Lasting Impact:
A Business Leader's Playbook for Supporting America's Schools

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Conflict of interest disclosure

The organizations writing this report have been substantively and, in some cases, financially involved in certain examples used in the report. Specifically:

- Through grants and other activities, the Bill & Melinda Gates Foundation has supported the Alliance for Excellent Education; Aspire Public Schools; Charter School Growth Fund; Council of Chief States Schools Officers and National Governor's Association Common Core State Standards Initiative; Delaware Department of Education; Denver Public Schools; Education Pioneers; Hillsborough County Public Schools, Florida; Jefferson County Schools, Louisville, Kentucky; Kentucky Department of Education; KIPP; KnowledgeWorks Foundation; Los Angeles Unified School District; Memphis and Shelby County Public Schools, Tennessee; Montgomery County Public Schools, Maryland; National Math and Science Initiative; New Leaders for New Schools; New Schools for New Orleans; New York City Department of Education; Rocketship Education; Rodel Foundation, Delaware; Strategic Data Project; Strive Partnership; Student Achievement Partners; Teach for America; The New Teacher Project; and UTeach.

- The Boston Consulting Group (BCG) was retained to work with Delaware stakeholders to draft the Vision 2015 plan. BCG also supported the initial launch of the National Math and Science Initiative. Finally, as part of the Memphis-Shelby County merger, BCG supported the Transition Planning Commission in creating the strategic plan for the merger and helped the school districts implement key initiatives from the plan.

In addition, Harvard Business School provides executive education to a handful of large school districts through its Public Education Leadership Project, a joint effort with the Harvard Graduate School of Education.

Executive Summary

The time has come for America's business leaders to consider anew how they work with the nation's educators to support our schools. A number of trends are converging to create fresh opportunities, greater need, and a unique moment for business to partner with educators.

Three decades ago, the National Commission on Excellence in Education warned that "a rising tide of mediocrity" in America's schools was eroding our economy and society.[1] The nation's educators rose to this challenge, though progress has been slow and inconsistent. Today, many indicators of average student performance in the United States are gradually improving. High school graduation rates, for instance, have climbed bit by bit and are approaching an all-time high.

America's business community played a role in this gradual improvement, especially by donating money and employee time. Support from individual businesses has not always been steady, but the business community as a whole gives a large sum to schools. No one knows exactly how much, but the best estimate is $3 billion to $4 billion annually.[2] Such generosity is also self-interest: America's companies depend on our schools to produce the next generation of employees and consumers.

Unfortunately, *gradual* improvement in average student performance is not sufficient when global standards for education and skills are rising rapidly. For young Americans to succeed, they must out-innovate and out-produce the world's best, and mounting evidence shows that those best are getting better faster than Americans are. As students in other countries, both developed and developing, match and surpass U.S. students, the future dims for our youth and for our nation's economic competitiveness. Moreover, the system's gradual improvement has been uneven: students in some locations and some parts of our society are being left behind.

The good news is that gradual improvement is no longer the best we can hope for. A set of forces now converging—including improved district and school leadership, an upgrading of teaching talent, new technologies and instructional models, innovative social entrepreneurs, and higher standards that demand better teaching and learning—could move America's PK–12 education system to an era of much faster progress in student outcomes.[*] Our accompanying booklet, *The Brink of Renewal: A Business Leader's Guide to Progress in America's Schools*, examines these forces in depth. It paints a cautiously optimistic picture: transformative progress is possible, but it is far from assured.

Business leaders can work with educators to raise the odds that improvement will accelerate. The most progressive business leaders have realized that the changes in PK–12 education are creating new ways for business to support education. Tapping these opportunities requires moving away from business's traditional "checkbook philanthropy."[3] Beyond providing money, these leaders are partnering closely with educators and with one another to pursue three kinds of transformative actions:

- They are joining with educators and civic leaders to **lay the policy foundations for education innovation**.

- They are helping to **expand programs that boost student outcomes**, taking them to national scale.

- They are collaborating with a variety of stakeholders—from school district leaders and local community organizations to parent groups and labor associations—to **reinvigorate the entire education ecosystem** in cities and towns.

These forms of engagement shift business from trying to alleviate the symptoms of a weak educational system toward working with educators to strengthen the system. They require greater commitment by business—and a more authentic partnership with educators—but they offer much more potential for lasting impact on student learning.

This booklet describes these transformational approaches, with examples drawn from across the country and from diverse companies. We aim to encourage business leaders who are already supporting America's schools to ask whether they can have even greater impact through deeper, longer-term engagement with educators. And we hope to help business leaders who are new to assisting PK–12 education find powerful ways to engage that are right for their companies. It is a crucial moment for all American business leaders to rethink how they invest in our most important shared resource—our young people—to ensure our future competitiveness.

[*]PK–12 education refers to education from prekindergarten to 12th grade.

Business and education, falling short of their potential

This booklet examines how America's business leaders do, and should, support the nation's educators, our educational system, and ultimately our students. We start with the "do" question: in the past and today, how do business leaders engage with education?
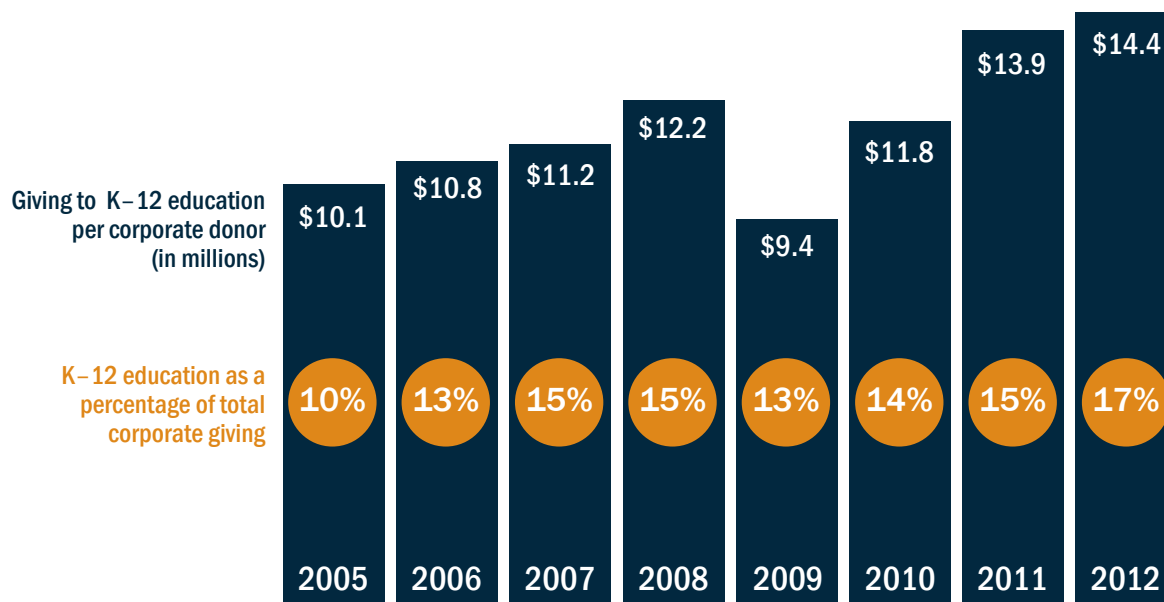
America's business leaders have involved themselves deeply in education at least since the 1950s, when corporate philanthropy first bloomed in the United States. In recent years, public education has been second only to health and social services as a recipient of corporate giving.[4] Figures are sketchy, but the best available numbers suggest that the typical company gives more to schools today than ever before; that the share of corporate philanthropy donated to education has risen; and that, as noted before, corporations in America donate $3 billion to $4 billion each year to K–12 education. (See Figure 1.)

The long-standing, generous relationship between business and education seems healthy on the surface. But when we recently interviewed business and education leaders about the relationship, we discovered—deeper down—a set of troubling dynamics.

The dynamics begin with a doubt: many business leaders who care deeply about PK–12 education lack confidence that America's schools can be made excellent. They worry that in too many school systems, bureaucracy stifles even small innovations, high leadership turnover makes it hard to stay the course on reform efforts, administrators lack management skills, and few are held accountable for results—which often are very difficult to measure.

Starting with such concerns, these business leaders typically take a course that is sensible in light of their pessimistic assumptions: they invest in schools not to help educators transform long-term performance (a goal they see as unrealistic) but to make a short-term difference in the lives of individual students, to boost their employees' morale, and to improve public relations. Consequently, they write checks, donate computers, sponsor student scholarships, encourage employees to volunteer time, and take other steps with immediate effect—but with little enduring, systemic impact.

FIGURE 1: CORPORATE DONATIONS TO K–12 EDUCATION

Giving to K–12 education per corporate donor (in millions)

2005	2006	2007	2008	2009	2010	2011	2012
$10.1	$10.8	$11.2	$12.2	$9.4	$11.8	$13.9	$14.4

K–12 education as a percentage of total corporate giving

2005	2006	2007	2008	2009	2010	2011	2012
10%	13%	15%	15%	13%	14%	15%	17%

Source: Committee Encouraging Corporate Philanthropy, *Giving in Numbers*, 2006–2013 editions.

Such efforts surely benefit individual students, and we do not suggest that companies stop investing in them. But collectively, this approach creates a fragmented array of separate projects. Even within a single corporation, we can see multiple initiatives in PK–12 education, with little overall coherence. Unlike in their corporate endeavors, business leaders rarely demand evidence to determine which initiatives work, so successful efforts are not recognized and usually do not spread. Initiatives often endure because someone believes they are doing some good, not because they are proven effective. And successful efforts often fade when their executive champion moves to a new role.

It is not surprising, then, that educators can see business as a fickle partner. Businesspeople—educators complained to us in interviews—launch well-intended efforts to support schools but have short attention spans and lose commitment when results don't materialize overnight. Educators view business as a useful source of near-term funding and volunteer manpower, but rarely as a long-term partner in efforts to transform PK–12 education.

