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Stimulating Excellence

Unleashing the Power of Innovation in Education

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NEW PROFIT inc.

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Contents

Preface: A nonpartisan call for greater state and federal support for innovation

Education reform has long seen partisan battles, where advocates often retreat to either side of the aisle in defense of a program, reform or ideology. Indeed, two of the organizations that spearheaded this report often find themselves on opposite sides of many issues: The Center for American Progress and American Enterprise Institute's Frederick M. Hess are widely regarded as embracing distinctive philosophical approaches to government, and they often champion different approaches to addressing our country's challenges.

When it comes to the crucial role of entrepreneurial problem-solvers in tackling the challenges of American education, however, we find much common ground. We may disagree on some questions, but we are of the same mind about the vital import of increasing dynamic, quality-conscious problem-solving in education. More specifically, we agree about many changes to policy and practice at the federal, state, and local levels that are essential to clearing obstacles that hinder entrepreneurial innovation.

Alongside a handful of others from across the political spectrum, we each have studied, written about, and advocated for policy solutions that can encourage the entry of new entrepreneurs in public education and broaden the impact of the most successful innovations. Our partner in this paper, New Profit Inc., a national venture philanthropy fund, is dedicated to working with and supporting social entrepreneurs—including many in education—and connecting entrepreneurial leaders with local, state, and national policymakers to implement reforms that support their growth.

Hess has authored and edited a number of books and articles that consider the critical role of entrepreneurs in public education—particularly the challenges they face and what it might take to help them thrive. In this work, he and his collaborators have documented many of the federal and state policies, as well as social and cultural norms that inhibit entrepreneurs' success and considered what measures might improve this state of affairs. The Center for American Progress has also proposed several policies and investment tools to foster greater growth and innovation from a federal perspective, including a White House Office of Social Innovation, and has called upon the new federal administration to foster entrepreneurial solutions to public education's greatest challenges.

Together, we have reached across partisan divides to work in support of greater entrepreneurship in education. In October 2007, we co-hosted a roundtable discussion with some of the nation's most successful educational entrepreneurs to explore policy tools that the federal government can use to support and invest in successful entrepreneurial efforts and help stimulate new innovations in our schools.

To expand on the outcomes of the 2007 roundtable, we engaged Julie Kowal and Bryan Hassel from Public Impact, a national education policy and research organization, to gather creative solutions and ideas from a collection of leading education entrepreneurs about federal and state policy changes that can support their success and growth, while encouraging development of new entrepreneurial ventures in education. In the following pages, we examine how current state and federal regulations and policies have stymied the efforts of these entrepreneurs, and what changes should be made to support their work to encourage the growth and expansion of innovations in education that pay off for students.

A handful of the recommendations in this report build on the published and unpublished work of advocates, entrepreneurs, experts, and scholars in education and across sectors. We have provided citations to their work where applicable. To build a comprehensive list of resources on such a broad array of topics, however, is outside the scope of this report. We are grateful to this broad community of thinkers, whose ideas and recommendations undoubtedly influenced the formation of several of our proposals.

The generous support of the Annie E. Casey Foundation and The Eli and Edythe Broad Foundation made this report possible. We also wish to acknowledge the important contributions of the entrepreneurs whom we interviewed for this report: those who operate schools or networks of schools, leaders of organizations that recruit or train teachers and principals, path breakers whose organizations bring new technological solutions to schools and classrooms, and innovators who provide services or tools to schools and districts. We also solicited responses to a written survey about the greatest challenges to educational innovation and policy solutions to support entrepreneurship. Finally, we asked each of the entrepreneurs whom we interviewed and surveyed to provide critical feedback on a draft of our findings during a roundtable discussion, held on December 19, 2008 in Washington, D.C. We are grateful to Sunita Arora and Mike Feinberg of Knowledge Is Power Program, Larry Berger of Wireless Generation, Michael Brown of City Year, Susan Colby of the Bridgespan Group, Tim Daly of The New Teacher Project, Denis Doyle of SchoolNet, Mike Goldstein of MATCH, Kevin Huffman of Teach For America, Ted Mitchell and Julie Petersen of New Schools Venture Fund, Ron Packard and Charles Zogby of K12, Catherine Rohr and Ann Carney Nelson of the Prison Entrepreneurship Program, Larry Rosenstock of High Tech High, Jon Schnur of New Leaders for New Schools, J.B. Schramm of College Summit, Eric Schwarz and Kate Mehr of Citizen Schools, Sarah Usdin of New Schools for New Orleans and Steven Wilson of Ascend Learning for their contributions.

Executive summary

The United States is facing one of the worst financial crises of recent history. But we are experiencing a quiet crisis, as well—one that has been building in our nation's classrooms and schools for decades. We are failing to prepare the next generation of Americans as citizens, thinkers, and graduates prepared for success in a global society.

Yet, even amid this crisis, there are reasons for optimism. Recently, a new generation of social entrepreneurs has begun to transform public education with innovative solutions that have extraordinary potential to serve American students more effectively and efficiently. Programs like Teach For America, College Summit, New Leaders for New Schools, the Knowledge is Power Program, among others, are part of a growing movement to use new methods to deliver a higher-quality education to every student—particularly those from disadvantaged backgrounds. These innovators have challenged our understanding of "business as usual" in American public education by introducing new philosophies, methods, and expectations for the education of our nation's students.

The 2009 American Recovery and Reinvestment Act accords increasing importance to entrepreneurship in education, primarily through a $650 million "innovation fund" designed to allow non-profits with a record of increasing student achievement to scale-up their initiatives. Nonetheless, entrepreneurs in education continue to face significant barriers to success and expansion: rigid bureaucracies, lack of access to capital, limited supply of human talent and other barriers inhibit entrepreneurs' entry and growth, and together combine to discourage new innovations.

To foster and support innovative solutions to our nation's education crisis, we urge policymakers to pursue numerous reforms that change the demands and incentives in K-12 systems to better serve students. In this report, we gather creative solutions and ideas from a collection of leading education entrepreneurs about federal and state policy changes that can support the emergence, success, and growth of entrepreneurial problem-solvers while encouraging a determined focus on quality and results. We primarily address the specific local, state and federal policy barriers that have thus far precluded thriving entrepreneurial activity in public education. We then outline several policy approaches for district and state superintendents, governors, and the new federal administration.

The recommendations included in this report are not a wish list of items to support entrepreneurs; rather, they represent a nonpartisan agenda for federal, state and local leaders to address the rules, procedures and practices that hinder innovation in education. We concentrate on those policy changes that enable high-quality entrepreneurs to better succeed at scale because it will allow them to better serve students, teachers and schools. We recommend initiatives that prompt local action, rather than issuing broad mandates; focus on state and local changes that require limited federal involvement to have an immediate impact; and, particularly mindful of our current economic climate, offer reforms that remove anachronistic barriers and problematic practices, rather than those that require additional resources.

Recommendations

Use dramatically better information to create a performance culture

The interviewed entrepreneurs identified the lack of a performance culture in K-12 public education as the greatest constraint on their ability to scale and succeed. A critical ingredient of this performance culture—clear metrics that indicate how good a product is or how well a service is working—is largely missing in public education. Insufficient data means that teachers rarely have the capacity or tools to adjust their instruction based on results. Fifty systems of standards and assessments make it difficult to compare and aggregate performance across states, and the information generated by these systems typically does not make it possible to tie internal systems to results. Proposed federal and state approaches to address these challenges include updating student achievement data systems to maximize their utility for educators; encouraging the formation of consortia of states that adopt common standards; supporting collection and reporting of management data; and a commitment to track a set of high-priority "power metrics" that can be used to assess the quality of entrepreneurial providers as well as the status quo systems with which they aim to compete.

