
Transformation leadership in education

**Three key
imperatives
for lasting change**

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INTRODUCTION

Globalization, new technology, and changing social patterns have significantly disrupted the education sector over the past decade. National education systems have scrambled to respond to these shifts, which are likely to increase in the future. In that context, transformation is the new normal for education systems. However, many reforms in the sector simply do not work. The specific initiatives may be well-intended, yet they fail during implementation. One major reason is a lack of communication and collaboration—policymakers often fail to sufficiently engage with stakeholders (school administrators, teachers, parents, students, the private sector, and the third sector). As a result, rather than simply crafting individual reforms, education leaders must develop the capability to implement change—they must become transformation leaders.

Our research with successful transformation leaders around the world identified three roles that these individuals fulfill. First, these transformation leaders “think ahead,” setting the vision and strategy for the education system in order to meet future expectations regarding employment and national competitiveness. Second, these leaders “deliver within,” overseeing the education system during the transformation, in order to build new capabilities. Third—and most important—these individuals “lead across,” directly engaging stakeholders during the planning and implementation phases

of transformations, in order to ensure that everyone supports the proposed changes and will work to help them succeed.

This Leading Research also highlights specific case studies of education transformations in regions around the world—Abu Dhabi; Singapore; Finland; South Korea; and Alberta, Canada; among others. These examples illustrate the three-part framework in action and show what is possible when education leaders implement transformations in conjunction with all relevant stakeholders.

TRANSFORMATION IS THE NEW NORMAL

Education is the engine of national growth. A population of well-educated citizens increases national economic competitiveness. It also results in intangible benefits, such as political stability, social well-being, and a more innovative approach to solving problems.

This Leading Research is an attempt to address the gap between the reforms that most people agree are needed in education systems and the difficult reality in which education leaders operate. The aim is to provide hands-on insights into the dynamics of education transformation and the role of leaders in driving these changes. By education transformation we mean a comprehensive, system-wide change. We define transformation leaders as individuals who are in a formal position to influence the development of the system as a whole. Typically this means education ministers, directors-general of ministries and education departments, CEOs of education companies, and chairs of education-related foundations.

The challenge is that globalization and new technology have significantly disrupted the education sector over the past decade. Today's students face greater opportunities and tougher competition than in previous generations, as the world "flattens" and the job market becomes more global.

On a macro scale, information and digital applications in knowledge-based economies give countries that can excel in education a substantial advantage over less-capable nations. Unsatisfactory outcomes (either real or perceived) in education systems are another driver for transformation. Students and parents are being forced to pay more for education, but are questioning its effectiveness. Governments are seeking ways to better align education systems with job-market needs. The private sector is increasingly active in education, whether as an education provider, as an employer seeking skilled workers, or as a "corporate reformer" providing advice from the business world.

These disruptions have led some to ask whether traditional education pathways are still relevant (see "*Alternative Approaches to Education*," p. 8). In many markets, a college degree is necessary but not sufficient for professional success. In the United States, just 47 percent of high school graduates attended college in 1973. By 2008, the number had risen to 70 percent, without solving the nation's education alignment problem. More fundamentally, many markets experience a persistent mismatch of supply and demand. The IT engineers educated in Finland in the 1990s and 2000s during the boom in mobile communications technology are now struggling to find jobs because of the changing structure of the economy.

Recent fiscal pressures in many countries have only compounded this challenge. The financial crisis has led to spending cuts in education. According to the Organisation for Economic Co-operation and Development (OECD), the most wide-

spread negative effects of the crisis on the public financing of education occurred in Hungary, Iceland, and Ireland. In other countries, overall education spending levels may remain unchanged but the focus of spending is shifting—for example, to prioritize vocational education and training to reduce unemployment.

As a result, education systems are in a permanent state of reform, seeking to adapt to rapid economic changes and evolving student needs. These are not subtle adaptations but large-scale transformations. Other sectors, such as healthcare and pharmaceuticals, have been similarly affected by new technologies and globalization. The key difference, however, is that reforms in education are far more challenging, in part because those leading change in this field must deal with a far wider range of stakeholders, including parents, students, teachers, administrators, the private sector, and other government entities. Traditionally private-sector industries have a much better track record in implementing the transformations necessary to adapt. All social sectors need to leverage this corporate experience, by implementing an organizational culture that is flexible, adaptive, and innovative.

Unfortunately, there is a substantial gap between the widely acknowledged need for transformation in education and the actual success of such initiatives. Governments invest repeatedly and heavily in reform programs that fail to consistently or significantly improve outcomes. Each incoming administration launches a reform effort of its own, at times contradicting earlier measures.

THE CHALLENGE OF EDUCATION REFORM

For many education leaders, reforms have led to stakeholder resistance and outright unrest. In Argentina in the fall of 2011, the government sought to restructure the selection process for teachers, replacing a peer-review system with one run by the Education Ministry. The bill triggered strong reactions from 15 of the country's 17 teachers' unions, which opposed the measure in part because of a belief that the peer-based system was fairer and because the bill was drafted without their input.

Demand for change can also come from the main stakeholders in any education system—students. Chile, for example, has a strong education system. Chilean students typically perform well on the standardized tests of the OECD's Programme for International Student Assessment (PISA), better than the rest of Latin America. Yet the country ranked 64th out of 65 countries in terms of "segregation across social classes in its schools and colleges" in the 2009 PISA assessment. The Chilean system of education is tiered, with a mixture of public, private, and subsidized private schools, and only 45 percent of students are enrolled in public schools. Chile also has the lowest levels of public funding for secondary and

higher education in the region, leading to a perception that quality education benefits only a privileged minority. Between May and December 2011 roughly 100,000 students took to the streets to demand that the government provide equal access to quality free education regardless of income level. The students also called for greater state involvement in the sector and an end to profit-making in education. Three attempts at compromise between the Chilean government and student groups have failed.

Even evidently valuable initiatives, such as promoting the use of technology in education, can become controversial. In the U.S., plans to invest in education technology—a seemingly admirable goal—have drawn teacher resistance. Teachers are unhappy not because they dispute the value of information technology. Rather, education technology initiatives can draw scarce resources away from traditional approaches, impose teaching methodologies from the top, and may not provide sufficient support to teachers grappling with digital applications. In Idaho, teachers have succeeded in forcing a referendum on a requirement that students take a minimum of two online courses to graduate from high school.

THE CHALLENGE IS IMPLEMENTA- TION, NOT CONTENT

The common theme in many of these examples is that reform efforts often stumble because of implementation, not because of content choices—the “how” rather than the “what.” The reforms were based on reasonable principles that were likely to generate results, yet education leaders failed to engage stakeholders in the planning and execution of reforms. Their proposals caught stakeholders off guard, generating controversy and institutional resistance.