Often, lacking business as a transformation partner, educators proceed without the valuable organizational, political, and financial support that business can lend to efforts to improve America's schools. And without deep and sustained engagement, business leaders remain pessimistic about the potential of the education system based on limited and, in some cases, biased information. In essence, business leaders' doubts fulfill themselves.

This discouraging depiction of business's engagement with PK–12 education is based on interviews and anecdotes, not extensive empirical evidence, simply because little evidence exists (one symptom of the problem). To gather better data, we recently surveyed 1,118 superintendents from America's 10,000 largest school districts on their experiences with business.

- The good news from the surveyed superintendents is that business is widely engaged in America's schools: 95% of superintendents reported some form of business involvement in their districts; nearly two-thirds had business leaders to whom they could turn for advice and support; and nearly 90% of business engagements in schools were judged to have positive effects on student outcomes.

- The bad news is that business engagements appeared to be, in large measure, fragmented instances of checkbook philanthropy. By a factor of nearly 3 to 1, efforts to donate money and goods and to support individual students outnumbered deeper engagements in curriculum design, teacher development, and assistance to improve district-level management. By 6 to 1, local-level efforts outnumbered initiatives connected to larger state or national programs. Only 3% of superintendents described business leaders in their

districts as well-informed about public education, while 14% said their business leaders were misinformed. Only 12% saw their business communities as deeply involved in their school districts, and more than 80% of superintendents hoped to see greater business involvement in their districts in the future, mostly in different forms than in the past. (For survey details, see our companion publication *Partial Credit: How America's School Superintendents See Business as a Partner*.)

Business leaders and educators can do better, and indeed, some have. Increasingly, we find businesspeople who are moving beyond efforts with only short-run effect and are partnering with educators to have a transformational impact on PK–12 education. And we see educators welcoming that engagement. To appreciate this approach, we first need to explore the changes that have made PK–12 transformation both an imperative and a possibility.

Too often, business leaders invest in schools not to help educators transform long-term performance but to make a short-term difference.

The problem and the promise

To survey progress in American PK–12 education is to take an emotional roller-coaster ride. Average student performance is gradually improving. But it is not improving fast enough to keep pace with world standards, which puts U.S. competitiveness gravely at risk. There are reasons to hope, however, that faster improvement can be our future.

Improving average performance

Figures 2a and 2b show the long-term trends in U.S. student performance in math and reading, based on the National Assessment of Educational Progress (NAEP), the test often known as "the nation's report card" and the only domestic assessment that allows for comparisons across states. Especially in math and at younger ages, the results show a pattern of gradual improvement. That pattern is echoed in the nation's on-time high school graduation rates, which peaked at 77% in 1969, hit bottom around 67% in the mid-1990s, but have since rebounded to nearly 75%.[5] Encouragingly, this increase has been driven largely by improved graduation rates among students from minority groups. In absolute terms, the U.S. PK–12 education system seems to be trending in the right direction, albeit slowly.

Falling behind the world

Unfortunately, gradual average improvement in absolute terms is not good enough for America when global standards for education are rising rapidly. On tests that compare student achievement globally, U.S. students turn in performances that are mediocre and—in relative terms—declining. On the Program for International Student Assessment (PISA) tests of 15-year-olds, for example, 19 of 65 countries scored higher than the U.S. in reading in 2012, up from nine countries when the test was last administered in 2009. In math, 29 outperformed the U.S., up from 23.[6] Relative performance matters in a world of global competition. A country short of accomplished students today will be starved of talent, innovation, and growth tomorrow.

While U.S. students' scores have risen slowly if at all, many countries—large and small, developing and developed, many with diverse populations—have significantly,

FIGURE 2A: NAEP AVERAGE MATHEMATICS SCORES
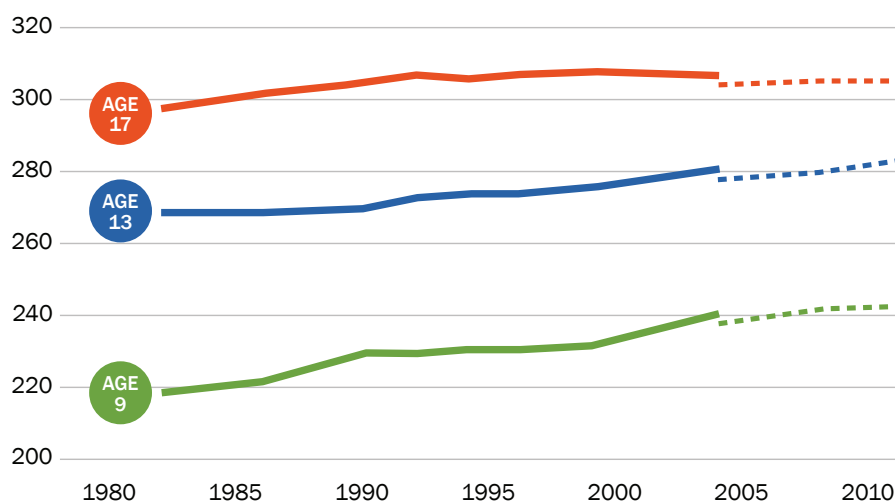
Source: NAEP, "The Nation's Report Card: Trends in Academic Progress in Reading and Mathematics, 2012." Dashed lines denote revised assessment format.

systematically improved their educational outcomes over the past 10 years. Most of the improvers share similar strategies: they have elevated educational standards for all students, emphasized equity of opportunities and outcomes for disadvantaged groups, and invested to improve the quality of the teaching workforce. The U.S. has focused on some of these same strategies, but not as consistently or fully.

Trends in adult education and skills also show the U.S. falling behind international peers. While Americans aged 55 to 64 are more likely to have completed high school than their peers in any other OECD country, Americans aged 25 to 34 rank 10th on the same measure.[7] The OECD recently released its first-ever assessments of adult workplace skills, by country and age cohort. Figure 3 (on page 6) shows that younger Americans have greater competency in literacy than older Americans. But reading skills in other countries have advanced so much more rapidly that a U.S. advantage among 55- to 64-year-olds in literacy now contrasts with a large disadvantage among American 25- to 34-year-olds.[8] Assessments of numeracy and problem solving among adults show similar patterns.

It is not surprising, then, that U.S. employers are seeing shortages of skilled employees, even at a time of high national unemployment rates. In ManpowerGroup's 2012 Talent Shortage Survey, 49% of U.S. employers reported that they struggled to fill vacant jobs due to a lack of available talent. The global average was just 34%.[9]

Indeed, many view America's PK–12 education system as undermining our national competitiveness. In 2011 and 2012 surveys, Harvard Business School alumni placed the PK–12 system among the weakest and fastest-deteriorating elements of America's national business environment. Only the tax code and the gridlock in Washington rated as poorly.[10]

Gradual average improvement is also inadequate because the averages mask large differences across race, income, and geography. The gap between standardized test scores of non-minority and minority students has slowly narrowed, but it still exists: on average, white students score 10% higher on math and reading tests than do Hispanic and black students.[11] Moreover, the gap in scores between high-income and low-income students is about 40% larger today than it was three decades ago.[12] Since a good education is the gateway to a good job, this widening gap creates a vicious cycle: children of the poor get relatively weak educations, leading them to lower-paying jobs and keeping their children poor. America is not the land of opportunity and mobility that many imagine. Forty-two percent of American men raised in the bottom quintile of incomes stay there as adults, far higher than in Denmark (25%) or Britain (30%).[13]
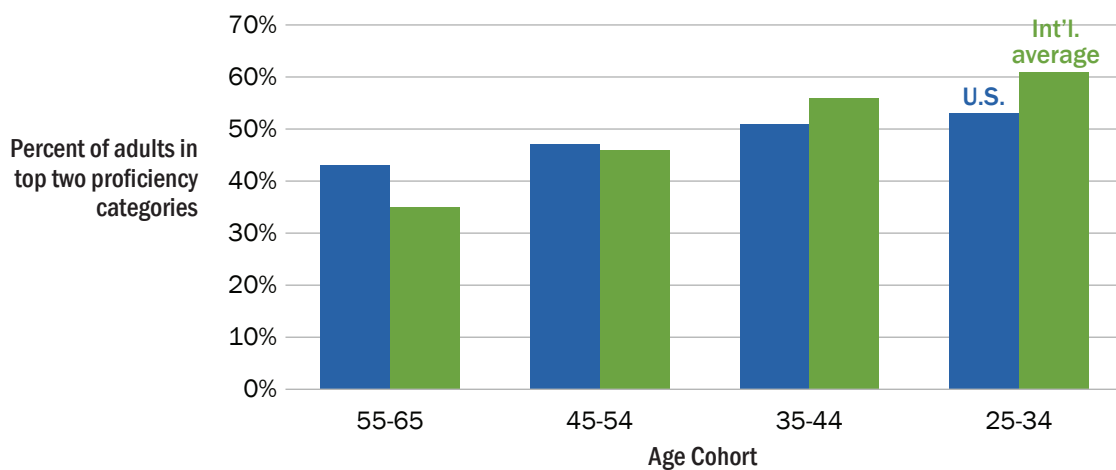
In sum, there is every reason to believe that a future of gradual average improvement in America's schools would be a future of persistent inequality and relative decline on the global stage.