Open the public K-12 system to a diverse set of providers

In American schools today, local, county, and intermediate school districts largely hold exclusive rights over the provision of education, and a small number of large providers monopolize the marketplace for services and tools. Practical constraints such as budgetary rules and processes and collective bargaining agreements combine with a widespread bias against outsourcing to prohibit or discourage districts and schools from opting for entrepreneurial provision of key services, even when they are superior to current providers. Policy reforms—such as eliminating unnecessary statutory and regulatory constraints upon the location or delivery of schooling, opening the market for licensed providers of principal and teacher training, and devolving purchasing power for some services to school leaders—would help open the supply markets to more new, high-quality providers.

Make districts and other buyers into real "customers"

A public education sector open to entrepreneurship also requires true demand—a set of real "customers" among districts and other potential buyers of education services. Even when an exclusive franchise does not fully block entrepreneurs' access to markets, spending restrictions, rigid procurement regulations, slow buying cycles, a fragmented set of buyers, and a dearth of investment vehicles make it very difficult for entrepreneurs to have an impact. Granting existing resources in more flexible ways, facilitating investments to free up future savings, and allowing greater collaboration between buyers and sellers would empower districts and schools with real buying power and enable entrepreneurs to better articulate their value.

Use public policy to encourage financing for entrepreneurial ventures

Finally, entrepreneurship can thrive only when there are various types of financing available for new ventures. Few dollars are currently available in the education sector for start-ups, new tools, or delivery systems, and the capital market lacks many of the elements that make these markets work for entrepreneurs in other industries. Policymakers can use existing public funding streams in ways that better foster innovation by reallocating current funds to encourage recipients to tap entrepreneurial providers, leveraging more private investment, and developing models of performance-based funding to reward and sustain those entrepreneurs that are most successful.

In addition to the recommendations outlined above, several overarching themes also arose from our conversations with leading education entrepreneurs:

- **Using the "bully pulpit."** Federal and state leaders have a critical opportunity to communicate a commitment to supporting promising innovations, educate philanthropists and private investors about the success and potential of educational entrepreneurs, and provide a forum for addressing the barriers that hinder even effective ventures.

- **Inventorying national and state agencies.** This process can be used to assess agencies' openness to entrepreneurship, evaluate their performance metrics, and eliminate outdated rules and practices that today impose a burden relative to the benefits they convey.

- **Engaging foundations and private investors.** In this report, we focus primarily on the role of state and federal policymakers, but private funders can help jumpstart many of our proposals by providing seed funding for new initiatives and co-funding alongside publicly financed ventures.

- **Re-examining the traditional structures of public schooling.** Many of our recommendations are designed to make the traditional structures in public education more conducive to entrepreneurship. But by carefully revisiting these institutional assumptions—such as providing almost all instruction via teachers who work on-site with students—policymakers could begin to open up even more opportunities for entrepreneurship.

We should be encouraged and inspired by the current generation of educational entrepreneurs who have challenged our assumptions about what is possible in public K-12 education and provided a higher-quality education to thousands of students. But the current and potential new entrepreneurs are stifled by several unnecessary and outdated state and district policies, and an education system that remains as a whole insensitive to performance and quality. The recommendations here suggest several steps that state superintendents, governors, and the new federal administration can take to make public K-12 education a more enticing and hospitable sector for social entrepreneurship. By removing barriers to innovation and reform and providing greater support for entrepreneurship, we can spur the critical and necessary new solutions to many of public education's greatest challenges.

Introduction

The United States is facing one of the worst financial crises of recent history. But we are experiencing a quiet crisis, as well—one that has been building in our nation's classrooms and schools for decades. We are failing to prepare the next generation of Americans as citizens, thinkers, and graduates prepared for success in a global society. Seventy percent of our eighth graders cannot read on grade level. By the end of eighth grade, they will be two years behind their international peers in math. And while two-thirds of new jobs created in the United States require advanced training or a college education, 1.2 million of our students drop out of high school every year.

Achievement gaps also persist among racial groups and between students in low-income and high-income communities: by the time they are only nine years old, students in low-income areas are already three grade levels behind their peers in wealthier communities. While our nationwide graduation rate of 70 percent is alarming, rates for African-American and Hispanic students hover around 50 percent. This crisis belies our national commitment to equal rights and threatens our standing in the world and competitiveness as a nation.

Even amid this crisis, however, there are reasons for optimism. Many states have made education a top priority in recent years; federal accountability policies have started shining a light on underperforming schools and inequity in education quality. Recently, a new generation of social entrepreneurs has begun to transform public education with innovative solutions that have extraordinary potential to serve American students more effectively and efficiently. Programs like Teach For America, College Summit, New Leaders for New Schools, and the Knowledge is Power Program (see sidebar on educational entrepreneurs) are part of a growing movement to use new methods to deliver a higher-quality education to every student—particularly those from disadvantaged backgrounds. These innovators have challenged our understanding of "business as usual" in American public education by introducing new philosophies, methods, and expectations for the education of our nation's students.

These entrepreneurs and others have changed the face of public education, produced dramatic results for children and—perhaps most importantly—influenced education beyond the students they serve by creating "proof points" of success that expand the boundaries of our thinking and transform our understanding of what is possible in our public schools.

Examples of educational entrepreneurs

CHARTER SCHOOLS—These public schools, which operate outside many of the constraints of traditional district schools, are perhaps the most visible version of entrepreneurship in education. An increasing number of charter schools are operated by "charter management organizations," or CMOs, and other networks of brand-named schools that follow a common design under some degree of central management.

Aspire Public Schools operates charter schools in California, with an emphasis on serving low-income communities. In 2008, Aspire served more than 6,000 students in 21 schools throughout the state. The **Knowledge is Power Program, or KIPP**, the largest non-profit charter school network, operates 66 schools based on the same fundamental model in 19 states and Washington, D.C.

Smaller clusters of schools are also emerging through CMOs such as **Ascend Learning**, based in New York City. Ascend opened its first college-preparatory elementary school in 2008, and plans to open a second school in 2009. **High Tech High** operates a growing portfolio of charter schools in California with a focus on art, humanities, math, science, and engineering, and has recently launched its own teacher-credentialing program through its Graduate School of Education. The **MATCH** middle and high schools follow a rigorous college-preparatory focus and serve approximately 300 students in two schools located in the Boston area.

HUMAN CAPITAL BUILDERS—**New Leaders for New Schools** recruits and trains individuals to become principals in both charter and district-run schools in high-need urban areas. More than 400 New Leaders currently lead schools in disadvantaged communities across the country. **Teach For America** has mobilized 17,000 of our nation's most successful college graduates to close the achievement gap in underserved urban and rural schools across the United States. **The New Teacher Project, or TNTP**, partners with school districts to recruit, train, select, and hire high-quality teachers, often from non-traditional routes. TNTP also works with school districts to analyze their human capital policies and align their systems and practices with the goal of optimizing teacher effectiveness and student learning.

New Schools for New Orleans, a non-profit created to build the supply of high-quality schools in the aftermath of Hurricane Katrina, helps launch new charter schools; works with NLNS, TNTP, TFA and other entrepreneurial organizations to attract and prepare teachers for New Orleans schools; and supports advocacy on behalf of public education in New Orleans.