To generate better results, education leaders must become transformation leaders—building and deploying specific capabilities to continuously oversee and implement transformations. Occasional initiatives will no longer suffice. Education systems are now in a permanent state of reform. Although education leaders still need traditional capabilities to develop successful programs, they must also become proficient in adapting, upgrading, and sustaining those programs, which is the only way to keep pace with rapid-fire social and economic changes. More important than any individual change, such as the degree of technology in classrooms, specific aspects of

curricula, or the quality of individual teachers, is the skill of *implementing* change.

Although there is legitimate debate whether one person can truly make a difference, transformation leaders in education are the ultimate decision makers whose mandates allow them to adopt and drive reform. Principals, teachers, community activists, and entrepreneurs can lead on the front line. However, education ministers and senior civil servants must play a key role in setting the vision, providing resources, setting regulatory frameworks, and enabling that front-line work.

These leaders often sit atop operationally complex systems with increasingly distributed forms of leadership, marked by greater professionalization. However, this does not argue against transformational leadership. Instead, the changing nature of the system obviates traditional top-down approaches and directives. Indeed, the more complex the education system, the greater the need for leadership that advances the goal of reform while ensuring buy-in and participation from multiple stakeholders.

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TIME LINES OF REFORM

The clock speed of economic evolution has accelerated, making education reform an urgent priority. If education leaders feel that the challenge is too daunting, they should remember that reform has been under way for decades. The pace of these initiatives is speeding up, as shown by the time lines below:

United States

- 1964—National Assessment of Educational Progress is created to assess student progress across the country and develop ways to improve education in the U.S.
- 1983—The National Commission on Excellence in Education produces a report for President Reagan entitled, “A Nation at Risk: The Imperative for Educational Reform.” Its publication paved the way for a wave of local, state, and federal reform efforts.
- 1991—Minnesota becomes the first state to adopt charter school legislation. Today, 41 states have similar laws. Charter schools are publicly funded but independently operated. They have more autonomy in exchange for increased accountability.
- 1994—President Clinton signs into law the “Goals 2000: Educate America Act.” The law creates a series of goals to reform education through higher standards. The focus is on such outcomes as increasing the high school graduation rate to 90 percent.
- 2001—The Bush Administration’s “No Child Left Behind Act” requires all public schools to make progress toward standards of “proficiency,” established at the state level, for all students.
- 2009—The Common Core State Standards, developed in collaboration with experts, school administrators, and teachers, address the problem of discrepancy among state requirements by aligning standards for the entire U.S.
- 2009—“Race to the Top,” or R2T, takes effect, a US\$4.35 billion competition organized by the federal Department of Education to stimulate innovation and reforms in state and local primary and secondary education. R2T encourages states and districts to develop more rigorous systems to evaluate teachers and principals based on performance, and to promote charter schools and computerization.

Shanghai, China

- 1980s—Curriculum reform begins across China in conjunction with broader economic reforms. In 1985 the central government decentralizes finance and administration of local schools, and

officially encourages local production of textbooks. Within Shanghai, several rounds of school renovation begin, with the goal of reducing disparity and ensuring that schools are in sound physical condition.

- 1982—China establishes a degree system for higher education that follows the Western model.
- 1985—Shanghai is allowed to organize the higher education entrance examination for universities under its jurisdiction.
- 1986—China enacts a “Law of Compulsory Education” to ensure universal education and a minimum of nine years schooling for children.
- 1988—First phase of curriculum reforms is introduced (with another following in 1998) to overcome “examination orientation” practices in schools and to build quality education, improving students’ capacity for creativity and self-development. The overhaul of the curriculum was supported by changes in teacher education and professional development.
- 1994—Shanghai becomes the first jurisdiction in China to require students to attend the closest local primary and junior secondary schools. This effectively eliminates the notion of preferential schools at these levels, and prepares school systems to face the challenges of migrant children from rural areas, which will become a major national problem by the late 1990s.
- 2002—China adopts legislation to encourage private schools.
- 2004—Shanghai’s municipal government begins spending more than \$500 million to improve rural schools by building new facilities and laboratories, update older buildings, purchase books and audiovisual materials, and increase teacher salaries.
- 2006—Amendments are adopted to China’s “Law of Compulsory Education.”
- 2007—Shanghai commissions 10 top-performing public schools and other educational intermediary agencies to begin overseeing 20 of the lowest-performing schools in rural districts and counties, through a two-year contract that the city funds.
- 2009—Number of students in higher education reaches 29.8 million, up from less than 6 million in 1998, thanks to the official policy of expanding education provision.
- 2010—The central government’s Medium & Long-Term National Educational Reform and Development Plan (2010–2020) lays out a four-part strategy, including the expansion of preschool and compulsory education, greater equity in access to a good education, enhanced quality of education, and finally, better data and assessment measures.

Qatar

- 1995—The Qatar Foundation for Education, Science and Community Development is launched with the goal of revamping the higher education sector and replacing 75 percent of the expatriate community employed by the crude oil and manufacturing industries with local workers by 2010. Education City, housing six top-tier U.S. universities (Virginia Commonwealth University, Weill Cornell Medical College, Texas A&M University, Carnegie Mellon University, Northwestern, and Georgetown University School of Foreign Service) along with HEC Paris, University College London, and the Qatar Faculty of Islamic Studies, is a direct result of this reform.
- 1997—Qatar begins funding the project in earnest, ultimately spending \$1 billion over the subsequent decade. Among these expenditures is the tuition of every Qatari student who enrolls in higher education. In addition, Qatar University, the country's only public university, now includes a new teacher training college.
- 2002—The Supreme Education Council is created to oversee a complete redesign of the K–12 system, including a phased transition from government-run schools to independent schools—i.e., publicly funded schools that are granted autonomy to carry out their own educational mission and objectives. The reform also includes variety in curricula, parental choice, and accountability for results.

ALTERNATIVE APPROACHES TO EDUCATION

A range of entrepreneurs—commercial and social—along with some traditional institutions, are developing alternatives to traditional education systems. Such new approaches appeal to a younger generation that is increasingly questioning the relevance of existing systems.