FIGURE 2B: NAEP AVERAGE READING SCORES
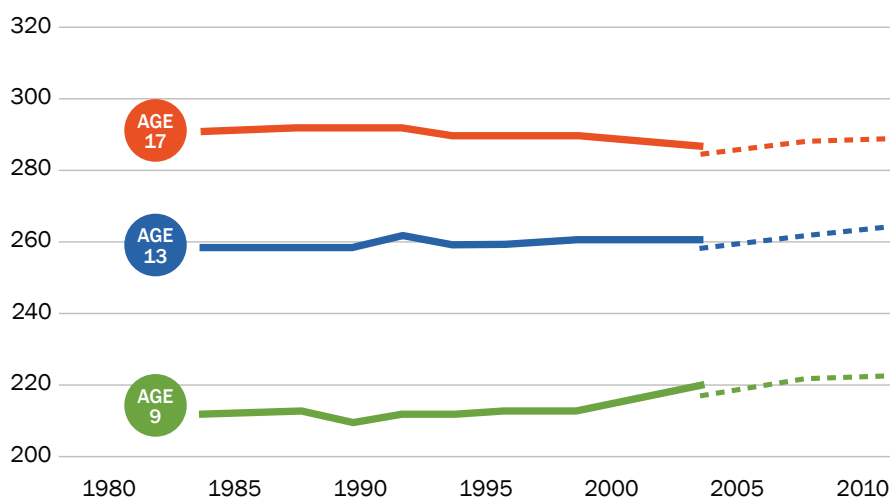
Source: NAEP, "The Nation's Report Card: Trends in Academic Progress in Reading and Mathematics, 2012." Dashed lines denote revised assessment format.

FIGURE 3: ADULT LITERARY COMPETENCY BY AGE COHORT, U.S. VS. INTERNATIONAL PEERS

Percent of adults in top two proficiency categories

Int'l. average

U.S.

Age Cohort: 55-65, 45-54, 35-44, 25-34

Source: Goodman, M., Finnegan, R., Mohadjer, L., Krenzke, T., and Hogan, J. (2013). Literacy, Numeracy, and Problem Solving in Technology-Rich Environments Among U.S. Adults: Results from the Program for the International Assessment of Adult Competencies 2012: First Look (NCES 2014-008). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Potential to accelerate improvement

Fortunately, gradual improvement is not the only possible future for America's schools. The experiences of a handful of dynamic urban school districts and charter management organizations make it clear that, for the first time in decades, much faster gains are in reach. For example, in New York City, high school reform under former school Chancellor Joel Klein and former Mayor Michael Bloomberg has produced substantial gains in graduation rates, math skills, and literacy for all populations, particularly in a new set of small high schools.[14] New Orleans, after Hurricane Katrina, has rebuilt its school system with a novel portfolio of district-managed and charter schools and has seen major gains in student performance on virtually every dimension.[15] And KIPP, a leading charter management organization focused on underserved communities, has produced graduation and college-enrollment rates greater than both the national average for similar communities and the nation as a whole.[16] Such pockets of success reflect the convergence of a number of trends, some a generation in the making, that together set the stage for an era of transformation in America's schools.

- Since the early 1990s, school districts, states, and outside organizations have developed the **talent** already in the PK–12 system and attracted new talent from unconventional sources. Their efforts have upgraded

talent at all levels: teachers (via Teach for America and The New Teacher Project, for instance), principals (through organizations such as New Leaders), and district leaders (supported by The Broad Center). Districts such as Hillsborough County in Florida have improved their teacher development processes by relying much more on data to recruit, train, and retain effective teachers. And programs such as Education Pioneers and the Strategic Data Project have funneled hundreds of highly skilled data analysts into districts and state agencies to enable a culture of data-driven decision making.

- The spread of rigorous **standards**, most recently through the adoption of Common Core State Standards by 46 states (see page 13), has helped establish common benchmarks for postsecondary readiness across the country and will provide students with the skills needed to compete in global labor markets.

- **New technologies** make it possible to engage students and deliver instruction in radically new ways that accelerate student learning. Hundreds of schools are exploring new modes of instruction that take advantage of specialized teacher roles, personalized lessons, effective digital content and tools, and flexible use of time within and outside the school day. These new approaches, in turn, have inspired an increasingly

vibrant community of ed-tech entrepreneurs and investors. Together, technology and talent are unleashing a wave of innovative school design inside the PK–12 system.

- Efforts to collect **data** on student performance date back at least to the Kennedy administration, but they gathered strength especially with the 2001 passage of the No Child Left Behind Act. By requiring states to report data by subgroup, the Act cast bright light on achievement gaps. In addition, new "P–20" longitudinal databases have helped states understand the progress of their students from prekindergarten through college and into the workforce. Both measures have led to transparency and smarter decisions about deploying funding and altering program design to address sobering differences in student outcomes.

- New kinds of **incentives** have catalyzed innovations in school systems. Most recently, the competitive Race to the Top Fund launched by the U.S. Department of Education awarded more than $4 billion to states willing to take on transformational education efforts.

- School **choice** has emerged as a way for parents to make informed decisions about where to send their children and has put pressure on PK–12 systems to improve faster. Choice was once the privilege of the well-to-do. Increasingly, parents at all income levels can select among district-run schools, opt for a charter school, or use vouchers to choose a school option for their child with public money. Innovative school options, including some in traditional school districts, are emerging that showcase strong student outcomes and diverse student pathways and encourage other schools to follow suit. Choice was initially viewed almost universally as a threat to traditional district schools. But forward-thinking district leaders are now using school choice as an integral part of their strategies and are collaborating with both high-performing charter school operators and entrepreneurial district staff to seed innovation within districts.

Our companion booklet, *The Brink of Renewal: A Business Leader's Guide to Progress in America's Schools,* lays out the implications of these and related trends in detail. There, we paint a cautiously optimistic picture: PK–12 transformation is within reach in America, but it is far from assured.

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New roles for business

Many business leaders support faster progress in PK–12 education for moral reasons: every child deserves access to a world-class education. But there are also compelling economic reasons for business to foster PK–12 improvement. Well-educated students become skilled and productive employees, and prosperous employees become avid consumers. Compared to high-school dropouts, graduates pay more taxes, draw less from social welfare programs, and are less likely to commit crimes. The Alliance for Excellent Education, a nonprofit focused on ensuring that all students graduate ready for college and careers, estimates that the 13 million U.S. students likely to drop out of school during the next decade will cost the country more than $3 trillion.[17] Conversely, Stanford University Professor Eric Hanushek estimates that an 8% improvement in U.S. PISA scores during the next 20 years would boost GDP by about $70 trillion over the next 80 years.[18]

How can business leaders improve the odds of PK–12 transformation? To size up business leaders' options for action, we first highlight that education in America is largely local: each city or town has what we call a "local education ecosystem."* In most locales, a conventional school district is a pivotal actor in the ecosystem. But the ecosystem also includes others who contribute to student achievement—nonprofit organizations, teachers' unions, government agencies, businesses, faith-based organizations, and, in some cases, a network of charter schools.

Figure 4 depicts the major components of any local education ecosystem.

- Students are at the heart of the ecosystem.

- Closest to the students are the drivers of their progress—teachers, curriculum, families, personalized learning models, and wraparound supports. These components have the most direct impact on student performance.

- Surrounding the drivers are enabling elements that can make the drivers more effective and create the right context for change. These elements include leadership and management, data and measurement systems, standards, accountability, school choice, and resources. National, state, and local policies mold several of the elements—shaping, for instance, the nature of standards, the character of accountability, and the prevalence of school choice.

The "system" part of the term "ecosystem" is crucial: an ecosystem's success in educating all students in a city or town hinges on how well the components in Figure 4 work together. Personalized learning is valuable only in the hands of teachers trained to deliver it, for example, and people can be held accountable for results only if good systems are in place to measure results. There is no one right way to configure any particular component—no universal best way to teach or to manage schools, for instance. And similarly, there are many different ways to construct a successful ecosystem.

Ultimately, the hard work of PK–12 transformation must be done by educators. The goal of any business engagement is to partner with educators to make the system shown in Figure 4 work better. We cannot emphasize this enough: the acid test of a business engagement with PK–12 education is whether it helps make educators more effective in their core educational tasks.

By and large, most businesses have supported schools in the past by focusing on a single driver or enabling element in Figure 4, often within a single ecosystem. They have provided supplies to a nearby school, for instance, or assisted with science, technology, engineering, and mathematics (STEM) opportunities in one district. Rarely has such an effort been enough to push an ecosystem to a new configuration and level of

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*The notion of a local *education* ecosystem builds on the more general idea of a business ecosystem introduced in Rosabeth Moss Kanter's article "Enriching the Ecosystem," *Harvard Business Review*, March 2012, pp. 140–147.