SERVICE PROVIDERS—**Citizen Schools** operates a high-quality, hands-on after-school program and apprenticeships for sixth, seventh and eighth grade students in seven states across the country. **College Summit** provides schools, districts and colleges with strategies and tools to build their capacity to increase the number of students who go to college. **K12** operates full-time virtual public schools in several states and provides a custom curriculum and learning tools for traditional and home school instruction. **SchoolNet** provides real-time data, reports, tools and content to help teachers, schools and districts assess students' reading progress and individualize instruction. **Wireless Generation** markets educational technology that allows teachers to monitor students' progress using handheld computers that enable them to analyze data and customize their instruction to students' needs. **GreatSchools.net**, an online database and web community, provides parents and policy makers with data and reviews of every public school in America.

There is an urgent need for more of this type of innovation in American public education. An increasingly competitive international workplace, a new concept of responsible global citizenship, and the great debt we owe our most at-risk students demand creative and entrepreneurial solutions to the nation's education crisis. Indeed, many in the field of education have called upon the new federal administration to foster entrepreneurial solutions to public education's greatest challenges.[1] And some federal policymakers are accordingly increasing importance to promising innovations in education: Among some $115 billion for education in the 2009 American Recovery and Reinvestment Act, up to $650 million is designed to reward and scale innovative programs that have a record of increasing student achievement.

Still, entrepreneurs in education face far too many barriers to success and expansion. Rigid bureaucracies, lack of access to capital, limited supply of human talent and other barriers inhibit entrepreneurs' entry and growth, and together combine to discourage new innovations.

To foster and support innovative solutions to our nation's education crisis, we must commit to several reforms at both the federal and state levels that change the demands and incentives in K-12 systems. In this report, we gather creative solutions and ideas from a collection of leading education entrepreneurs about federal and state policy changes that can support the emergence of new entrepreneurial problem-solvers and foster their success and growth, while encouraging a determined focus on quality and results. We focus primarily on the specific local, state and federal policy barriers that have thus far precluded thriving entrepreneurial activity in public education. We then outline several policy approaches for district and state superintendents, governors, and the new federal administration. The recommendations included here are not meant as a wish list of items to support entrepreneurs; rather, they represent a nonpartisan agenda for federal, state and local leaders to address the rules, procedures and practices that hinder innovation in public education. Each of these reforms has the potential to make public education a more attractive sector for entrepreneurs and to usher in policies and practices that enable us to better serve all of our nation's children.

Findings and recommendations

Use dramatically better information to create a performance culture

The interviewed entrepreneurs identified the lack of a performance culture in K-12 public education as the greatest constraint on their ability to scale and succeed. In any sector, entrepreneurs thrive when potential customers are highly motivated to seek out the best products and services and are willing to switch providers when providers are not producing optimal results. It is this "performance culture" that spurs entrepreneurs to figure out what their customers need and want, to continually improve their offerings in response, and to leapfrog ahead of the competition in the quest to win and keep customers.

Too often, our interviewees told us, this kind of performance culture is missing in K-12 public education. "We don't have this type of market now," The New Teacher Project's Tim Daly argued. "Districts aren't under pressure to provide greater quality; but that's what entrepreneurs value—they're trying to increase quality. This won't matter if they rely on districts for their financial success or expansion, because districts aren't set up to value the same thing."

While many have written about the lack of performance culture and overall resistance to change in public education,[2] we focus here on one specific barrier that emerged most strongly in our interviews: the lack of clear performance information.

Barriers

One critical ingredient of a performance culture is clear metrics that indicate how good a product is or how well a service is working. With clear evidence about what works, all education providers can tout their value to potential customers; customers can analyze each provider's claims objectively and compare them with other providers; and both existing providers and new entrepreneurs can benchmark their performance against their competitors in an effort to stay on top. Without clear metrics and strong evidence of success, entrepreneurs have trouble making a compelling case that what they are offering is better than the alternatives. In addition, state or districts that may wish to contract with entrepreneurial providers often face difficult political battles in the absence of clear data that helps demonstrate their results.

Numerous analysts have pointed out the lack of good information about the operational quality of K-12 education in recent years.[3] Almost all of the entrepreneurs consulted for this report noted a dearth of meaningful information about the effectiveness of providers. The advent of state testing and accountability systems, sharpened by the No Child Left Behind Act, has helped address both of these problems. However, the data resulting from these systems still form an inadequate basis for a performance culture, for three primary reasons:

Insufficient data is available for educators

Even where good data is available, it typically is not actionable—teachers rarely have the capacity and tools to put it to use in the classroom to adjust their instruction and improve student learning. In areas where leaders are committed to empowering their teachers and principals with more actionable data, development of benchmark or formative assessment systems has largely fallen to local districts.

Results are difficult to compare and aggregate

Fifty different systems of standards and assessments make comparing and aggregating performance across states challenging at the very least, and arguably impossible. States can set widely varying thresholds for acceptable performance, muddying the waters considerably for anyone trying to use state data to judge performance.[4] (The 50-state system creates other headaches for entrepreneurs as well, as described in the sidebar "A Fragmented System".)

Internal systems are disconnected from results

The information generated by the 50-state systems typically does not make it possible to judge the quality of particular entrepreneurial service providers or the district in-house offices with which they compete. End-of-year proficiency measures say little about the value that different actors are adding to students' learning over time. While states are making progress toward implementing systems that will capture this value,[5] few state data systems put analysts in a position to answer questions like "How strong is the new cohort of teachers who graduated from ABC Teacher Preparation Program?" or "Is The New Teacher Project placing more effective teachers in classrooms than districts hire on their own?" As a result, says NewSchools Venture Fund's Ted Mitchell, "We don't know what we're getting for our dollars right now. We don't have good measures, especially to differentiate which program is better than another. In education it is still too much about inputs, not about outcomes."

All of these barriers combine to severely weaken incentives for schools, districts, and even entrepreneurial organizations to improve the quality of the services they provide to students. With better metrics and more reliable evidence of what works—and what doesn't—state and federal leaders could better hold all providers accountable, recognize and reward effectiveness, and create the groundwork for a true performance culture in public education.

Public education in the United States: A fragmented system

Some of the interviewed entrepreneurs noted the significant obstacles posed by what is currently a highly fragmented system of K-12 public education—with 50 state education agencies, 14,000 school districts, 97,000 schools and a widespread commitment to local control. Each level of the national system has some level of authority to set policies and standards with regard to most aspects of public schooling—including learning standards, assessments, teacher certification standards, procurement processes and others.

While a significant national debate is underway about whether a system of national standards would be desirable, there is little doubt that fragmentation can slow the scale-up of entrepreneurial approaches with proven value for students. As Ron Packard of K12 explains, "The existence of 50 separate sets of state standards creates enormous complexities for what we do." The concern here was not the familiar ideological debate over local versus federal authority, but the fact that dissimilar rules and metrics make it very expensive for entrepreneurs to try to compete in multiple markets—and advantage the status quo and established mega-firms.

Wireless Generation's Larry Berger explains that this wide variation across geographic boundaries often means that "if entrepreneurs want to work nationally, they either have to start local and hope to scale or rely on national delivery through an existing distributor. Customization for 50 different markets is extremely difficult, particularly for small organizations." Many entrepreneurs likened the process of expanding their work across state lines to opening up a brand new business every time. As a result, many entrepreneurs have chosen to focus their efforts in one region of the country, and many others struggle to maintain a meaningful "brand" amid significant customization to those aspects of their organization that cross district and state lines.