- *UnCollege*—Started by Dale J. Stephens, the UnCollege movement challenges the notion of college as the only path to success, by advocating a lower-cost alternative based on self-learning, home schooling, and self-motivation. Stephens suggests that differentiating oneself and taking the initiative are keys to success in today's competitive environment, which is characterized by an oversupply of graduates with similar credentials. He suggests that traditional education systems suffer from a high opportunity cost, due to rising tuition fees, lack of proper learning in many institutions, and high levels of debt incurred to finance college attendance.
- *Khan Academy*—With more than 300,000 subscribers, the Khan Academy is a free online education platform started by Salman Khan (also known as "Bill Gates' favorite teacher" and recipient of the Microsoft Tech Award for Education in 2009). The program aims to make education more accessible and affordable for the broadest possible audience—any individual, anywhere in the world, who is willing to learn. The website offers over 3,000 free video tutorials and 120 million visitors have looked at lessons covering a range of subjects, including mathematics, sciences, and humanities. It also provides hundreds of practice exercises that students can do at their own pace and level. Videos are broadcast on both Khan Academy's YouTube channel and its official website. Content is also made available outside of YouTube by not-for-profit partner organizations such as the Lewis Center for Education Research, bringing Khan Academy into community colleges and charter schools. Khan has attracted significant funding from the Bill and Melinda Gates Foundation and Google, among other supporters.
- *MITx*—Massachusetts Institute of Technology (MIT) has been a pioneer in developing unconventional approaches to education. In addition to offering all of the school's online course content for free through its Open Courseware (OCW), it created the MIT Exchange (MITx). The new system offers interactivity, online laboratories, student-to-student communication, and individual assessments, and even awards a certificate of completion.
- *Partnership for 21st Century Skills*—A recent initiative, the 21st Century Skills movement aims to use innovative learning methods to transform the process of learning and ensure that students achieve the skills required to compete globally in the 21st century. These include digital literacy, career and life skills, critical thinking, and communication. Although a more mainstream aspect of education reform than online initiatives or UnCollege, the 21st Century Skills movement nonetheless has its critics, at least as a stand-alone reform. Jay Mathews, an

education columnist for *The Washington Post*, raises the question: "How are millions of students still struggling to acquire 19th-century skills in reading, writing and math supposed to learn this stuff?... It takes hard work to teach [it], and even harder work, by poorly motivated adolescents, to learn it."

- *The Whole Child Initiative*—Another approach is the Whole Child Initiative, developed in 2007 by the Association for Supervision and Curriculum Development, a professional organization in the U.S. with over 150,000 members. This program advocates a holistic approach to education based on research, practice, local needs assessments, and a commitment to collaboration. The focus is to ensure that all children are healthy, safe, engaged in learning, supported by caring adults, and academically challenged. The initiative's public-engagement and advocacy campaigns encourage schools and communities to collaborate so that each student has access to a challenging curriculum in a healthy and supportive environment.
- *International Baccalaureate Schools*—An education system that is gaining ground is the International Baccalaureate (IB). The IB organization is a nonprofit educational foundation. It works with 3,372 schools in 141 countries. The organization develops three challenging programs and offers them to over 1,010,000 students of ages 3 to 19 years.

These programs develop the intellectual, personal, emotional, and social skills of children. The aim is for them to be able to live, learn, and work in a rapidly globalizing world:

- *The Primary Years Program* for students ages 3 to 12 focuses on the development of the whole child in the classroom and in the world outside.
- *The Middle Years Program* for students ages 11 to 16 provides a framework of academic challenge and life skills, achieved through embracing and transcending traditional school subjects.
- *The Diploma Program* for students ages 16 to 19 is a demanding two-year curriculum leading to final examinations and a qualification that is welcomed by leading universities around the world.

The organization works with schools, governments, and international organizations to develop programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate, lifelong learners. They promote an understanding that other people, with their differences, can also be right. The increasing demand for IB is based on its ability to provide a transferrable, recognized model. The IB approach is also flexible enough to accommodate local circumstances. It offers a curriculum and the support mechanisms required for successful delivery.

TWO CATEGORIES OF EDUCATION REFORM

by Dr. Pasi Sahlberg

Although education reform is a global phenomenon, there is no reliable, recent analysis about how reforms in different countries have been designed and implemented. However, the professional literature indicates that the focus on education development has shifted from structural reforms to improving the quality and relevance of education. As a result, the most common priorities around the world today include curriculum development, student assessment, teacher development, technology-assisted teaching and learning, and proficiency in basic competencies (i.e., reading, mathematical, and scientific literacy).

I call this the “Global Educational Reform Movement,” or simply GERM. It can be traced back to the education reform thinking of the 1990s. GERM has increasingly been adopted as an “evidence-based policy agenda” within many education reforms throughout the world, including those in the U.S., the United Kingdom, many provinces of Canada, Germany, in the transition countries of the former Communist bloc, and in the developing world. The acronym GERM is deliberate as these ideas have spread like a virus.

The inspiration for GERM comes from several sources. The first is the new paradigm of learning that became dominant in the 1980s. According to this paradigm, schools emphasize greater conceptual understanding, problem solving, emotional and multiple intelligences, and interpersonal skills, rather than the memorization of facts or the mastery of irrelevant skills.

In addition, the public demands guaranteed, effective learning for all pupils. This has led to central standards and aligned national assessments that many countries implemented during the 1990s. This work was restricted, in many cases, to the core subjects in national curricula—reading, mathematics, and sometimes science—and rarely anything else. Finally, the accountability movement in education has led to a host of education benchmarks, assessments, testing, and prescribed curricula. Various mechanisms have emerged to link school performance and education quality to accreditation, promotion, sanctions, and financing.

There are several manifestations of GERM, and some have had a positive influence. A focus on higher expectations for all students is a welcome improvement. However, GERM has also led to unexpected trends in reform. For example, many education systems now rely on *competition* as a main driver of change. This concept often stems from international development organizations and private-venture philanthropy, both of which are seeking to address unsuccessful education reform efforts. Yet competition undermines important elements of successful change. It often limits risk-taking and creativity, as teachers and students look for secure strategies and practices for success. Perhaps more importantly, it also paralyzes teachers’ and students’ attempts to learn from each other.

The second unanticipated reform trend from GERM is *standardization* of education. Following the outcomes-based education reform measures in the 1980s and standards-based education policies in the 1990s, poli-

cymakers and education reformers came to believe that setting clear and sufficiently high performance standards for schools, teachers, and students would improve the quality of outcomes. However, centrally prescribed curricula—with detailed and often ambitious performance targets, frequent testing of students and teachers, and high-stakes accountability—have led to a homogenization of education policies worldwide.

The third global trend is the adoption of *test-based accountability policies* for schools. School performance—especially raising student achievement—is now closely tied to processes of accrediting, promoting, inspecting, and ultimately rewarding or punishing schools and teachers. Pay-for-performance is one popular approach, especially in the U.S., to holding teachers accountable for their students' learning. Schools are now perceived as succeeding or failing based on standardized test results and external evaluations that devote attention to limited aspects of schooling.

In sum, these measures, although based on understandable and even admirable goals, have often failed to drive real reforms and instead have brought new problems to schools. In contrast with such standardized approaches, alternative education policies focus on fostering creativity and inventiveness among students. Unlike GERM they do not aim for a single line. Rather they include a multitude of approaches that can be applied based on local needs, priorities, and capabilities.