FIGURE 4: A LOCAL EDUCATION ECOSYSTEM
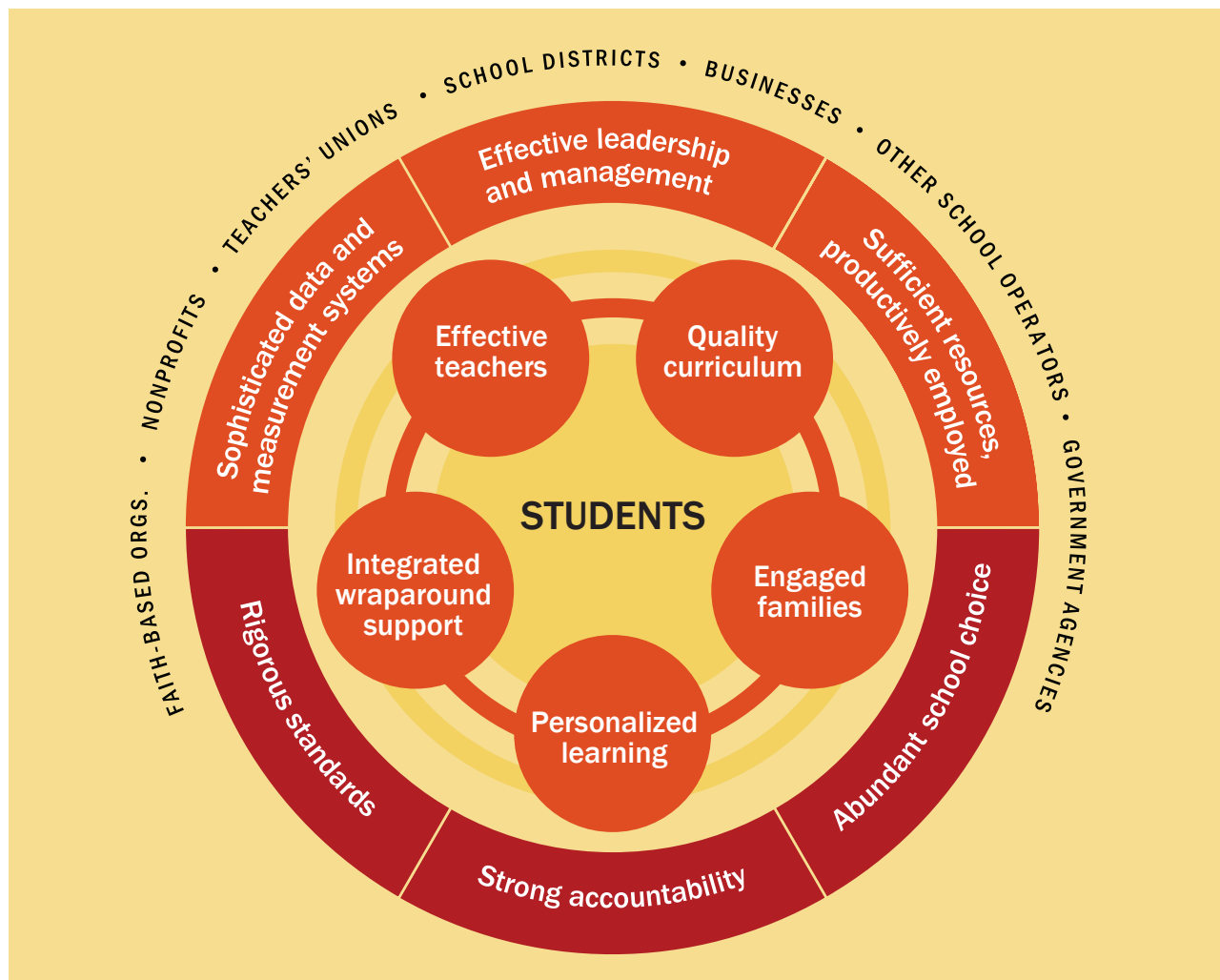
Key drivers:
most directly affect student outcomes

Enabling elements:
create right context for change

a   Laying the policy foundations:
advocate for adoption and implementation of policies (e.g., standards, accountability, and choice) that enable innovation

b   Scaling up proven innovations
across multiple ecosystems, working with local partners

c   Reinventing a local education ecosystem: upgrade multiple components of a given local ecosystem in a coherent manner

performance. And often businesses have helped out by donating money. The money has usually been spent to make the ecosystem work better in its current basic configuration, not to rethink fundamentally how things are done.

Historically, it made sense for business leaders to engage in PK–12 education as they have. Before the trends described in the prior section gathered force, it was very unlikely that the education ecosystems in most locales could change fundamentally. In such a context, it made good sense for business to invest to make short-term differences in the lives of individual students and not to waste time and money trying to change deeply inert ecosystems.

But recent trends open the doors for more transformational action. Figure 4 highlights three approaches that businesses can take, and are taking, to help educators dramatically improve PK–12 education:

a Some business leaders are partnering with educators to **lay the policy foundations for innovation** in PK–12 education (the red enabling elements in Figure 4). Such efforts are under way at the national, state, and local levels. Nationally, for instance, a broad coalition of businesspeople has pushed for adoption, and now implementation, of Common Core State Standards—a move they believe will set the stage for broad-based innovation and increased rigor in America's schools. A local example is taking place in San Antonio, where business leaders recently helped win voter approval of a 1/8th-cent sales tax increase (about $31 million annually) to support universal access to quality prekindergarten programs.

b Other business leaders are partnering with educators to **scale up proven innovations** that are isolated in one or a handful of local ecosystems. This approach involves choosing an innovation related to a particular component in a specific local ecosystem (a driver or enabling element in Figure 4) and replicating it in other ecosystems. Through the National Math and Science Initiative, for example, ExxonMobil identified two successful programs detailed below—one related to Advanced Placement exams and another related to teacher development—and has helped move them toward national scale directly and via numerous local partners such as universities, school districts, and statewide coalitions.

c Yet other business leaders are working in support of educators to **reinvent a local education ecosystem** (the entirety of Figure 4)—that is, to upgrade many components of an ecosystem in concert and shift it from an old configuration to a new one. In Tennessee, for instance, executives of Federal Express, AutoZone, International Paper, and other companies are providing resources and expertise to support the merger of the Memphis and Shelby County school districts. The largest such merger in U.S. history, this move will unite a struggling urban system serving mostly low-income students with a more affluent suburban system. And in Cincinnati, business leaders have joined with educators, civic leaders, and nonprofit heads in the Strive Partnership—an effort to craft an integrated system for supporting the city's children from cradle to career. The effort has led to new levels of coordinated action and measurable improvement on outcomes that shape the city's health.

Each of these three transformational approaches brings its own benefits and challenges, which we consider next.

a
Laying the policy foundations for innovation

Business leaders can make a major contribution by publicly advocating for the adoption and implementation of policies that foster innovation in PK–12 education. In this section, we describe what innovation means in PK–12 education and why innovation hinges on policy advocacy at the local, state, and national levels. To illustrate how business leaders can make a difference, we highlight an arena where business action is urgently needed today—to ensure that the Common Core State Standards are actually put into practice.

More than anything else, *innovation* is the key to PK–12 transformation. In education as in business, innovation depends less on the supply of new ideas than on the cycle of experimentation, learning, and improvement that leads to real benefits for the system's participants, primarily students and teachers. There has never been a shortage of new ideas in education. However, the system has lacked the ability to experiment with, validate, and diffuse new ideas effectively. Fortunately, the changes described earlier are starting to erode the barriers to innovation in education.

How can businesspeople promote innovation in PK–12 education? A handful will contribute directly by becoming ed-tech entrepreneurs or investors. But all business leaders can contribute by helping to lay the foundations for PK–12 innovation.

This opportunity arises for two related reasons. First, in education more than in most sectors of the economy, innovation is bound up with policy. Second, policy in education is driven largely at the state and local levels, where business leaders have particular sway. Business leaders can make a major difference, then, by being public advocates for adopting and implementing the policies that enable innovation, especially in their states, counties, cities, and towns. We explore the link between innovation and policy— and especially state and local policy—next.

Innovation and policy

Perhaps because it shapes our society so profoundly, education is surrounded by a broad set of policies. The school boards and superintendents of America's more than 16,000 school districts, the 50 state governors, legislatures, and departments of education as well as the president, Congress, and the federal Department of Education all play a role in shaping education policy. The policy thicket makes change, especially widespread innovation, extraordinarily difficult.

Several types of policies have particularly significant impacts on innovation in PK–12 education:

- **Standards.** By setting high standards and holding schools accountable for results against those standards, policymakers can motivate educators to try new approaches. On the other hand, narrow regulations—such as those that define how teachers do their jobs, how they can get performance feedback, or which students they teach—can suppress the creativity that produces innovation.

- **Accountability.** Policies that hold states, districts, schools, and teachers accountable for student outcomes can strongly motivate individuals to try out new approaches.

- **School choice.** Policymaking bodies such as local school boards and state education agencies hold the reins when it comes to families being able to choose among schools. These bodies decide, for instance, whether to raise the number of charter schools, issue educational vouchers, or allow students to move among district-run

schools. Choice, in turn, influences innovation in a few ways. First, charter schools, with more operational flexibility than district-run schools, typically find it easier to try new approaches. Second, choice puts pressure on schools that aren't attracting students and may spur them to improve or close. Third, as families move their children to high-performing schools, more students benefit from successful innovations.

Choice, however, is not a panacea for the PK-12 system. Charter schools, for instance, produce mixed results and are not uniformly innovative. A thorough 2013 evaluation from Stanford's Center for Research on Education Outcomes across 27 states found that 25% of charter schools achieve greater student performance gains in reading than do traditional public schools, while 19% do worse. For math, the comparable figures were 29% and 31%.[19]

With education innovation so bound up with policy, business leaders who seek much faster school improvement must get involved in policy advocacy and public-awareness building.

Local advocacy

But where should they start? The answer is typically "close to home." Education policy is most often a state and local affair. State legislatures, district school boards, superintendents, mayors, and governors hold much of the influence and control most of the budget. Non-federal sources account for 88% of total K–12 funding.[20] In some states, the vast majority of the budget is state-controlled, and in others it is almost entirely city- or town-controlled. Business leaders advocating for policy changes typically have to work at both the state and the city/town levels.

The power of determined local advocacy is illustrated well by the actions of Delaware's business leaders. In the early 2000s, members of the Delaware Business Roundtable and leaders of the Rodel Foundation of Delaware grew concerned that the state's schools were failing to meet world-class standards. Student scores were 27th among the 50 U.S. states even though Delaware's education spending was the eighth highest in the nation. Marvin "Skip" Schoenhals, longtime chair of a local bank, helped assemble a 28-person steering committee of education, business, government, and community leaders. The committee sized up Delaware's schools, investigated best practices in education around the world, gathered views from hundreds of Delawareans, and in 2006, issued Vision 2015, a comprehensive plan for transforming Delaware's schools.

Vision 2015 laid out six integrated priorities for change, each embodied in a set of concrete recommendations. For instance, the priority to "develop and support high-quality teachers" was embodied in steps such as "establish

What is innovation in education?

The term "innovation" in education is sometimes equated with new technology for instruction. But the term should be interpreted far more broadly. As we emphasized earlier, new ideas and tools are ubiquitous in education. What is missing is the capacity to harness and implement those new ideas effectively across classrooms and schools.

Take Rocketship Education, a cluster of nine charter schools having early success in raising the academic performance of impoverished children in San Jose, California, and soon in other states. Many observers focus on Rocketship's innovative instructional technology: students spend hours each day receiving computer-based, multimedia instruction in a "learning lab." Adaptive quizzes ask harder questions of students who give more accurate answers, and the quizzes contribute to a personalized learning plan for each child.