Many of our interviewees, including Steven Wilson of Ascend Learning, suggest that in a more standardized environment with shared definitions of success and how it should be measured, "entrepreneurs could begin to really make claims about their success that could then be put to the test, allowing states and districts to compare results for different products. We can't really do that now across state and regional lines." Entrepreneurs were not particularly interested in shifting the locus of control in any particular direction so much as promoting the adoption of more cross-jurisdictional practices governing academic expectations, outcome measures, and procurement specifications so that services that deliver results for children could spread more rapidly.

Policy approaches

Update student achievement data systems to maximize utility for educators

Three primary changes at the state and local levels would help ensure that the data state and local agencies collect are more useful for principals, teachers and students in the classroom. First, states must carefully align the content of standardized assessments with state standards for student learning, to make sure that scores truly reflect what students should know and be able to do. Second, to make assessment results more relevant to the teaching and learning process, student achievement data systems need to make results on these assessments available quickly—ideally a day or two after testing—so that teachers have a meaningful picture of their students' progress and can adjust their pacing and instruction in real time. State and local leaders should also report achievement data in ways that enable teachers to view student responses by learning standard, grade level and specific test questions—so that they can direct their strategies to individual students' needs. Finally, states will need to make a commitment to ongoing revision and continuous improvement, so that state standards and assessments remain valid and relevant to what students will need to know as citizens and employees in an increasingly global society.

Encourage the formation of consortia of states that adopt common standards

To help streamline the growth of successful regional ventures and encourage the development of new entrepreneurship on a national scale, numerous respondents called for the creation of national standards—a common agreement upon what students must master in core academic areas—that could be mandated by Washington. Several others suggested that a more viable but still powerful step would be for federal and state leaders to encourage the formation of consortia of states that could agree to adopt common standards for student learning, or at least a core set of them. Ron Packard of K12 explains: "if we were to consolidate standards—not to one set necessarily, but perhaps to five or ten—we would greatly streamline development and distribution costs and allow more entrepreneurial organizations to scale." Steven Wilson of Ascend Learning points out that in addition to streamlining entrepreneurs' efforts at cross-state growth, an increase in the number of common standards would help the standards movement gain traction. "It would make it harder for anyone to game the system, if even just a few states agreed upon common standards and measurements as a model." These consortia could establish common targets to clarify how schools, districts and entrepreneurial providers will be accountable, and eventually evolve into a national system over time.

Encourage and support collection and reporting of management data

To better measure the internal systems and processes that impact school systems' effectiveness and, ultimately, student learning, Hess and Fullerton (2008) have recommended that local education leaders adopt a tool like the balanced scorecard—an organizational planning and management instrument frequently found in the business sector—for use at the district level. District leaders require more than student testing results to promote efficient internal processes that make high student achievement possible in the classroom. An internal measurement tool would help districts collect and analyze data about their own processes—such as teacher recruitment and placement, textbook delivery, and professional development—and improvements in these services over time, as well as customer service and satisfaction data, which most districts now collect haphazardly. With connections across content areas and traditional district silos—between professional development and student outcomes, for example, or human resources functions and costs—district leaders could also analyze the effectiveness of specific processes and conduct more sophisticated cost-benefit analyses. Collecting and reporting on these types of data in real time, rather than annually, would make district leaders more able to spot inefficiencies—potentially opening up new niches for innovation—and better respond to needs when they arise.[6]

As Hess and Fullerton point out, the best role for federal and state governments in this scheme is not to hold districts accountable based on their management data, for this would inevitably coerce particular practices and stifle districts' ingenuity in responding to their own unique circumstances. Instead, federal and state leaders could simply mandate that these types of data be collected at the district level and shared. There is also a federal role for building support and infrastructure for the type of data systems that would be required to put a management system such as the balanced scorecard to use in this way.

Measuring the internal processes and systems that contribute to a well-run organization would increase both capacity and incentives for schools, districts, and entrepreneurial organizations to improve the quality of the services they provide. This, in turn, would help create a much more welcoming environment for innovation in education.

Commit to track a set of high-priority "power metrics"

Many states are working diligently to improve their data systems by assigning student identification numbers, tracking individuals' progress over time, and—more rarely—making it possible to see how an individual teacher's students have progressed. All of these developments are necessary steps toward creating performance information systems conducive to entrepreneurship. They will only lay the preliminary groundwork, however, for the kind of metric-driven system that entrepreneurs crave.

To create the ideal kind of system, state policymakers should consider an additional step: turn their raw data into "power metrics" that can be used to assess the quality of entrepreneurial providers as well as the status quo systems with which they aim to compete. To see how such power metrics could work, consider the example of teacher recruitment. Every fall, a new cohort of teachers enters the K-12 system. A district, state, or coalition of states could develop a power metric called the "teacher cohort quality index" to measure the quality of each cohort of teachers entering the system. At the outset, of course, a cohort's index could not be based on actual measures of effectiveness; instead, it would be composed of the most predictive available proxies. As the cohort gains actual teaching experience, value-added test gains or other measures of classroom effectiveness would increasingly determine the index. Most importantly, the index could be disaggregated in various ways to rate the quality of sub-cohorts, such as "teachers recruited through XYZ Alternate Route Program," "teachers graduating from ABC University's teacher education program," "teachers hired by the district's HR department," or any number of other categories.

Federal policymakers could commission the construction—and continuous improvement—of such an index; require that the necessary data be gathered; and specify how districts, states, and others would report the metric to the public. They could mandate that the data be made available to the public and researchers in as fine-grained a fashion as possible to spur third-party analyses that would go beyond the power metric itself. The result over time would be a much more robust picture of the quality of various preparation and recruitment efforts in operation. That clearer picture would, in turn, create a much more hospitable environment for entrepreneurial providers—or at least for those that are able to achieve measurable results within the power metric.

Similar metrics could be developed related to other high-priority policy concerns, such as:

- the quality of teachers retained by districts and other school providers over time;
- the quality of leaders recruited by districts and other school providers;
- the quality of leaders retained by districts and other school providers over time;
- the rate at which 9th grade cohorts graduate from high school;
- the proportion of cohorts of high school graduates needing remedial instruction once in higher education;
- the rate at which cohorts of high school graduates enroll in, persist in and receive degrees from post-secondary institutions.

Like the teacher cohort quality index, these metrics could be disaggregated to show the results achieved by different schools, districts, and other providers, making possible the performance-oriented quest for results in which entrepreneurship thrives.

Policymakers at different levels could create power metrics. States would be a natural agent, but the process could gain even more power if consortia of states or even federal officials instigated power metrics. Though cross-state data issues are challenging, any movement toward more universal approaches to measuring the results of programs would create a more welcoming environment for entrepreneurs whose work does or could cross state lines.

Open the public K-12 system to a diverse set of providers

The public education "marketplace" is dominated by several monopolies and oligopolies that inhibit entry and growth of new entrepreneurs. School districts have long had an exclusive franchise over school operations and oversight, which continues to hinder charter school entrepreneurs and limit innovations in virtual schooling. A handful of large textbook publishers also dominate the market for instructional materials, making it extraordinarily difficult for new content providers to gain traction. And colleges and universities continue to own training and certification of teachers and principals in almost every state. Too often, the services provided by these incumbents are not as good as they need to be to help students meet the increasing demands of our economy and society. If these established providers block the entry of higher-quality entrepreneurial providers, students miss out on the chance for benefit.

The secure monopolies over decision-making and service delivery make the work of dedicated innovators more difficult—and, as a whole, often combine to make the education sector less attractive for new social entrepreneurs who are eager to make an impact. Most importantly, the monopolies too often provide one-size-fits-all solutions, which have proven inadequate to address the needs of diverse communities and student populations.