Dr. Pasi Sahlberg is a noted education expert from Finland who has advised both the World Bank and the European Commission. His book Finnish Lessons: What Can the World Learn from Educational Change in Finland? was published in 2011.

Exhibit A **The Global Educational Reform Movement Vs. Alternative Education Policies**

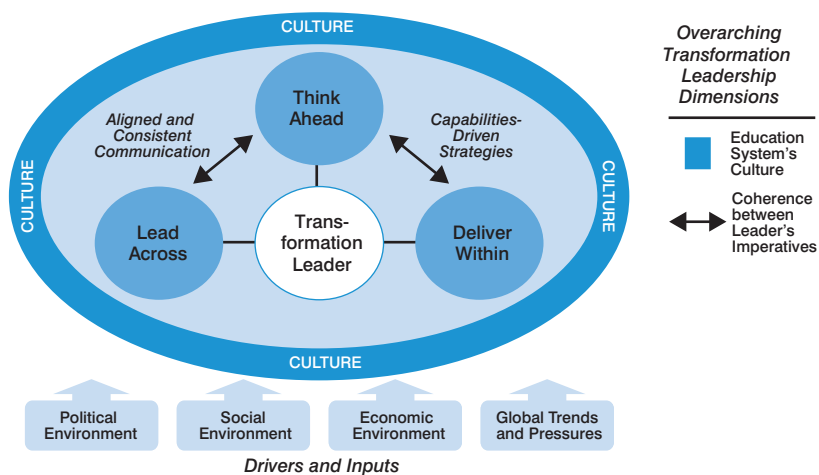
GLOBAL EDUCATION REFORM MOVEMENT (GERM)	ALTERNATIVE EDUCATION POLICIES
Competition <ul style="list-style-type: none"> - Main driver of educational change is a competition model brought to schools from the corporate world. - Assumption is that competition between schools, teachers, and students will ultimately improve their performance and lead to better results. 	Collaboration <ul style="list-style-type: none"> - Main driver of educational change is a collaboration model brought to schools from communities and social networks. - Assumption is that networking, collaboration, and cooperative learning will ultimately improve performance of schools and teachers, and thereby improve student learning.
Standardizing Teaching <ul style="list-style-type: none"> - Setting clear, high, and centrally prescribed performance expectations for all schools, teachers, and students to improve the quality and equity of outcomes. - Standardizing teaching and curricula to have coherence and common criteria for measurement and data. 	Customizing Learning <ul style="list-style-type: none"> - Setting a clear but flexible national framework for school-based curriculum planning. - Encouraging local and individual solutions to national goals to find best ways to create optimal learning and teaching opportunities for all. - Offering personal learning plans for those who have special educational needs.
Test-Based Accountability <ul style="list-style-type: none"> - School performance and raising student achievement are closely tied to processes of promotion, inspection, and ultimately rewarding schools and teachers using standardized tests and data collected through these tests. - Winners normally gain fiscal rewards, whereas struggling schools and individuals are punished. Punishment often includes looser employment terms and merit-based pay for teachers. 	Trust-Based Responsibility <ul style="list-style-type: none"> - Gradually building a culture of responsibility and trust within the education system that values teacher and principal professionalism in judging what is best for students. - Aiming resources and support at schools and at students who are at risk to fail or to be left behind. - Sample-based standardized tests and student assessments.

THREE ROLES FOR TRANSFORMA- TION LEADERS IN EDUCATION

Transformation leaders in education need to balance several dimensions. To understand these dimensions, we spoke to a number of transformation leaders, their advisors, and their counterparts, representing different education systems at differing stages of development. Many of these leaders see themselves assuming three roles:

- *Think Ahead*: Set the vision and strategy for the education system.
- *Deliver Within*: Manage the education system and build its capabilities among internal stakeholders.
- *Lead Across*: Reach out to and engage stakeholders within and outside of the education system.

Exhibit 1
Transformation Leader Framework



Source: Booz & Company

Think Ahead

At a fundamental level, leaders must set the vision and strategy for education transformation. This entails developing a policy agenda and strategies for the sector. In this role, the transformation leader faces several key questions:

- What does society need and expect from education?
- What objectives should education have?

- What paradigm shifts are needed within the system to meet these objectives?

These questions go to the heart of how education systems must anticipate economic and technological changes. Systems need to be able to adapt accordingly so that they can prepare students to succeed in the 21st-century marketplace. Moreover, societies have greater expectations of education systems. They want accessible and affordable education,

high-quality curricula, an increasing focus on life skills and creativity, and integration with the requirements of the labor market.

If transformation leaders are to address these evolving economic and societal demands, they must adopt a holistic approach that covers all aspects of education. Tinkering with small initiatives or “quick fixes” will not resolve core issues or create sustainable education systems. Instead leaders must make a transparent

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assessment of a country’s competitive environment. They must compare national socioeconomic objectives to the condition of the education sector, so that they can identify the specific themes, practices, and tactics necessary to strengthen it (see Exhibit 2).

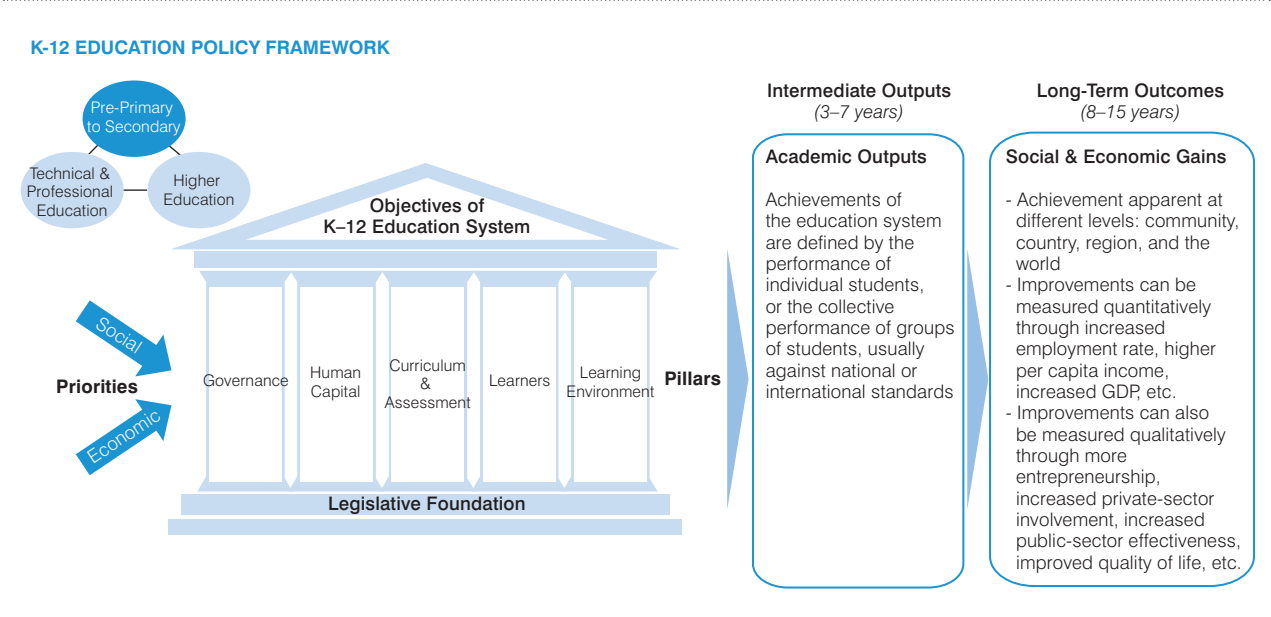
Another important consideration is the coherence between strategies and capabilities. By capabilities, we mean the set of distinctive factors or key