Groundbreaking technology is central at Rocketship, but it works only when coupled with many other, less visible innovations. Distinctive classroom coaching prepares teachers to give one-on-one or small-group tutorials that are linked to the learning labs. Parents are strongly encouraged to volunteer at least 30 hours each year, sometimes reviewing homework to free up teachers to teach. Teachers have a work-day 25% longer than is traditional, but they take home higher pay. The school emphasizes positive reinforcement but also has a strong system to deal with behavior problems. In short, the human innovations at Rocketship are every bit as important as the technological ones.

professional development centers to allow teachers and principals to share best practices" and "provide incentives to attract teachers to high-need subjects and high-need schools."

Though having no official standing, the Vision 2015 plan quickly gathered support from policymakers, thanks to concerted advocacy. By mid-2007, Delaware's governor and general assembly were issuing executive orders and passing laws to support parts of the plan. A network of district and charter schools soon began to implement pieces of the plan, backed by $2.9 million from 20 members of the Delaware Business Roundtable. Vision 2015 eventually became the foundation for Delaware's winning entry in the federal Race to the Top program, which has provided $119 million for dozens of innovations across the state.

An urgent need: the Common Core State Standards for College and Career Readiness

Locally and nationally, the voices of business leaders are especially needed in the struggle currently under way to move the "Common Core" from adoption to implementation.

In the past, each U.S. state had its own set of educational standards—some far less rigorous than others, and no two entirely alike. Starting in 2008, the nation's governors and state education commissioners deployed teams of teachers, parents, administrators, researchers, and content experts to develop the Common Core State Standards—a set of clear, consistent guidelines for what students should know and be able to do at each grade level in math and English language arts. The high standards are designed to ensure that all students, regardless of where they live, are prepared for success after graduation. The standards were released in 2009. To date, 46 states have adopted them and agreed to implement them by 2015.

Business has been a strong supporter of college- and career-ready standards. By highlighting America's need for a talent pool at least equal to that of other countries, business leaders have helped make the case for the adoption of new standards.

Now, after adoption, comes the hard part: implementation. The standards provide a set of shared goals for our students, but the real work will be helping teachers and students reach those goals. The new standards are higher, and they demand more rigorous assignments and shifts in instructional practices that engage students in deeper learning. While the standards are consistent across 46 states, each locality will decide how the standards are to be achieved. They will establish the curriculum, just as they currently do. This allows for flexibility and creativity in the classroom.

The good news is that there is overwhelming support for the standards among the group that must deliver them: most teachers believe the standards will be positive for students.[21]

However, forces opposed to implementing the new standards are gathering on both ends of the political spectrum. On the right, some claim that the Common Core is an inappropriate federal effort to "tell us what we should teach our children." On the left, some worry that teachers will be punished for failing to deliver high scores on these new, unfamiliar standards and that there won't be sufficient support available to teachers. Legislators in several states, including Alabama, Indiana, Michigan, Ohio, and Tennessee, have called for their states to repeal adoption.

Such cries are likely to grow louder as test results start to roll in. Especially in states with weak prior standards, student scores will drop sharply. In Kentucky and New York, so far the only states to have administered tests aligned with the Common Core, the portion of students classified as proficient at grade level fell by approximately 30 percentage points with the new tests. There is every reason to expect that other states will experience similar sharp declines. It may be easy in those states to "blame the standards" for such results.

Business should help educators sustain momentum for the Common Core through the tough process of implementation. Business leaders can, for example:

- **Affirm their support for the Common Core publicly, both locally and nationally.** In early 2013, 73 leading business executives published an open letter in the *New York Times* expressing support for Common Core implementation. ExxonMobil has sponsored a national television advertising campaign supporting the new standards.

- **Advocate for the Common Core at the state and local level.** The work to implement the standards is local, and it is critical that local educators and politicians understand they have the support of business leaders. Michigan business leaders sent an open letter to state politicians supporting the new standards, and Tennessee business leaders are launching a social media campaign to promote higher education standards in the state. Leaders whose firms operate in multiple states can tell governors and state legislators that they will direct future investment toward locales with high educational standards.

- **Fund efforts to make implementation easier.** The GE Foundation has granted $18 million to Student Achievement Partners, a nonprofit, to develop free material and training programs that help teachers adapt their curricula and provide professional development to support teachers with new, higher standards. State education agencies, school districts, and other technical assistance providers at the local level could also benefit from direct business support.

- **Prepare the public for initial lower test scores.** Business and education leaders in Kentucky supported communications campaigns to help the public anticipate that scores were likely to drop when standards were raised and tests got harder. When the test results came in low but better than expected, there was limited pushback, and implementation has stayed the course.

- **Educate and enlist employees as supporters.** The GE Foundation holds lunch sessions to educate employees about the reforms happening in education and how they will benefit their children and the community in the long run.

- **Offer management and leadership counsel.** Business leaders with experience in change management, innovation, and continuous improvement can offer to coach education leaders through the challenges that Common Core implementation will bring.

Business's experience with the Common Core illustrates a larger point: effective business advocates not only encourage the adoption of policies that foster innovation, but they also follow up to ensure those policies are carried out.

Business leaders who step up to support Common Core implementation should realize that they are treading on politically sensitive terrain. They can, however, find some safety in numbers by acting through organizations like the Chamber of Commerce and the Business Roundtable, which are mobilizing collective efforts around the Common Core.

> *Effective business advocates not only encourage the adoption of policies that foster innovation, but they also follow up to ensure those policies are carried out.*

Beyond the Common Core

Laying the foundations for innovation does not end with the Common Core. Future challenges where business might lend its voice and its hand include:

- Ensuring that all U.S. schools and classrooms have the technical and physical infrastructure to have access to new methods of instruction. In June 2013, President Obama called on the nation to give 99% of students faster online connections at their schools and libraries within five years.

- Funding the training that prepares teachers to make good use of new methods of instruction and technical infrastructure.

- Closing policy loopholes that allow some school districts to direct funding away from high-poverty schools, which are typically the ones most in need of innovation and improvement.[22]

- Adopting standards for science instruction that complement the language arts and math standards of the Common Core. Science and technology education has long been a favorite focus of business efforts in education, and business leaders are already sponsoring the National Research Council's development of Next Generation Science Standards.

- Promoting the funding of, and broad access to, high-quality early-childhood education. In February 2013, President Obama unveiled a preschool plan that would be the largest expansion of early-childhood education in 50 years.

Building a strong foundation

Working to lay policy foundations is not for the faint-hearted. It requires patience, an ability to build coalitions and craft compromises, and a willingness to take on controversial issues. But the right foundations must be in place for America's PK–12 education system to be strong yet flexible enough to allow innovation. It is imperative that business leaders—locally and nationally—use their influence to support adoption and implementation of the policies that underpin innovation.

Scaling up proven innovations

With stronger policy foundations for innovation in place, educators will be able to try more diverse approaches to teaching. But the successes that emerge will transform the system only if proven innovations spread widely. Business leaders are uniquely qualified to partner with educators to scale up what works. We explore this opportunity by examining the factors behind the success of the National Math and Science Initiative and similar efforts.

Even on its worst days, America's PK–12 education system has never lacked success stories. One can always find isolated classrooms, schools, or districts that are thriving against the odds. An enduring challenge, however, has been to spread successes widely—to scale up what works.

The barriers to scaling up can be daunting. When measurement systems are poor, it is hard to detect successes and know what deserves to spread. News and knowledge of successes move slowly across a fragmented system of nearly 16,000 school districts. The recipes for most educational successes are so complex that it's hard to figure out which ingredients must be replicated elsewhere. Conditions in diverse schools are so different that what succeeds in one place can sputter in another.

Can business partners help educators overcome such barriers and take proven innovations to scale? A growing number of examples suggest that in many circumstances, they can. Moreover, the survey of school superintendents we described earlier indicates that there is power in this approach: Superintendents reported that 33% of business efforts to support schools had a major positive effect on students when those efforts were local, standalone initiatives. That figure rose substantially, to 48%, when superintendents assessed business efforts associated with larger state or national programs.

The National Math and Science Initiative

ExxonMobil's experience with the National Math and Science Initiative (NMSI) illustrates how businesses can help local programs grow to a national scale.

In 2007, ExxonMobil CEO Rex Tillerson decided to restructure portions of ExxonMobil's nonprofit activities to ensure the company could have a positive impact on a national scale in improving U.S. math and science education. To accomplish this objective, the decision was made to take existing high-quality programs with quantified results and successfully replicate them on a national scale.

Two programs that had been recommended by the National Academy of Sciences' 2005 report, *Rising Above the Gathering Storm*, were chosen to launch the effort. The two programs, UTeach and the Advanced Placement Training and Incentive Program (APTIP), had been successfully operated in Texas and had strong evidence of success. Several members who wrote the Academy's report joined with Peter O'Donnell, Jr., a Texas-based businessman and philanthropist, to create the national board that founded the National Math and Science Initiative (NMSI) in 2007. NMSI was selected to oversee effective and efficient replication of UTeach and APTIP nationally. To launch the effort, ExxonMobil committed $125 million to help NMSI take these initiatives to scale. In time, NMSI attracted another $125 million from other corporations, foundations, individuals, and government agencies across the United States.

The UTeach Program began in 1998 at the University of Texas at Austin. The program recruited strong science and math undergrads, enabled them to get teacher

certifications without adding time or cost to their degrees, gave the aspiring teachers student-teaching experiences early on, and mentored them through their first few years of teaching.[23] By 2007, when NMSI was formed, UTeach was graduating 70 students a year and had begun replication at three additional universities. Working with the UTeach Institute as the implementation partner, NMSI then identified many more universities willing to replicate the program faithfully.