The sponsoring partners of this project and the entrepreneurs whose ideas are incorporated here are committed to American K-12 education as a public system. Opening the marketplace to a diverse set of new—including private, for-profit and non-profit—providers is not a veiled call for privatization of our education system. Instead, it reflects our recognition that within a public system we must still remain open to various methods of delivery—and a spirit of innovation, whatever its source. Given the crisis in our nation's schools, we must put aside ideological predispositions to support a rational conversation about which providers and approaches have the greatest potential to solve the problems that public education faces.

Established monopolies serve as the greatest obstacles in several areas that have been described in great detail in other publications; here, we focus specifically on how monopolies and oligopolies hinder entrepreneurial solutions, before posing specific policy solutions.

A microcosm of educational entrepreneurship: public charter schools

One of the most prevalent types of educational entrepreneurship is the development of charter schools—new public schools that are designed to be held strictly accountable for results in exchange for greater autonomy over many of the laws and regulations that govern traditional public schools. More than 4,500 charter schools are currently in operation, and some are having great success with our country's most disadvantaged students. An increasing portion of charter schools is operated by "charter management organizations" and other networks of brand-named schools such as KIPP, MATCH, Ascend and many others. But charter schools still serve only a small percentage of students in most districts— the share hovers around 3 percent nationally—and by custom, dollar and law, districts still hold a monopoly on the provision of public education in many ways.

Caps on growth

The most obvious constraint on the ability of high-quality charter schools to emerge, grow and reach more students is caps on the growth of charter schools. Twenty-five states and the District of Columbia currently impose some type of limit—either on the number of charter schools that can be licensed to operate or the number of students they serve.

District authorizers

In many states, school districts are the only charter authorizers—the entities that license charter schools and oversee their operations. This puts districts in the position of licensing and overseeing their competition—as Ted Mitchell of New Schools Venture Fund says, "akin to asking Yahoo to certify Google's new web search business." Some have proven themselves willing and capable authorizers, but in too many cases districts are unduly influenced by local politics and focus on the same sorts of regulation and compliance that characterize district schools—making it difficult for qualified applicants to obtain a charter, and infringing upon the autonomy of those that open.

Funding

A less explicit but equally powerful limitation upon the growth of charter schools comes in the form of inequitable and restricted funding. Although charter schools serve the same students as traditional public schools, they are often perceived as siphoning public funds away from the district monopoly. States use a variety of funding formulas to finance charter schools, but across the country charter schools receive significantly lower funding than traditional public schools. A 2005 report by the Fordham Foundation revealed that nationwide, the average charter school received approximately $1,800 less per pupil than its traditional district counterpart.[7]

In addition, outdated regulations regarding charter-funding allocations further limit the dollars available to individual charter schools and networks of schools. In particular, the federal charter schools program has been interpreted to limit applicants for funds to one campus per charter—so a charter school that opens more than one campus under one charter, which is increasingly common, particularly for CMOs, is

Barriers

Districts' exclusive franchise

Most state education codes contain language regulating the location, structure and delivery of public education that was originally designed to ensure children's safety and a minimum level of educational quality. But today these regulations serve largely to protect the monopoly of district-run and school-based education, regardless of quality. As Ron Packard of K-12 explains, "the barriers vary by state, but they generally fall into the same broad categories: the location of the school day, taking of student attendance, and the delivery of educational programs." Ten states do not have charter school laws on the books, and more than half of the states that do still impose some type of cap on charters' growth. Most states leave charter authorizing and oversight to public school boards, which

ineligible for additional funding. This interpretation of the funding available through the federal charter schools program severely limits efficient scaling by highly effective charter schools.

Facilities

Related to the lower level of funding for charter schools is the lack of school facilities. Charter schools typically do not receive facilities funding and unlike districts, cannot raise funds through taxes, so many must dip into their operational funds to address facilities needs. Some states offer some type of facilities aid—such as right of first refusal for unused school buildings or specific facilities allotments—and the federal Department of Education provides facilities assistance through grant and credit enhancement programs. Still, these programs have proven insufficient to address the great facilities challenges and funding shortages that many charter schools face.

Governing boards

Because the great majority of charter schools are run as independent non-profit organizations, they must be overseen by governing boards—the bodies that actually hold the school's charter. The recent increase in the number of CMOs and "education management organizations," CMOs' for-profit cousins, has brought to the fore a unique challenge of scaling under this governance structure: in some states, a charter management organization that operates several schools must recruit different board members for each of its schools. Finding qualified and dedicated members to serve on a charter school board is difficult for most individual charter schools, but particularly for EMOs and CMOs, which often operate dozens of schools. The governance structure in most states follows this model, which is too antiquated to efficiently address the reality of operations for charter management organizations.

Several new policies and reforms of existing laws and regulations can help accelerate the work that some states and districts have begun to address these obstacles within the charter sector. Many of these solutions have been well documented in other charter-specific publications—including raising, modifying or eliminating caps on the number of charter schools or the number of students they can serve in exchange for greater accountability by all types of charter authorizers. States should revisit their charter laws to eliminate outdated provisions regarding the structure of governing boards for organizations that run multiple schools: For instance, could successful EMOs and CMOs appoint one board for a group of schools within the same geographic area? State leaders should also loosen the district monopoly on charter school authorizing to empower capable, independent boards with the authority to license and oversee charter schools.

There is also a federal role for providing more—and more flexible—charter school funding and increased access to facilities financing. States also must revisit their funding formulas for charter schools to ensure that money follows the child, so that students receive the same level of support regardless of the type of public school they attend.

often make it difficult for qualified applicants to obtain a charter, and infringe upon the autonomy of those that open (see sidebar, "A microcosm of education entrepreneurship").

In addition, several states' charter school laws and education codes prohibit or hinder technology-based—or "virtual"—education. Others prohibit schools that are based in a private home. These often well-intentioned laws may be interpreted to protect both the welfare of children and public funds. But in many areas, they combine to "make it impossible for a school that really does things differently to even exist," as Packard puts it. An education entrepreneur who develops a curricular program that can be delivered in part or entirely online would run afoul of many of these regulations, because students could interact with an instructor virtually from their home computer. And because most of these types of policies were based on traditional physical methods of counting student attendance, virtual schools and other innovations can also contravene state attendance policies because their students check into the school day from a remote location.

Human capital constraints

The primary aim of many education entrepreneurs is to increase the supply of high-quality teachers and principals in public education, and to help districts and CMOs better manage their human capital systems. Yet several policies at the state and district levels hinder entrepreneurial work.

Teacher and principal preparation and licensure

Colleges and universities serve as the sole trainers and certifiers of teachers and principals in most states—and state statutes often secure this role by authorizing only these institutions to provide educators' licenses. Even where alternative programs are able to provide training for teachers or principals, state funding and regulation of college and university programs perpetuates a significant competitive disadvantage for entrepreneurs who seek to implement a new model of teacher or principal preparation.

Successful educational entrepreneurs in the human capital arena have shown that innovations in teacher training can increase the number and quality of teachers who are specifically prepared to work with students who face unique challenges—including those in charter schools, high-poverty or high-needs schools and rural communities. But many traditional teacher education programs and state and district leaders have been resistant to alternative teacher certification programs that are designed to provide this training, despite the fact that these routes now provide approximately one-fifth of all new teacher hires each year.

One entrepreneurial organization that has faced this type of resistance is The New Teacher Project, which trains teaching candidates from non-traditional backgrounds for work in high-need schools through its Teaching Fellows programs, which operate in 15 states. In most of those locations, TNTP must partner with a local university to offer teaching licenses for its program graduates. This partnership is necessary under many state laws despite recent studies suggesting that TNTP's own certification program produces graduates who contribute to greater learning gains for their students than graduates of many other traditional programs.