strengths that distinguish a system or an organization. Each capability derives from the right combination of processes, tools, knowledge, skills, and organization—all focused on achieving the desired result.

Strategies for education should be clearly aligned with the existing and achievable capabilities of education systems if they are to succeed. As such, reforms and strategy develop-

ment exercises should always start by looking at the system’s existing or potential achievable capabilities before designing the strategy. This approach, Booz & Company’s “Capabilities-Driven Strategy” (http://www.booz.com/global/home/what_we_think/cds_home/), increases the coherence and consistency between capabilities and the likelihood of success.

Exhibit 2
K–12 Policies Defined Using Holistic Framework Built on Five Pillars, Designed to Respond to Socioeconomic Priorities



Source: Booz & Company

“THINKING AHEAD” IN PRACTICE

Singapore and Abu Dhabi show what is possible when education leaders “think ahead” through a holistic approach.

Singapore has raised its education level to match the best among OECD countries, thanks to long-term and consistent thought leadership and proactive responses to the country’s socioeconomic conditions and global trends. The country, which has few natural resources, has evolved from a low-skill, labor-intensive economy to a knowledge-based society, thanks in large part to government-led education reforms.

Singapore thinks ahead through its “Desired Outcomes of Education.” These are a set of attributes that educators want all Singaporeans to possess by the end of their formal education so they can successfully compete in the global job market. In addition, the Ministry of Manpower works with economic agencies such as the Economic Development Board to identify and project manpower needs. This information is captured by the Ministry of Education and relevant institutions to inform their education planning across all areas, and by the Ministry of Finance to distribute funds more efficiently.

Abu Dhabi offers another example of thinking ahead with a holistic approach. Abu Dhabi’s Policy Agenda 2007–2008, issued by Abu Dhabi’s Executive Council, sought to respond to the emirate’s socioeconomic challenges with a comprehensive reform of the education system, from P–12 education (equivalent to K–12) through higher education and technical and professional training. The Policy Agenda highlighted the need for premium education for all citizens, in order to develop a true knowledge-based economy. In 2008 the emirate established the Abu Dhabi Education Council (ADEC) to oversee this education transformation.

Based on Abu Dhabi’s vision and policy agenda, the reforms consisted of three phases. The first built capabilities and aligned education objectives with socioeconomic aspirations. The second phase compared local education outcomes to international benchmarks. Finally, the third phase (still ongoing) aims to help Abu Dhabi become an education leader by developing local and international human capital.

Deliver Within

The second role for transformation leaders is to “deliver within”—to effectively oversee the performance of the organization they are managing during the transformation and build the capabilities of the education system. In this role, leaders face a number of questions:

- What capabilities does the education system need to function effectively?
- How should the transformation process be managed?
- How do leaders ensure the continuity and sustainability of transformation?

Transformation leaders need to develop key capabilities throughout the education value chain, including strategy development, management, design, delivery, and evaluation. Capabilities also have to be built at every layer of the education system, from the Ministry of Education cascading down to universities, schools, principals, teachers, students, parents, the private sector, and the community at large. For example, in Finland, one core education capability is early intervention. Trained professionals apply a set of tested tools and processes to intervene to assist students with potential special-education needs.

Transformation leaders also need to ensure the sustainability of these

initiatives, which often operate on time lines that outlast their tenure (especially for elected officials). As such it is crucial to have civil servants and local institutions that are actively engaged, empowered, and supportive of the transformation.

Related to this, many governments establish central program management offices (PMOs) that can coordinate the effort, centralize information, and analyze feedback and input to improve the process during subsequent phases. For example, Abu Dhabi established a central PMO within the Abu Dhabi Education Council to closely follow up and monitor transformation progress and deploy additional resources to initiatives that require support.

Transformation leaders also need to ensure the sustainability of initiatives that operate on time lines that outlast their tenure.

“DELIVERING WITHIN” IN PRACTICE

Finland and South Korea are successful examples of capability-building in education systems.

Finland has improved its education system in recent decades, to such a degree that it has become a destination for those who wish to replicate its success. To deliver within, Finland relies on a strategy of decentralized authority and empowers teachers with more autonomy and flexibility. Finland’s national core curriculum serves only as a framework and is not prescriptive. Instead, the curriculum is largely developed at local levels. This gives principals and teachers wide latitude and independence to decide what they will teach and how. The same holds true of accountability and performance monitoring, which is primarily handled within individual schools. The national school inspectorate was abolished about 20 years ago. The National Board of Education conducts standardized testing only on a sampling basis.

Finland has invested substantially in school system capabilities to ensure success with this decentralized model. The country puts considerable effort into developing exceptional teachers. Teaching is a very well respected and attractive occupation in Finland. In 2010 more than 6,600 applicants competed for 660 available slots at academic universities’ primary school teacher education programs. Master’s degrees are required as a condition of employment. Finland also builds the capabilities of students to prepare them for autonomy—for example, they take a significant role in designing their own learning experience.

The result is a remarkably efficient system. Finnish students have fewer hours of instruction than students in any OECD country, and educators teach fewer hours than their peers. Yet Finland is not the highest spender per pupil among OECD countries. Similarly, teacher salaries are in the middle range for European countries. The key differentiator is that Finland has minimal administrative overhead. Aside from the costs of the national education administration, almost all the money spent on education is focused on schools and classrooms.

The *Republic of Korea* is another good example of a country that gives individual schools wide latitude. As part of a restructuring of the Ministry of Education, Science, and Technology in 2008, South Korea’s national government provides a national teaching content framework, but individual schools organize and implement their own curricula. The government has also invested in teacher education and training and developed rigorous standards. In addition to recognized university degrees, educators must take an intensely competitive comprehensive exam to actually obtain a teaching position.