APTIP was a Dallas-based program that trained teachers to lead math, science, and English Advanced Placement (AP) courses, as well as the courses leading up to them. Both students and teachers earned small financial incentives for passing AP exams at the end of the courses. Like UTeach, APTIP had several years' track record of measured success before NMSI's involvement.[24]

To replicate APTIP, NMSI partnered with schools, districts, and states that were eager to replicate the programs at a local level. Each partner continued to receive NMSI funding only if it performed well against predefined metrics, and each school was required to have a plan for financial self-sufficiency after the initial grant period ended.

NMSI has developed central services to support its staff and its partners. NMSI has partnered with the University of Texas's UTeach Institute to implement the programs; provide curricula, student work samples, course workshops, and topical webcasts; host an annual conference; and deliver services that evaluate program implementation on each campus.

Both UTeach and APTIP have delivered strong results. As of spring 2013, UTeach programs were running at 34 universities in 17 states, with more than 1,600 graduates to date, more than 6,200 students enrolled, and a projected output of 1,000 graduates a year.[25] Five years after completing the program, 80% of UTeach graduates are still teaching, compared with 65% of all new teachers nationally. APTIP currently operates in 551 schools in 22 states, and schools that implement the program nearly double the number of passing exams taken in the first year.

Other exemplars

ExxonMobil's experience with NMSI is not unique. We see a rising number of business-assisted efforts to scale up proven innovations in PK–12 education, such as:

National Academy Foundation (NAF)

Sandy Weill, then chairman of Citigroup, founded NAF in 1982 to connect young people to entry-level jobs on Wall Street. Over time, NAF has developed into a national program that helps high schools set up and run "career academies." Each academy focuses on one of five industries: finance, information technology, engineering,

We see a rising number of business-assisted efforts to scale up proven innovations in PK–12 education.

hospitality and tourism, or health services. NAF provides each school a set of industry-designed curricula for career-focused elective courses as well as business partners who offer internships and serve on advisory boards.

NAF currently supports more than 500 academies in 39 states, Washington, DC, and the U.S. Virgin Islands, serving more than 60,000 students. The program is effective in helping underserved students: though 62% of NAF's students qualify for free or reduced-price lunch, 97% graduate and 52% earn a bachelor's degree in four years. Employees from more than 2,500 companies mentor students, volunteer in academies, hire NAF interns, or serve on advisory boards.

Charter School Growth Fund (CSGF)

CSGF offers a strong example of an intermediary that business can use to spread valid new models in education. Established in 2005 as a nonprofit venture capital firm, CSGF invests behind charter school operators to expand their impact on underserved students. Funded by national and local foundations, its portfolio now includes 40 charter management operators with roughly 400 schools serving 160,000 students across 18 states and the District of Columbia. The fund provides charter school operators with business-plan support, coaching on how to approach expansion, and financing to grow. It pairs charter leaders with business-leader mentors who can coach them through the complexities of starting and growing an organization. It also holds its portfolio organizations accountable by tying funding to results such as gains on test scores. Indeed, CSGF-supported operators significantly outperform their counterpart school districts on state math and reading tests.[26]

P-TECH

IBM—in collaboration with the New York City Department of Education and the City University of New York—founded Pathways in Technology Early College High School (P-TECH) in 2010 as the nation's first grades-9-to-14 school for STEM education. P-TECH students will graduate with a high school diploma, an associate's degree in computer science or engineering, and a promise to be first in line for an entry-level position at IBM. Early results have been promising: after only two semesters, 72% of students passed the New York state English and Math Regents, which are city graduation requirements.

Right from P-TECH's launch, the aim was to replicate the Brooklyn model in other locales. IBM shared its expertise in scaling to create a "playbook" that would help reproduce P-TECH's key elements in other sites. Efforts to replicate P-TECH with other corporate partners, including Cisco, Motorola, and Verizon, are under way in Chicago, Boise, and other parts of New York State.[27]

Drivers of successful scaling up

Though diverse, the emerging exemplars of scaling innovations share a number of traits and approaches.

- **Proof of success.** Successful scaling begins with a success worthy of scaling. ExxonMobil and NMSI could be confident in backing UTeach, for instance, because the program at UT-Austin had tracked and measured its success on relevant metrics for nearly a decade.

- **A replicable and robust core.** The innovation that is being scaled up must have some well-articulated core elements that promote success and lend themselves to replication. And those elements must be robust—that is, effective in locales other than the original site. The National Academy Foundation, for instance, develops curricula on topics such as computer networking, business economics, and financial planning—courses that are relevant to a wide range of students. Local leaders can then tailor around the core to adapt the innovation to local conditions.

An innovation should not be scaled up before the necessary groundwork is in place in lots of local ecosystems. It is futile, for instance, to roll out high-tech personalized learning tools if schools lack the technical infrastructure to use them well.

- **Educators as full partners.** In each example, educators were early and enduring partners, from the initial idea through full implementation.

- **Economies of scale.** Just as in business, scaling up makes the most sense when there are underlying economies of scale, especially when major shared investments make sense for a community but no single site can afford it. NAF makes a big investment in designing each career-focused curriculum, then leverages that investment over hundreds of schools.

- **A leader and a coalition.** Most of the scaling-up successes include both a leader, such as ExxonMobil or IBM, and a coalition of partner companies. The leader is necessary to set the vision and sustain momentum. The coalition is necessary because few organizations can cover the nation as a solo actor.

- **A backbone or intermediary organization.** Business leaders such as Rex Tillerson and Sandy Weill may put scaling-up efforts in motion—and companies such as ExxonMobil and IBM might seed the programs—but standalone, nonprofit backbone organizations such as NMSI and NAF are necessary to ensure quality implementation, sustain efforts across business cycles, and balance the needs of partners in the coalition.

- **A learning community and continuous improvement.** Backbone organizations such as NMSI value and foster peer-to-peer interaction across sites. Good practices develop, get refined, and spread laterally, not just vertically through the backbone organization.

- **Rigorous monitoring and evaluation.** Like well-run businesses, effective backbone organizations vigorously collect data—to refine the original model, to make sure the model works outside its original context, and to hold "franchisees" accountable for results. For example, the Charter School Growth Fund evaluates the results of its charter management operators each year. It suspends investments in, or even exits from, operators that repeatedly miss their student performance goals.

- **A compelling business rationale.** The scaling-up successes that we observed support the community first, but they also connect to—and in the long run can help—the business. IBM and ExxonMobil, for instance, have a deep, long-term interest in building a stronger, more skilled STEM workforce. Business leaders who can strike the right balance between supporting a publicly shared communal goal and serving their bottom line appear to get strong results. If an effort meets a vital business need, the company is far more likely to sustain its commitment.

Often, the business rationale of a scaling-up effort is linked to the sponsor's workforce knowledge and long-run needs. This makes sense. After all, who is better positioned than business to help educators understand the contours of the future job market? And what do executives in knowledge-intensive industries need more than skilled employees?

Pioneers needed

Scaling up proven innovations is in its early days as a way for business leaders to help improve PK–12 education, and much remains to be learned about it. But the underlying logic is sound. As the foundations for innovation solidify in PK–12 education and as educators themselves innovate, we need to spread successful innovations across many local education ecosystems. The capability to scale up proven innovation is a talent that the education system needs and that many business leaders possess.

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Reinventing a local education ecosystem

In a number of U.S. cities and towns, educators and civic leaders have committed themselves to overhauling the local education ecosystem—finding a new, coherent, and better way to configure many components of the system. Business can make a vital contribution to such far-reaching reinvention, especially by reinforcing the capacity of an ecosystem's leaders to set strategy, implement plans, and collaborate. We use the examples of the GE Foundation's Developing Futures™ in Education program, the Strive Partnership in Cincinnati, and the Memphis-Shelby County schools transformation to illustrate business's potential role.

Scaling up a proven innovation takes an improvement in one component of a local education ecosystem and spreads it across many locales. An alternative, explored in this section, is to focus on a single city or town and partner with educators there to upgrade many components of the local ecosystem in a coherent way.

Scaling up is a bet that some innovation applies broadly across ecosystems. It makes use of business's ability to find and replicate successes. In contrast, reinventing a local ecosystem is about crafting a tailored, coherent education strategy for a particular city or town and implementing it through deep, enduring local partnerships.

The local-ecosystem approach recognizes that an ecosystem is indeed a system (as in Figure 4 on page 9). And to transform a system, one has to coordinate change in multiple components. Importing innovations from outside, component by component, is unlikely to work. Business leaders can be powerful partners in reinventing a local education ecosystem because they often can think and act holistically.

Helping educators reinvent a local ecosystem is messy, hands-on work, but it can have enormous impact. The experiences of the GE Foundation, the Strive Partnership in Cincinnati, and the Memphis-Shelby County schools merger illustrate the power and challenges of such an approach.

The GE Foundation's Developing Futures™ program

GE has long been one of the nation's most generous corporate supporters of K–12 education. Early on, its efforts focused on investments in individual schools. In 2005, however, seeking greater lasting impact, the GE Foundation shifted its education investments from school-based efforts to intensive, district-level engagements. The Developing Futures program was launched with a five-year, $25 million grant to Jefferson County Public Schools in Louisville, Kentucky, and has since expanded to six other districts where GE has major operations.[28] The strategy of the Developing Futures program is, in the words of GE managers, "to apply proven GE business practices and a philosophy of systemic change to America's education challenges." The GE Foundation's leaders wanted to help improve student performance, especially in math and science, but they concluded that to do so for the long run, they also had to help school district leaders improve their management capacity.

Accordingly, in each district, or local ecosystem, the GE Foundation deployed a few dedicated staff members and drew on local GE leaders to play three kinds of roles:

- **Connector.** A dedicated GE staff member at each site works to improve working relationships among key players—often among the superintendent, the school board, and the teachers' union. A key is to have the players, together, articulate goals and priorities for the ecosystem.