The monopoly of education programs currently in place also creates barriers to the entry of talented teacher and school leaders. The extensive course requirements, costly required tests, lengthy application process, and burdensome paperwork all deter many promising candidates from ever pursuing a teaching career. Many of the entrepreneurs we spoke with would accept and even welcome these requirements if strong evidence showed that they correlate with improved performance in the classroom. Instead, the available research suggests that they are only weakly related, if at all—and as a result, they serve largely to complicate candidates' entry into education and constrain entrepreneurs' efforts to break into the education monopoly.

Bias against outsourcing

A significant barrier to change in schools and school districts is a preference for carrying out tasks in house rather than outsourcing them. In the case of teacher recruitment, for example, the competition faced by an organization like The New Teacher Project comes less from other teacher recruitment organizations than from districts' standard decision to carry out their recruitment and hiring with an in-house human resources department. Data services vendors like SchoolNet face some competition from other entrepreneurial contenders, but their primarily rival is still districts' use of their own employees to handle the work of data gathering and analysis.

As described above, this bias is partly structural: budgetary rules and processes, collective bargaining agreements, and other hard constraints prohibit or make it difficult for districts and schools to choose entrepreneurial provision of key services. Nevertheless, the bias is also cultural, rooted in a strong set of norms about the way schools and districts should

Nontransferable retirement benefits

One major challenge to effective human capital management in the entrepreneurial sector— particularly in charter schools—is teachers and principals' inability to transfer their retirement benefits between district and charter schools. In some states, teachers and principals in charter schools do not have the option of participating in the state pension or insurance systems; in others, the benefits that educators accrue during their service at a charter school are not transferrable if they return to a traditional district school. Pension and retiree health insurance benefits make up a significant portion of these educators' total compensation, and they can significantly affect their career decisions. The nontransferable nature of these benefits creates a serious barrier to the flow of talent in both directions—from district schools to charter schools and vice versa—which, in turn, curtails an important avenue for charter schools to influence district practice in positive ways.

Seniority provisions in collective bargaining agreements

Many districts' collective bargaining agreements contain provisions that offer teachers preferred assignments and job security based on the length of their service in the classroom, with little regard for their contributions to student learning.[8] "Last in, first out" rules mean that new teachers can be the first to be fired, regardless of how well they teach. And in many districts, new teachers face the risk of being "bumped" from their position if a more senior teacher wants their job. These provisions can undermine the work of entrepreneurial organizations that seek to recruit and retain excellent teachers, particularly in low-performing urban schools. Because these organizations often recruit candidates who are especially committed to serving at-risk students, a job in just any school often won't do. The provisions can also cause difficulty for entrepreneurs trying to articulate a compelling value proposition to talented graduates or career-changers who face losing their job or their position regardless of their success in the classroom.

Several new policies and reforms of existing laws and bargaining agreements can help accelerate the work that some states and districts have begun to address these obstacles. Some of these solutions—including modifying or removing seniority and transfer provisions in district collective bargaining agreements—have been well documented in other publications.[9] As states examine their retirement benefits systems in light of the recent financial downturn and the demands of a changing workforce,[10] they should also consider the effects of teachers' benefits on recruitment and staffing stability in local charter schools. To address the monopoly over teacher licensure programs, states can also revise existing legislation to allow non-university providers to train and license teachers and principals.

carry out their work. The combined power of these hard structural constraints and the softer but still important cultural norms creates an inertial force that results in continued use of in-house services even when strong, more effective entrepreneurial providers are available. “Rather than holding all providers accountable for outcomes and recognizing the one that produces the best gains, we are bound by policies that automatically provide contracts to organizations that have been doing it the same way for a very long time,” says Sarah Usdin of New Schools for New Orleans.

State and district adoption processes

States and districts do look outside the central office for some tools and services, such as curricula, textbooks and assessments. But the contracts for these tools typically are developed according to state and local policies that favor established monopolies over the innovations of new entrepreneurs.

Textbook adoption policies are a prime example. A handful of large education publishers dominate the textbook publishing market, making it extremely difficult for smaller entrepreneurs to gain traction. Pearson, McGraw-Hill, and Houghton-Mifflin/Riverdeep—the “Big Three” textbook publishers—control almost 85 percent of the K-12 textbook market.[11] State textbook adoption policies inadvertently reinforce this monopoly by engaging adoption committees who are often inclined to seek out the least offensive material or books that cover the most material on the state standards list—not necessary the most accurate, engaging, or likely to meet student needs.

Nearly half of the states, including California, Texas and Florida—which, due in part to their size, have considerable sway over the rest—require committees to decide which books can be used in public schools. Even states without such committees often use the same books as the ones that are tailored for the larger states.[12] A widespread penchant for the familiar, established and relatively risk-free publications by the Big Three, together with the arms-length contracting processes described in the next section, make it very difficult for a small entrepreneurial provider who offers new content, methods and approaches to break into the decentralized purchasing environment of K-12 public education.

School-level staffing

Due to several state policies, provisions in local collective bargaining agreements, and the norms of a people-centered sector, education leaders are typically inclined—and in many cases required—to define tasks and processes by the people who will carry out or oversee them.[13] When the federal or state department of education or a local district implements a new program, for example, many times the only way to carry it out is to hire or reassign staff. This has a variety of implications for entrepreneurs, who in many cases could carry out these new tasks more efficiently or effectively than traditional staffing arrangements. These policies also affect the level of demand for new services among schools and districts, and we explore more specific barriers and potential policy solutions to this challenge in the next section.

Policy approaches

Several new policies and reforms of existing laws and regulations will help accelerate the work that some states and districts have begun to open the public education marketplace to a larger and more diverse set of providers.

One overarching solution is for the federal and state governments to invest significantly in the growth and expansion of highly successful networks of charter schools via many of the methods suggested in the sidebar titled "A microcosm of education entrepreneurship." Charter networks are in some ways an entrepreneurial cousin of the traditional district office and require most of the same services—from teacher recruitment and hiring to curricular materials and assessment tools. But these networks are arguably much more inclined to outsource these products and services than their district relatives. As innovators themselves, they are likely to view new products and services more favorably and to adopt internal policies that foster collaboration and customization with a variety of external providers. Growth and replication of successful charter management organizations would therefore not only provide a greater number of students with a high-quality education, but would offer a powerful method for driving innovation in other products and services as entrepreneurs gain access to a growing market of customers eager (and legally able) to outsource.

Many other solutions involve specific policy changes to loosen certain regulations that are largely outdated. Whether or not by design, these regulations too frequently slow existing providers' growth and deter new players from entering the field.

Loosen the district monopoly over school operations and oversight

Many of the best solutions to foster more growth in the charter sector have been well documented in other publications. These include empowering new, independent boards with the authority to license and oversee charter schools, and raising, modifying, or eliminating caps on the number of charter schools or the number of students they can serve in exchange for greater accountability for schools and all types of authorizers (see sidebar, "A microcosm of education entrepreneurship"). States also must revisit their funding formulas for all public schools to ensure that money follows the child—so students receive the same level of support regardless of the type of public school they attend. In addition, the entrepreneurs we spoke with suggested relatively straightforward solutions to remove the barriers to innovation in the delivery of educational content: State policymakers should review local education codes and charter or cyber school laws for unnecessary constraints upon the location or delivery of schooling.