Lead Across

The third role of transformation leaders is to “lead across” the boundaries of their own organizations to engage all internal and external stakeholders (government, educators, private sector, students, parents, and the broader community) in the design and execution of education reforms. This is the most critical of the three transformation leadership capabilities.

By deftly engaging with these internal and external stakeholders as early as possible, an education leader can build momentum for the reform process. At the political level, cross-boundary leadership secures the

support of the wider government, a necessity for realizing joint outcomes and securing sufficient funding for education transformation. For example, during the recession of the 1990s in Finland a political consensus saved the country’s universities from funding cuts.

Beyond government, the private and third sectors are increasingly important partners for the transformation leader. They help to conceptualize the transformation, and to fund and deliver it. Furthermore, the active participation of parents and students—and the acceptance of the general public—are essential ingredients for success in education transfor-

mation (*for specific examples, see the case studies on p. 19*).

Finally, we cannot stress enough the importance of incorporating cultural elements into the leader’s decisions and actions. From the reform’s inception and throughout its development and the stakeholders’ engagement processes, the country’s general culture and traditions have to be taken into account, in addition to the specificities and “micro-cultures” of each of the target groups. Conversely, it is important to take into account cultural disparities when seeking to transfer reform approaches from one country to another.

Leaders should incorporate cultural elements into their decisions and actions, and take into account cultural disparities when seeking to transfer reform approaches from one country to another.

TRANSFORMATION LEADERSHIP IN ACTION

In this section, we look at the challenges and solutions of education reform in three very different transformation journeys: Latvia; Alberta, Canada; and the United Kingdom.

Case Study: Latvia

In 2007, Latvia was one of the countries hardest hit by the global financial crisis—it witnessed a 25 percent contraction in GDP, and unemployment swelled from 8 percent to 20 percent. Bailout packages from the IMF and EU required that the government implement harsh austerity measures in late 2008, including severe cuts in education spending (among other social programs). The proposals advocated reducing teachers' salaries by 40 percent and the higher education budget by 67 percent. In 2009 thousands of teachers rallied in Riga to protest against salary reductions. More recently, in November 2011, students demonstrated against the proposed cuts in the higher education budget. In addition, Latvia had been facing demographic changes—specifically a low birth rate and resulting excess school capacity—requiring that it reduce the overall size of the education system and optimize the school network.

These difficult conditions have led to multiple government efforts coordinated among numerous stakeholders. The country's legislature has mechanisms in place that require public consultation before issuing new laws; hence, the Parliamentary Committee for Education continuously engages society and professional groups. In addition, mass media and journalists are very influential and deeply involved in education reform. The current Minister of Education, Dr. Roberts Kilis, makes frequent media appearances—even discussing emerging strategies and policies in order to foster public debate. This approach has at times led to uncertainty regarding large-scale, early-stage changes—

these appearances are often unscripted and ad hoc, without sufficient data to formulate a clear argument—but it has also created a dynamic education discussion.

The coordination between the Ministry of Education and Science and the Ministry of Finance is crucial to prioritize initiatives that will be funded locally, and streamline EU funds administered by the State Education Development Agency, a body under the Ministry of Education. The government has also coordinated with the private sector through formal mechanisms, such as the National Tripartite Cooperation Council and the 12 Sectoral Councils. Today, both the government and the Latvian Trade Union of Education and Science Employees (LIZDA) recognize the importance of teachers and their contribution to education reforms. The aim is to have discussions move beyond financial issues and more toward academic and pedagogic discussions.

In sum, Latvia recognizes the importance of leading across and ensuring stakeholders' buy-in and involvement. The country's education transformation is still ongoing and it is too early to gauge the success of these efforts. Although PISA and Trends in International Mathematics and Science Study (TIMSS) scores are in line with international averages, Latvia has higher aspirations.

Despite—and maybe because of—its struggles, Latvia understands that all stakeholders must be genuinely part of the education reform conversation. However, the practice is somewhat more challenging. The government is engaging both teachers and students, but it is often dominated by a financial-negotiation mind-set rather than a collaborative content-related effort. Also, even though the active role of the leadership in media has

been instrumental in engaging Latvian society, a coordinated and well-structured approach is still needed when dealing with the media.

Case Study: Alberta, Canada

The province of Alberta, Canada, has witnessed considerable transformation in education. The education system has progressively moved from a government-led, top-down, policy-making approach to a stakeholder-oriented model. Alberta's education reforms constitute a clear success story, as demonstrated by improving international PISA and TIMSS scores. These now consistently rank Alberta students among the world's strongest performers, and Alberta is the highest-performing English-speaking education system in the world.

In Alberta's education history, several centrally designed, government-led education reforms faced strong resistance, mainly from teachers. In 1993, Premier Ralph Klein set up education roundtables to change the reform approach and introduce consultations with Albertans. Greater parental choice and business community involvement were encouraged. Since then, internal and external stakeholders' engagement has become the guiding practice of education reform. Recent changes have introduced a system that is more enabling, empowering, supportive, and less prescriptive than most of the previous models designed with limited consultation.

A central component of Alberta's education reforms has been a partnership created in 1999 among key education stakeholders. Known as the Alberta Initiative for School Improvement (AISI), the partnership includes the

education ministry, Alberta Education; the Alberta Teachers' Association; school boards; school councils; school superintendents; school business officials; and universities. AISI supports local initiatives through targeted funding of creative projects that operate outside the usual paradigm. As part of AISI, educators are responsible for implementing initiatives and then collecting the data and results to be analyzed. Moreover, educators are responsible for knowledge sharing among peers and for the proposal of new initiatives.

Alberta Education also has an innovative way to engage teachers and ensure the government maintains a realistic perspective. Around 250 teachers are seconded to the ministry (which has a total of 700 staff) for two- to three-year assignments where they work alongside civil servants.

In 2010, Alberta combined think ahead and lead across with its Inspiring Education initiative. This involves an open dialogue with the wider community on how education needs to take place now and in the next 20 to 30 years. Inspiring Education and AISI complement each other. They are examples of bottom-up reforms, involving extensive stakeholder engagement, with an umbrella and general framework provided by Alberta Education. Local empowerment, autonomy, and stakeholder engagement are the common denominator of these two initiatives.

Alberta Education also has formal mechanisms for engaging with students, a key aspect of leading across. First, in 2008 it developed a program called "Speak Out," an online plat-

form giving students ages 14 to 19 a greater voice in the education system through blogs, podcasts, and real-time surveys. The recent Alberta Education Act created a student advisory panel that comprises 24 students representing different regions, ages, and levels of achievement. Members frequently meet and interact with the education minister. Alberta Education provides the students with training in leadership, media, and public speaking to prepare for this role. This initiative has been extremely successful and has exceeded expectations. Members of the student advisory panel have met with the Premier and other government leaders, such as the Minister of Health. Alberta Education also organizes regular student forums, including an annual conference held every April that lets 250 students work collaboratively with teachers to identify common problems and discuss potential solutions.