- **Management developer.** GE personnel work with district and school personnel to develop internal talent and improve change processes. A full management tool kit, including classic GE tools such as Six Sigma, workout, and tollgate reviews, is brought to bear. Local GE managers are available for counseling and coaching. In Cincinnati, for example, a GE Aviation facilities manager worked side by side with the district facilities manager to help the district save more than $15 million. In Erie, Pennsylvania, district and GE Transportation personnel worked together to build a new IT system. In such efforts, the GE Foundation focuses on helping the district develop its decision-making talent and processes, and it avoids becoming a decision maker itself.

- **Math and science promoter.** With the GE Foundation's support, educators in Louisville developed new science modules used in nearly all elementary and middle schools; public schools in Cincinnati introduced a Web-based K–8 math curriculum linked to the latest standards; and Stamford, Connecticut, improved its data systems to track the impact of changes in its math curriculum. The GE Foundation found that "using science and mathematics as the vehicle for engaging in community dialogue … created a strategic direction, focused the districts on building internal management capacity, and reduced the resistance to change."[29]

Such efforts have helped boost student outcomes. Independent researchers have found that the launch of Developing Futures marked the beginning of significant gains in student math test scores in Cincinnati, Louisville, and Stamford. In Erie, test scores stopped falling soon after the launch.[30]

Recently, the GE Foundation has explored ways to help transform even more local ecosystems. It has documented its approach and shared the material with other businesses. And it is experimenting with giving districts implementation advice but no funding.

> *The GE Foundation's leaders wanted to help improve student performance. But they concluded that to do so for the long run, they also had to help school district leaders improve their management capacity.*

The Strive Partnership

Few companies in America have the heft to take on an effort as extensive and expensive as the GE Foundation's Developing Futures program. Fortunately, smaller companies can help reinvent local education ecosystems through collaborative models. And large companies can increase their impact through collaboration. The Strive Partnership in Cincinnati illustrates this way to reinvent an ecosystem.

Before 2006, when the Strive Partnership was launched, the greater Cincinnati area had a PK–12 education system that observers described as "program rich, system poor." With large community foundations, generous corporate citizens such as Procter & Gamble (P&G), and one of the nation's largest United Way offices, Cincinnati had plenty of efforts to support children. But philanthropy in the city took a "spray and pray" approach to serving kids, with lots of small programs and little coordination. Donors were growing weary of persistently poor educational outcomes in lower-income communities in the region.

Against this backdrop, Nancy Zimpher, then president of the University of Cincinnati, and Chad Wick, chief executive of KnowledgeWorks, the area's largest education-focused foundation, launched the Strive Partnership. The superintendents of the region's three largest school districts and the presidents of other nearby universities soon joined, followed by the top leaders of major area employers, other foundations, and civic organizations.

In essence, the Strive Partnership sought to move Cincinnati from being a city with a collection of well-intended but isolated projects to being a community with a coherent strategy for supporting its children. The Partnership aimed to create a "cradle-to-career civic infrastructure" to support every child from early childhood through postsecondary education and on to a successful career launch. Importantly, the Strive Partnership never aspired to provide services to children directly. Instead, it aimed to help the community develop a shared vision and a set of measurable goals, make better decisions based on hard evidence, focus resources on programs that were working, and learn to collaborate.

Business has been a "critical accelerator" in the Strive Partnership from its launch, says Jeff Edmondson, StriveTogether's managing director. He highlights a few areas in which business has been crucial:

- **Framing the challenge.** At the Strive Partnership's inception, a P&G executive was the first to understand the effort as a systems-engineering challenge. The executive was initially frustrated with the "Tower of Babel" that arose from discussions among so many players, none of whom was as empowered or informed as a CEO. The frustration led eventually to the Partnership's emphasis on using data to guide decision making, which Edmondson describes as the "heart" of the organization.

Business has been a "critical accelerator" in the Strive Partnership right from its launch.

Jeff Edmondson
Managing Director
StriveTogether

- **Bringing a fresh approach.** Edmondson highlights the "innocence" that business leaders contribute. As outsiders, they can pose the "dumb questions" that need to be asked. For instance, former P&G chief John Pepper told a group of district leaders and university deans that he assumed the districts were sending performance data back to colleges that trained teachers so those colleges could evaluate their effectiveness. In fact, that was not being done—but is now.

- **Offering expertise.** Businesspeople have contributed their time and talent to assist the Strive Partnership. Procter & Gamble, Microsoft's largest client, recruited the software giant to work with the Cincinnati Public Schools on a system that integrates early childhood, K–12, higher education, and social services data. The data system can be used to help individual students and to assess how out-of-school supports affect students' classroom performance. In a similar vein, GE Aviation worked with the Partnership to develop continuous improvement tools tailored to the educational context.

- **Insisting on evidence and results.** Business leaders have reinforced the Strive Partnership's intent to demand evidence and focus on measurable results.

- **Shifting their funding.** Business leaders send strong messages when they shift their philanthropy toward Strive-endorsed programs. These shifts have not always gone smoothly, however: some companies have been reluctant to give up their historic pet projects in PK–12 education. But that is changing as business leaders see evidence of results.

- **Advocating and communicating.** Businesspeople have supported policy changes aligned with the Strive Partnership's goals and have helped convey the Partnership's vision to the public.

The nature of the Strive Partnership's approach—working by influencing others—makes it hard to pinpoint the organization's standalone impact. But the high-level data for Cincinnati are encouraging. The Strive Partnership's 2012–13 report indicates that 89% of the many metrics it tracks are trending in the right direction. Kindergarten readiness is up 11 percentage points since the base year of 2005, for instance, and fourth-grade reading is up 16 points.

The approach developed by the Strive Partnership is now in the process of being expanded beyond Cincinnati. The StriveTogether National Cradle to Career Network was launched in 2011 to help other communities build their own cradle-to-career civic infrastructure, using and adapting tools from Cincinnati. As of mid-2013, more than 90 communities were interested in adopting the StriveTogether approach, 30 of which were in various stages of setting up a similar partnership, committing to the cradle-to-career vision, and establishing community outcomes.

Memphis-Shelby County transformation

A confluence of events has turned Memphis and the surrounding suburbs of Shelby County into a hotbed of education reform. The creation of Tennessee's Achievement School District (ASD) in 2010 authorized the state to take over 69 Memphis schools that were among the state's lowest-performing schools. The ASD has asked prominent charter management organizations, such as Rocketship and Aspire, to restructure these schools. Meanwhile, as one of the Gates Foundation's "Intensive Partnership Sites," the Memphis school district is in the midst of a multiyear plan to overhaul how teachers are developed, evaluated, compensated, and granted tenure.

These reforms are being extended by a forced merger between the Memphis and Shelby County school systems. The merger, in turn, is governed by a bold transition plan developed by a 21-member commission. Key tenets of the transition plan include major changes in personnel policies for teachers, as well as the district's embrace of a system of schools with multiple operators (the Shelby County district, independent charter schools, and the Achievement School District), each held accountable to the same improvement outcomes.

Business leaders have played critical roles in the ongoing effort to reinvent Memphis's education ecosystem:

- **Creating the conditions for reform.** For more than two decades, business leaders such as Pitt Hyde, founder of AutoZone, have advocated for policies in Tennessee that promote school reform. He and other local advocates were instrumental in bringing the first charter school to Memphis and encouraging state policy that authorized more charter schools. Hyde and the Hyde Foundation also created a coalition of individuals and organizations to convince then-Governor Phil Bredesen to adopt the Tennessee diploma project, a precursor to the Common Core in setting higher standards. In parallel, business leaders in Memphis helped attract innovative talent developers (New Leaders, Teach for America, The New Teacher Project), which set the stage for a $90 million Gates teacher-effectiveness grant and a federal Race to the Top award.

- **Partnering with educators.** Business leaders provided time, expertise, and resources to support the range of providers in the system. The general counsel of Federal Express served on the Transition Planning Commission and worked closely with the superintendent and the district's academics and human resources heads to develop a human capital strategy for the merged district. When the superintendent got pushback from the school board to make tough decisions necessary to save more than $100 million for the merger, business leaders united to write editorials in support of the

reforms proposed by district staff. Business leaders from Memphis Tomorrow, a coalition of the top 25 CEOs in Memphis, met with the governor to advocate for changes in state funding policy.

- **Guiding reform to yield results for students.** Local foundations such as the Hyde Foundation, Poplar, and Pyramid Peak—all formed and steered by business leaders—have tried to ensure that the many reform efforts result in tangible improvements. They have, for instance, worked to develop a county-wide measurement and accountability system; fostered cooperation among the ASD, independent charter schools, and the district; worked to attract and expand leading charter school operators; and scaled up organizations that will attract teaching and leadership talent to the region.

For more than two decades, business leaders such as Pitt Hyde, founder of AutoZone, have advocated for policies in Tennessee that promote school reform.

Early results are promising: test results released in July 2012 showed gains in math and reading proficiency for both the district and the ASD. Indeed, the district's innovation zone achieved gains higher than the ASD, district, or state average.[31] Still, no one knows for certain how these reform efforts will play out—whether the merger, school restructurings, and charter school growth will result in better schools for many of the county's students. A constellation of business leaders have partnered with one another and with local educators to give Memphis-Shelby County a real shot at dramatically improving student outcomes.

Drivers of successful reinvention

The GE Foundation, Strive Partnership, and Memphis experiences point to certain factors that distinguish successful local-ecosystem efforts from unsuccessful ones.

- **An unrelenting focus on measurement and results.** Without the ability to hold parties accountable for measurable results, these projects would not have made progress. In Memphis, the members of the Transition Planning Commission often served as the "conscience" to stay the course on tough decisions for district staff.

- **Educator leadership.** In each GE Foundation locale and at the Strive Partnership in Cincinnati, top educators were among the leaders who initiated the reinvention effort. Without their buy-in and enthusiasm, change would have been impossible.

