementation gap and the barriers to change in your jurisdiction? What bold action could you take to eliminate those causes?

6. *Management and accountability:* Taking the vision and standards you have laid out as your school system's five-year goals, what kinds of teachers and knowledge sharing will your system need in order to develop the professional capacity necessary to meet those goals? What should be the goal for Year 1? Year 2? How would you measure progress toward those goals in a fair and transparent way?

7. *Student engagement and motivation:* How motivated are your students to study and learn? Can you identify those students who are bored or disengaged, whether because the work is not challenging enough or because they are falling behind and, as in Ontario, create a student success plan for each of them?

8. *Global and future orientation:* The world is changing fast, and schools cannot stand still. Review what other countries do to keep abreast of the world's evolving educational standards and best practices, and discuss ideas of how to impart a more global perspective in your school. (See Chapter 6 for ideas.)