Finally, results are owed in part to the efforts of a single transformation leader: Dave Hancock. A long-time minister and the prime mover behind the latest wave of reforms in the province, Mr. Hancock values the input and active involvement of all stakeholders and he personally participates in direct conversations with all groups. In other words, he leads across. Indeed, some commentators note that Mr. Hancock's key quality is his ability and willingness to ask the right questions and bring concerned parties together to jointly address critical issues.

Case Study: The United Kingdom

The British education system offers an example of how reforms can face resistance without sufficient engage-

ment with stakeholders. In the 1990s students contributed £1,000 annually toward the cost of their education. Faced with budgetary shortfalls, the government has gradually sought to raise this amount through various means. Initially it used variable tuition fees with a cap of £3,000 per year, and later introduced an income-linked, deferred payment. That final approach was reviewed in 2009 by a six-member commission of business and higher education notables under Lord Browne. The panel called for what some considered a radical shift in higher education funding.

Under the new plan, the government would provide up-front loans to cover tuition fees and living costs of students. Then the government would remove the cap on the level of fees that universities could charge, thereby allowing them to focus on quality and expansion, and to price courses accordingly. For students the impact was clear: they would now face variable tuition fees without a cap.

Predictably, the Browne report received significant public criticism, mainly for the manner in which the review was conducted. The report was

published only after the general election of 2010, leading some to suspect political meddling. The commission was also seen as lacking independence due to the perceived political leanings of its members. Others criticized the lack of parliamentary oversight and scrutiny. However, the main criticism was the lack of direct stakeholder engagement. The panel communicated with parents and students only through formal written consultations. Students *en masse* contributed input through a single survey that was not reflected in the final report. There were no educators on the panel, only higher education and business representatives.

In November 2010 the government adopted the cap on variable tuition, now at £9,000 per year. The students were not appeased. That month around 50,000 students took to the streets of central London. Teachers did not take part in the street protests but expressed their concerns through other channels. In March 2012, students launched the “Come Clean” campaign, which calls for a public debate on issues such as student funding and planned university reforms, organized by the National Union

of Students and the University and College Union (one of the lecturers’ trades unions).

The situation in the U.K. is a clear example of the problems with a limited-engagement approach. The government recognized the need to increase engagement but the bulk of the interactions took place—and are still occurring—through formal mechanisms, which do not reflect a strong desire to collaborate. The U.K. compounded its problems because its stakeholders did not truly believe that their contribution was valued. Instead, they felt it was treated as a formality. Furthermore, U.K. stakeholder engagement has been centrally driven and focused on engaging targeted stakeholder groups rather than on empowering community-wide stakeholder engagement. Increases in tuition fees were never going to be popular among parents and students, yet the government could have avoided much of the resistance and conflict that these measures triggered among students and teachers. The lesson is that without direct engagement, few reforms will succeed.

U.K. reform efforts suffered because stakeholders did not truly believe their contribution was valued. Instead, they felt it was treated as a formality. The lesson is that without direct and genuine engagement, few reforms will succeed.

EMERGING LESSONS LEARNED

These case studies establish some clear guidelines for leading across. Although engagement with each group of stakeholders will be different, several common themes apply, specifically coherence among various initiatives; a combination of both formal and informal efforts; collaboration at the earliest possible point in the process; and working with the predominant culture instead of against it.

Coherence is a recurring theme in our experience. Its absence can doom even innovative approaches at reform. For instance, one country's attempt to foster dialogue with older students—sending letters home with them and asking for their ideas to transform the schools—was perceived as inauthentic by the public because it did not align with earlier messaging about reforms. Similarly, in another country, public reports of near-term changes

in educator compensation triggered resentment as they came more than two years before the actual changes would be approved.

Combining **formal and informal engagement** is another frequent theme. Almost all leaders rely on formal channels—such as official representation through committees—during the planning process. In many cases, governments issue formal guidelines for consultation and engagement that mandate such representation. However, the most successful approaches also use informal coordination and build individual relationships. A reliance on formal channels alone often creates the impression of a ritualistic, pro forma approach.

Effective transformations also require the earliest possible efforts to involve stakeholders. This **early engagement**

creates a sense of ownership and commitment among the stakeholders. For example, Abu Dhabi undertook the difficult process of closing several-dozen private schools that did not meet the emirate's standards. The aim was to replace them with new facilities. The emirate prepared extensively to ensure that this process

went smoothly. ADEC coordinated with other government entities as well as with parents and school owners long before any of the schools were closed. It took pains to clearly explain the rationale behind the decision and discuss alternatives for the students, along with the financial implications of each option.

Finally, successful transformation leaders acknowledge the importance of **culture**, the often informal ways that groups and organizations operate. Successful reforms will work within the existing culture of an organization, rather than attempting to make immediate, sweeping changes to it (see “*The Cultural Accelerator*,” p. 24).

There are clear guidelines for leading across: establish coherence among various initiatives; combine formal and informal efforts; collaborate at the earliest possible point in the process; and work with the predominant culture.

THE CULTURAL ACCELERATOR

by Jon R. Katzenbach

Culture plays a key role in transformations. Many successful efforts depend as much on the informal aspects of an institution's culture as they do on its formal strategic and structural elements. Institutional cultures consist of deeply embedded beliefs, mind-sets, behaviors, and habits that determine "how we do things around here." Unfortunately, you cannot change very much about your culture very fast. Thus, it is important to work with and within the existing cultural situation while evolving to one that better fits changing societal expectations. In our experience, enterprises that leverage culture to help accelerate major change efforts apply five basic leadership priorities:

1. **Make sure strategic priorities match cultural strengths:** When leaders recognize that new capabilities will require the informal and emotional support of their culture, they chose a set of strategic priorities that is compatible with their most important cultural strengths. By emotional support, we mean how members of an organization feel about it and about their commitment to its goals. These leaders use the positive emotional influences that already exist across the organization. They also counterbalance the more negative influences. This requires a realistic and specific understanding of what is good, and what is not so good, about the current cultural situation.
2. **Focus on observable behaviors rather than mind-sets:** Psychology tells us that it is easier to "act your way into new ways of thinking than to think your way into new ways of acting." By behavior, we simply mean what individuals do repeatedly over time. When individual actions produce consistently favorable results over time, mind-sets will follow. If the behaviors are selected appropriately, an organization's results will improve much sooner than with attempts to change deeply embedded mind-sets. In short, the immediate performance of your institution improves while your longer-term cultural situation is still evolving.
3. **Work on only a few behaviors at a time:** Leaders are more likely to spur cultural acceleration if they attempt to change a few critical behaviors at a time. Top-down messaging and programmatic efforts work within comprehensive frameworks, whereas cultural influence works best on a selective basis. If you chose behaviors that are readily observable and that others are likely to "envy and emulate," the energy becomes contagious, and the behaviors spread virally and rapidly.