Students, for example, could be permitted to enroll in a school from any location within the state, rather than only from within certain attendance boundaries. They could attend school via online or other methods, rather than pen and paper alone. The best state laws would be silent on these types of issues, requiring only those conditions that are necessary for students' health and safety, and leaving room for innovation in the particular methods schools and providers use to provide an excellent education. Strong accountability provisions at the state level and the types of sophisticated performance data recommended above become particularly important in this context, to allow states to evaluate the success of all types of providers based on their success with students.

Reform adoption processes for instructional materials

To broaden the market for instructional materials, state policymakers should revise adoption guidelines to create incentives for quality and demonstrated effectiveness rather than security, breadth, and size. States could authorize districts or consortia to make the case for adding high-quality textbooks to the state's list of approved materials—or entrust districts, schools, and even teachers with funding for and decision-making authority about the purchase of instructional materials. As described in the next section, states could also revise their adoption policies to enable districts to commission products that are tailored to their needs—and they could participate in the development process—instead of purchasing only those materials that have been developed in advance (and often in response to needs of another state). As Larry Berger of Wireless Generation suggests, "this type of development process would enable a district or school to say, 'this is what we need' and seek out providers to make it for them, instead of purchasing a pre-fab thing."

The federal government also has a role in supporting states in their choice about instructional materials. Washington could target grant funding to create demand at the state level for materials and assessments in core subject areas, as it has with the Reading First program.[14]

Allow non-university providers to train and license educators

States can start to address barriers to innovation in the preparation and licensure of teachers and principals by revising existing legislation to allow non-university providers to train and license teachers and principals.[15] A handful of states have recently begun to allow individual schools (including charter schools) and districts to license teachers without a university partner. An additional step for state policymakers would be to tie accreditation or funding for teacher and principal preparation programs to their graduates' results in their schools and classrooms. Louisiana and Tennessee have led the nation on this front by using value-added student achievement data to calculate teachers' impact on their students' learning, and then tying those results to the university or alternative program where the candidate received his or her training. These states' programs may serve as useful models for other states with similar capacity to calculate teachers' value-added gains. But even in states that currently do not have the capacity to put student achievement results to use in this way, policymakers could take a great step forward by opening the pool of potential providers beyond colleges and universities, and holding every program accountable for its ability to provide talented graduates for local classrooms.

Make districts and other buyers into real "customers"

Even when monopolies and oligopolies do not fully block entrepreneurs' access to markets, a host of other restrictions on how school agencies receive and spend money make it very difficult for entrepreneurs to win viable contracts.

Barriers

Spending restrictions

Federal, state, and local budget systems typically allocate dollars to districts and schools based on line-item budgets that largely center on programs and the allocation of staff—teachers, principals, and others—rather than the services that the district or school provides—such as math instruction, professional development, or assessment.[16] These allocations can be explicit, such as in-state funding programs that allocate a certain number of positions to districts to carry out particular functions, and requirements that unused funds be returned at the end of the year. Or they can be indirect, such as in class size mandates that in effect require districts to hire a certain number of full-time equivalent employees to meet the class-size target.

Many of these restrictions are well intentioned, designed to drive funds out of administrations and into classrooms where, presumably, they can have a greater effect on students. But the result is that almost all district and school resources are tied up in required programs and staff positions, and many investments that would be best made at a more centralized level cannot be. Because these policies have been in place for so long, many education leaders have also begun to view their staff costs as irrelevant to total expenditures. As J.B. Schramm of College Summit explains, "when we talk with districts about how much a particular service costs, they don't even include staff costs in the calculation."

For an entrepreneur trying to convince school officials to buy a service, this structure is a major hindrance. A district may be spending millions of dollars on an activity—for example, data gathering and analysis—but those millions will come not in a flexible form. Instead, the money will flow in the form of dozens of staff positions and other required expenditures across many regions and schools. The district cannot simply convert those resources into dollars in order to contract with an entrepreneurial provider. It will simply continue to carry out the work in-house, even if a better solution exists elsewhere.

A related consequence of this system is that district and school officials often have little idea what it costs to conduct different kinds of activities. When an entrepreneur approaches them offering to provide a service for a given price, officials have little basis on which to judge the value proposition. Entrepreneurs' sales pitches are likely to fall on deaf ears.

Well-intentioned but rigid procurement regulations

Even when districts do have funds to spend on outsourced services, they typically must go through procurement processes prescribed by state or district policies in order to get contracts. Of course, these processes were designed primarily to protect the public interest by preventing officials and vendors from engaging in fraud, influence-peddling, patronage, favoritism, and other forms of corruption. As Berger and Stevenson (2008) point out, "every sales process has obstacles between the seller and buyer, and in cases where public procurement is involved there may be some needed formal obstacles to ensure the integrity of purchasing with public funds."[17] But in public education, entrepreneurs report that these obstacles are particularly impenetrable and too rarely related to real protection of public funds.

To prevent public officials from developing cozy relationships with vendors, procurement regulations typically require thoroughly arms-length dealings with potential vendors. This arrangement can work well when a district is buying a well-defined service or product that already exists in the market, such as pencils or landscaping services. It creates problems, however, when districts need vendors to create something new, such as a data analysis system or a new model of professional development. In these cases, officials could ideally have much more robust and ongoing contact with contractors and potential providers than typical procurement regulations allow.

Slow buying cycles

Most procurement processes follow timelines that would be unthinkable in most other sectors—Berger and Stevenson report that for Wireless Generation, many sales "are four years in the making. Our average sales cycle is about eight months to get some of the schools in the district as customers and about 18 months to expand to the whole district."[18] This timeline results from a combination of state budgetary systems and a bureaucratic approval process within most state and district education offices. The cycle grants an enormous advantage to large providers with greater reserves on hand; it also raises serious challenges for most entrepreneurs who must raise funds to create their product and run basic operations, and reassure investors that they have produced a product or service that will be viable in the marketplace.

Multiplicity of buyers

Another feature of the landscape that favors large established providers is the decentralized nature of school system governance and, thus, procurement. Decentralized purchasing does have a positive effect on entrepreneurship in some cases, because it allows start-up organizations to gain a foothold in areas where they might not be noticed in a more centralized system. But with nearly 15,000 local, county, and intermediate school districts in the country, an organization that wishes to sell a product or service beyond one district or region faces an enormous sales challenge. In addition, most districts are small and therefore potentially unattractive customers for growing ventures, which need larger contracts in order to cover the costs of research and development and growth. The same goes for the charter management organization market.[19] While CMOs are more interested in outsourcing, the rapidly multiplying number of still-small CMOs does not, individually, make an attractive customer base for an organization that needs larger contracts.

Inability to make "investments"

Finally, public budgeting processes make it difficult for officials to spend money now in order to save money or achieve some valued result later. Yet this kind of "investment" thinking is often exactly what is needed in order to innovate and engage entrepreneurs. Wireless Generation's Larry Berger noted in our interview that organizations could help districts reduce the number of students ultimately receiving special education by offering early preventive interventions. If successful, such services would ultimately save money for whatever agency pays for special education—even though the savings would not kick in for several years. Yet districts have few tools to make this kind of investment. Special education funds must be spent on children already identified with special needs, and there is no mechanism to borrow against future expected savings. The same problems apply to more ancillary parts of the education enterprise, such as facilities maintenance.

Prevention is just one "investment" that entrepreneurs could contribute to public education. Another is research and development work that, while costly now, could pay off in the long run—financially or otherwise. An investment now in revamping data entry and analysis systems could, over a period of years, decrease the costs of today's paper-based systems in ways that ultimately pay for the investment. But again, districts have few tools to make longer-term bets of this nature.