- **No one best way.** In expanding beyond their original sites, both the GE Foundation and StriveTogether have discovered that they must tailor their approaches to local circumstances. One size does not fit all. It is more important that the components of the local system fit with one another and with the needs of the community than that each component be optimal on its own. In promoting multiple school operators in Memphis, educators and businesspeople realized that it would take several different school models to serve the wide range of student needs.

- **Questions before answers.** Especially because each local-ecosystem effort must be tailored to the context, it is essential that business and other leaders listen carefully and ask questions before advocating for particular approaches. The GE Foundation learned this lesson in an early Developing Futures effort when executives tried to introduce Six Sigma techniques in a pure corporate form—and found that district leaders took little from the training. The executives then listened to feedback and adapted Six Sigma to the special features of the education sector—and the educators embraced the tool.

- **Humility in the face of complexity.** In local-ecosystem efforts and beyond, the individuals we interviewed told tales of businesspeople who started with overconfidence that they could "fix" PK–12 education … and quickly failed. Far more effective are those humble business leaders who understand that solving problems in the social sector—with many stakeholders, no central control, and multifaceted goals—is often more complex than tackling business issues. At the Strive Partnership, a key was to start with a few business leaders who appreciated the complexity and could bring their peers along.

- **Harnessing diversity.** Due to a long history of inequity, important issues of race and class come to the fore in many education discussions, especially in urban environments. Effective business leaders are deeply sensitive to these concerns and design their community engagement efforts accordingly.

- **Building management capacity.** No silver bullet will transform any local education ecosystem, and surely no single action will transform all ecosystems. But one aspect of local-ecosystem efforts stands out as especially central: building management capacity. If ecosystem leaders can't design, push, and sustain change, then no amount of instructional innovation will improve student outcomes over the long run.

Among different types of management capacity, the abilities to set strategy, implement well, and foster collaboration stand out as especially important in local-ecosystem efforts. In the Strive Partnership's case, both strategy-setting and collaboration began with a concerted effort to craft a shared definition of success.

The focus on management capacity may be what distinguishes local-ecosystem efforts from other PK–12 improvement efforts. As the GE Foundation leaders explained in a document designed to help other companies start similar programs, "In the past, education reform initiatives have focused primarily on instructional initiatives with less focus on collaborative efforts needed to manage the systemic change process. Less attention has been dedicated to capacity building and the training and technical support needed by middle managers and principals who contribute to the systems that support teaching and learning."[32]

The long haul

Business leaders who hope to help educators reinvent a local education ecosystem must understand they are taking on a decade-long process and be patient. All parties must have the desire to understand the differences across sectors and have confidence that leaders with varied perspectives and capabilities contribute to the effort. Anyone who expects overnight success will be disappointed. Though the road is long, the potential for impact is great and the journey worth the effort.

Finding the right approach for your business

America needs its business community more actively involved in all three transformational approaches. But how should a company's senior team pick the best way to get involved in improving public education? While a business is surely not limited to a single approach, certain considerations can make one approach a better starting point than others. Specifically, it's helpful to weigh three factors: the unique value the business can bring to the table, the geographic footprint of the company, and a locale's readiness for change.

Business's unique value

A partnership with educators is more likely to succeed when a business brings something special and useful to the venture—typically something beyond money. Funding is helpful, for sure, but alone, it rarely sparks systemic change. Three potential areas of unique value relate to the three approaches:

- **Influence and relationships:** Business leaders are well positioned to use their influence and relationships to help advocate for policy changes. If a business has particularly strong relationships at the local and state levels, it should consider laying policy foundations in a district or community. In Denver, for instance, business leaders with local clout opted to advocate together for increased tax revenue so the school district could better fund its strategic priorities in the face of budget cuts. Companies with influence above the state level can help to lay foundations more broadly.

- **Scaling expertise:** A business with deep expertise in (1) identifying proven models that are scalable, (2) developing partnerships to accelerate scaling across multiple locations, and (3) building momentum with early wins might naturally be drawn to scaling-up efforts. ExxonMobil's leaders realized that scaling was one of their strengths when they helped establish the National Math and Science Initiative.

- **Change-management experience:** Reinventing a local education ecosystem is fundamentally a change-management challenge. It involves breaking down silos and fostering collaborative thinking, building a shared definition of success among diverse stakeholders, defining new processes, focusing on excellent implementation, and creating tools and a mindset that promote accountability for results. If a company tackles such tough tasks well internally, it may be able to lend expertise and resources to help educators reinvent a local ecosystem.

Geographic footprint

A company's locations also inform what type of transformative action might fit best. For companies that are prominent in one locale and want to have a deep impact in that community, a local-ecosystem effort might be appealing. Companies and individuals focused on this kind of work often have a long-term commitment to lifting the educational outcomes in their communities. On the other hand, businesses with a broader geographic footprint may lean toward scaling efforts.

Local readiness for change

Finally, businesses should consider how supportive the environment in a particular locale is to change and reform. Scaling up is more likely to succeed in a place that has the right conditions for change—for example, one with a reform-minded leader, adequate infrastructure to implement innovations, and a school board and political leaders who will not derail change efforts. If the right context does not exist, a business may consider helping create the right conditions for change through a different action. If the shortfalls are in policy, laying the policy foundations may be an important way for businesses to get involved. However, if the right policy context exists but the district lacks the capacity or know-how to implement reforms successfully, businesses may consider a local-ecosystem effort.

However it chooses to help, a business needs to partner actively with educators and often with other companies. The next section explores the importance of partnerships and how businesses should think about selecting the right partners.

Partnering with educators and other companies

All of the successful business-education engagements we have observed involve deep partnerships between educators and businesspeople. Many also entail partnerships among groups of companies. In this section, we share what we have learned about such partnerships.

Partnerships with educators

In interviewing many education and business leaders for this report, we noted an odd disconnect. Few educators want more school libraries or volunteer teachers from businesses, and many want support with strategic and systemic issues in their schools and districts. At the same time, business leaders want to see faster improvement in student outcomes. Yet many of them give philanthropic dollars for libraries and the like and encourage their employees to volunteer in schools. This disconnect reflects, in large part, poor communication and weak partnerships between business leaders and educators.

But we also discovered a group of superintendents who have developed strong, productive connections with their local business communities. These superintendents emphasized two keys to their success.

First, they have worked hard to focus business on a narrow set of strategic priorities—priorities set by the district's top leaders. Business efforts might be directed, for instance, toward advocacy and legislative support, curriculum alignment, internships/externships, or fundraising. Without clear direction from top educators, business efforts tend to fragment across many initiatives, some central to the district's agenda and many not.

Some superintendents noted that the need to focus the business community forced them to communicate their strategic priorities more clearly—a secondary benefit. The superintendents with strong business connections offered this advice to business leaders: if you are working in an area where priorities are unclear, encourage your educator partners to pinpoint where business support would be most helpful.

Second, the superintendents emphasized the effort and patience required to get to the point where both sides understand each other, trust each other, and can jointly focus on the most significant challenges. The superintendents suggested joint problem-solving and learning sessions as good venues for building such relations. For example, in Montgomery County (Maryland) public schools, business leaders and district staff convene monthly for learning sessions so educators can share how the district is progressing (and where

there are roadblocks) and business leaders can learn where their time and support will be most helpful. These learning sessions have also helped both sides "speak the same language." Similarly, the Los Angeles Unified School District has "learning days" with four prominent companies in Los Angeles. There, company leaders partner with school district executives to provide external perspectives on how to handle major challenges the district is facing. The group might consider, for instance, how to improve the district's performance management system or execute a human resources transformation.

Partnerships among businesses

While many businesses pursue one-on-one relations with educators, some businesses team up with other corporations and organizations in their PK–12 efforts. Under what conditions does each approach make sense?

Several factors push businesses toward solo efforts with educators. Some businesses want to keep for themselves certain benefits of their involvement—better community relations or higher employee morale, for instance. Others want greater control over the effort's design and execution.

On the other hand, multi-business partnerships have important benefits. Single-company efforts often falter when management turns over while partnerships tend to endure. For businesses that are new to education reform and want to understand better how the system works, a partnership may allow them to "dip their toes in the water" before committing substantial time and resources. Some businesses choose to partner because they want to contribute to a systemic change effort but don't have the resources, appetite for risk, or geographic footprint to tackle it solo. Partnering with others allows them to have a broader, faster impact than they can have alone. And some companies seek safety in numbers if they are taking part in a controversial or risky change effort.

Leaders interested in building a multi-business partnership don't need to reinvent the wheel. In most communities, they can use existing vehicles such as mayoral commissions and local education funds as the starting point for a partnership. More formal coalitions such as the Business Roundtable and the Chamber of Commerce have been very active and effective in mobilizing and coordinating business efforts in education. Any of these coalitions requires strong leadership to bring a set of businesses together and a backbone organization to support and sustain its work. Intermediary organizations, such as StriveTogether or Memphis Tomorrow, can take on a heavier execution role and reduce the risk of tying individual businesses to controversial issues.

For businesses that are new to education reform, a partnership may allow them to "dip their toes into the water" before committing substantial time and resources.

Business champions for PK-12 transformation

America's education system is at a crossroads. One path to the future continues the nation's recent trend of gradual average improvement in student performance. This path leads to relative decline on the global stage, and it denies many of our children the opportunities that come from a great education.

Fortunately, converging forces have now opened an alternative path, toward much faster improvement. Along this path, the education system sees widespread innovation; successful new approaches diffuse rapidly; local education ecosystems remake themselves; and students graduate with the aptitudes and attitudes they need to thrive in a competitive global economy.

America's business community has a profound stake, moral and economic, in which path our nation chooses. To help America onto the second path, business leaders must rethink how they partner with the country's educators and with one another to promote faster, more sustained impact. The approach that made sense in the past will not meet the challenges or tap the opportunities before us today.

We hope and believe that many business leaders will see, and will step up to seize, these opportunities. Doing so will require foresight and courage, in individuals and in institutions. But nothing is more important to the well-being of the country and, in the long run, the prosperity of America's enterprises.

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