4. Integrate both formal and informal “reminder mechanisms”: Formal metrics and processes can help enforce critical behaviors because they prompt rational compliance. However, the informal, cross-organizational, and emotional elements are what yield the emotional commitment that high-performing organizations obtain. One without the other is likely to slow transformation and efforts as well as limit the amount of achievement.
5. Regularly assess behavioral change as well as cultural impact: In most cases, it is important to develop measurement and assessment approaches that differ from normal monthly or annual methods. Behaviors are usually more observable and measurable than cultural elements—and they tend to change earlier than cultural indications. Both dimensions are important, however, and finding credible and simple ways to track progress is very important.

Although the transformation challenges that leaders in education face differ from what leaders in other global sectors face, the cultural challenges are analogous. Deeply embedded cultures are very difficult to change, but they are very important to both recognize and utilize. The best way to do that is to be selective in both the behaviors you aim to change and in the cultural forces that you seek to activate.

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Although there are shared features of stakeholder engagements, each encounter with different stakeholder groups will have some unique characteristics.

First, the transformation leader should start by engaging internal stakeholders within the **government** and securing their buy-in. The higher government authority, other ministries and their teams, and civil servants within the ministry of education are all internal stakeholders that are essential drivers of education reforms.

When seeking support for education transformations with the government, leaders have to convey the importance of reforms for the overall socioeconomic benefit of the country, and not just for the education sector. Successful leaders seek to de-politicize issues and utilize evidence to prove the relevance of reforms. Furthermore, leaders have to encourage cross-ministerial collaboration at the minister and civil servant levels through formal institutional structures

to execute shared projects and discuss outcomes. These joint task forces are also a way to ensure the continuity of the work when the political landscape changes. Finally, informal coordination with the government, and with the ministry of finance more specifically, is particularly important to move beyond bureaucratic formalities and secure genuine support.

Educators—principals, teachers, and frontline administrators—are at the center of education reforms. They are the interface between policy-making institutions and the ultimate beneficiaries of education. They can facilitate the implementation of reforms, and are also the ones who can communicate to the government the local culture and requirements. As such, their buy-in and engagement is crucial. The trend today is to encourage more autonomy and flexibility at the local level to allow educators to tailor reforms based on local needs and specificities, such as in Finland and Singapore.

Educators legitimize the government in the eyes of the wider community. Students and parents typically trust their local educators more than central authorities and are willing to embrace reforms that have already secured educators' buy-in. Thus, the government should extensively communicate and involve educators in the early stages of the reforms and support them in shaping their professional identity. In unionized systems successful leaders recognize the role of teachers' organizations beyond their role as contracting parties and focus on their presence as professional organizations that have a pedagogical say in suggested reforms. This was one of the key success factors of Alberta's reforms.

Students are not only the end recipients of education reforms but can also be active partners and contributors in shaping these reforms based on their needs and expectations. Direct engagement is thus becoming increasingly important, whereby students are not

only interacting with the education system through their local institutions, but also collaborating directly with transformation leaders. Their input and participation happens through official representation in governmental committees, such as the Alberta Ministry of Education's Student Advisory Council, and through direct communication channels such as online forums and social media.

Engagement of the **wider community** is crucial for securing general buy-in and ensuring reform sustainability. Governments need to develop short-, medium-, and long-term plans and get national buy-in for all plans to ensure sustainability, as a new leader will find it difficult to change the direction of reform once society has approved and embraced it. But also to keep the momentum going, information dissemination should be managed properly and consistently in the media, and quick wins have to be communicated to show progress in a sector where results materialize only after several decades. For

example, Abu Dhabi has effectively communicated the improvements in preparing students for college, resulting from rapid interventions in high schools, though the full benefits of the emirate's reform will take years to materialize.

The **private sector's** engagement in education reforms still constitutes an untapped opportunity, as existing initiatives are mostly happening on an individual basis, at a small scale, and for higher education only. The objective is to move toward a robust, scalable engagement model in which the government seeks the input of the business community on the needs of the labor markets and skills necessary to build from the youngest age. The business community works directly with local institutions on joint initiatives. Successful examples of such engagement include the Texas High School Project, where funding by private foundations was managed through a framework for scaling up successful pilots.

Conclusion

This Leading Research is not meant to be a user's guide on how to replicate successful education transformations. All education systems are unique. Transformation efforts that work well in one region may fail spectacularly in another due to differing political structures, cultural aspects, and other factors. Rather, our aim is to analyze optimal transformations in order to identify the central elements among those initiatives, and to stimulate a discussion among education leaders on how specific elements can be adapted to their socioeconomic and political environment.

For education leaders, the stakes are clear. Rapid and large-scale changes stemming from technology and globalization are leading to a single global marketplace. Education systems that can adapt to this new environment—and continue to adapt to future shifts—will give these nations a clear competitive advantage.

LIST OF INTERVIEWEES

The authors wish to thank the following individuals for their contributions and insights:

COUNTRY	NAME	TITLE
Abu Dhabi, UAE	Dr. Mugheer Al Khaili	Director General, Abu Dhabi Education Council
	Eng. Hamad Al Dhaheri	Executive Director, Private Schools and Quality Assurance, ADEC
Alberta, Canada	Keray Henke	Deputy Minister, Alberta Education
	Dr. Dianna Millard	Director, School Improvement Branch, Alberta Education
	Jean-Claude Couture	Associate Coordinator, Research, Alberta Teacher's Association
	Dr. Pamela Adams	Researcher & Assistant Dean, University of Lethbridge, Faculty of Education
	Jean Stiles	Principal, Jasper Place High School, Edmonton
	Brent McDonough	Former Co-Chair, Alberta Inspiring Education Steering Committee
	Dr. Stephen Murgatroyd	Principal, Murgatroyd Communications & Consulting Inc.
Dubai, UAE	Dr. Abdulla Al Karam	Chairman of the Board of Directors, Director General, Knowledge & Human Development Authority
Ireland	John Dennehy	Former Secretary General, Ministry of Education & Sciences, Dublin, Ireland Former Chairman, Education Committee of OECD
Latvia	Ina Druviete	Former Minister of Education & Science
	Janis Gaigals	Former Minister of Education & Science Director, Vocational Education & General Education Department, Ministry of Education & Science
	Dita Traidās	Director, State Education Development Agency (VIAA)
	Ingrida Mikisko	Chairwoman, Latvian Education & Scientific Workers' Trade Union (LIZDA)
	Dr. Raita Karnite	Director, Member of the Board, Institute of Economics, Latvian Academy of the Arts and Sciences



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