Even more daunting is a class of potential investments that, if successful, would pay off—but not for the K-12 public education system itself. Implementing well-designed health and wellness education in public schools could reduce long-term health costs. That money would be saved not by school systems, but rather by other agencies, individuals, and companies. Improved high school instruction could also pay off in a reduced number of remedial courses—but that benefit would be seen at the postsecondary level, not in a public K-12 system. Making investments with this kind of cross-institutional payoff presents even more challenges than investments with direct financial benefits for the public K-12 system.

Finally, even where innovative investments are already being made, information about successes and failures is not currently shared in such a way as to empower school, district, and state leaders with information about how to invest in similar ways in their own communities.

Policy approaches

Provide resources as flexible dollars wherever possible

The most important policy recommendation on this issue that emerges from our interviews is for federal and state policymakers to denominate resources as dollars so that districts and schools can spend the money in ways that meet their needs most effectively—including entrepreneurial provision of services. As noted above, funding streams that are primarily based on full-time equivalent employees often tie dollars to structures that are not most beneficial for students, and they make it difficult for schools and districts to respond effectively to changing needs and circumstances.

One way to achieve greater spending flexibility would be for states and districts to adopt a system of "weighted student funding," in which each child's district or school receives a certain amount of funding based on the student's characteristics and then can spend those dollars flexibly. While our angle here is how to break down barriers to entrepreneurship, this idea of making education resources more fungible has been suggested in other contexts to meet a variety of policy goals, such as reducing funding inequity, empowering local officials to meet specific needs of their student population, and making financial systems more transparent.[20]

A more flexible financing system would have several potential benefits. First, it would make it more possible for state and local policymakers and service providers to understand their current cost structures, and to compare the value of various programs. This, in turn, could make entrepreneurs' value propositions more attractive compared to the status quo—if they are offering good value for the money. Flexible financing would also make it possible for districts and schools to consider restructuring or outsourcing certain functions and services that are now locked up in staff allocations and program line items. One U.S. district, for example, recently negotiated an agreement with the local teachers' union to tailor class sizes more closely to teachers' and students' needs: Schools could assign additional students to classes with highly effective teachers, and reduce teaching loads for others. This agreement, which relieved schools of across-the-board class-size requirements, eliminated the need for additional teacher hires and freed up funds that were then awarded to highly effective teachers in the form of performance bonuses. In other circumstances, it may be preferable to allocate dollars not to personnel, but to technology, curricula, or other resources that go beyond direct instruction to increase student learning.

Ultimately, federal and state policymakers should seek to loosen spending restrictions so that districts and schools are free to use funds in ways that will get results for students. While this may well include lowering class sizes in some cases, it could enable numerous innovative solutions as well.

Reform procurement process and regulations

While most procurement regulations have some public interest rationale, it is likely that they could be greatly improved without undermining sensible restraints on corruption. The two main ways that procurement reform could help entrepreneurs are by speeding up buying cycles and by allowing for sensible public-vendor collaboration when needed.

A primary policy tool that state and local policymakers can use to speed up buying cycles is to replace up-front process requirements with after-the-fact transparency and the possibility of audits. One of the aims of procurement regulation is to ensure that public agencies receive services and products for the best price available. Currently regulations try to realize this goal by requiring public officials and vendors to go through elaborate processes up front in which requests for proposals are created, released for comment, revised, and released in final form, and bids are taken, vetted, perhaps retaken, and so on. All of these process steps take time, making the system unviable for small operators and delaying the value of the procurement to schools and students. A more streamlined system would allow the purchase to move more swiftly. In place of the procedural safeguards, agencies could instead be required to make public extensive information about their buying process, which state officials could then randomly audit as a deterrent.

State policymakers should revise procurement regulations to eliminate unnecessary requirements for arms-length transactions to allow for collaboration between schools, districts, or states and service providers. When districts need a vendor to create an original or customized product—such as a data analysis system or a new model of professional development—procurement guidelines could allow more robust and ongoing contact between district officials and potential providers, with increased transparency and potential audits to ensure fair dealing.

In addition, state policymakers can begin to build on the open-source concept in computer technology, as Berger and Stevenson (2008) suggest, to enable districts and contractors to bypass many procurement barriers and engage in real-time collaboration.[21] Freely available curricula and other tools—such as professional development, instructional resources, and data analysis software—are increasingly possible with today's technology. The other reforms suggested here, including fungible resources and increased use of and access to high-quality data, would help enable the growth and adoption of these types of innovations.

Use standards to reduce the "multiple buyers" problem

One solution to the decentralized nature of education and procurement is to consolidate spending. If states were in charge of more of the educational delivery system, entrepreneurs would face a more attractive market with fewer, larger buyers. This was a primary reason why the federal Reading First program created a more viable market for many entrepreneurs. By allowing states to reserve more of the federal funding at the state level than is typical of federal programs, Reading First made states—instead of districts or schools—buyers of many services.

But centralization raises its own challenges for entrepreneurs, especially new and small ones without established relationships with larger buying entities. And it creates other potential problems as well, such as inflexibilities that arise from one-size-fits-all purchasing decisions. An appealing hybrid, therefore, may be one in which districts and schools remain the buyers, but higher agencies such as states create standards that must be met by vendors. Like technical and interoperability standards within the realm of information technology, ideally these standards would remain relatively lean, to allow for many different ways of reaching the same goal, while establishing a common platform for quality and coordination. They would also be dynamic, rather than fixed, so that entrepreneurs and other providers could continue to propose "next generation" standards that would enable programs to evolve in response to changing needs and capabilities.

Common standards could also enable states to distribute lists of approved vendors to districts and schools. In Florida, for example, the state recently mandated that every district establish a virtual schooling option for students. State policymakers supported this requirement with an approved vendors list, so that districts could choose from a set of certified providers. This type of approach to virtual education and other innovations has the potential to enable greater aggregation of demand, thus simplifying the buying tasks for districts and the sales tasks for entrepreneurs. But it also retains many benefits of local choice and control, while allowing the state to maintain an appropriate quality control and gatekeeping role.

Encourage the formation of intermediaries to make insurance and investment more feasible

Since districts face difficulties making investments in prevention or development activities that would pay off later, it is worth considering whether federal and state policymakers, or private actors, could address this challenge the way it is addressed in so many other domains of the economy: by creating financial intermediaries that solve the problem. While early 2009 may not be an auspicious time to suggest new financial instruments, there are real possibilities for institutional innovation that could have an effect not just on entrepreneurs, but ultimately on students as well.

Intermediaries in public education could mimic the forms already present or proposed in other public sectors—such as fiscal agents in the non-profit sector and wellness trusts in health care.[22] While we cannot settle all the details of how such an intermediary would work in education in this report, we offer two scenarios as illustrations.

First, philanthropists or federal and state policymakers could seed the creation of "insurance" funds in public education that would make investments in prevention possible. When students are diagnosed with learning disabilities, for example, districts incur added costs to provide them with special education, often in excess of additional reimbursements they receive from state and federal funding programs. An insurance fund could be created to pay these excess costs for district "customers." To obtain this insurance, a district would have to do two things: pay a premium out of current dollars, and meet the fund's "underwriting" standards. In its underwriting, the firm would presumably look for evidence that the district was taking research-based steps to prevent students from developing preventable learning disabilities. Districts with more vigorous prevention efforts would enjoy lower premiums. Because of the potential savings, districts would be on the lookout for entrepreneurs with promising prevention programs—and be willing to pay for them. If well managed, these funds would be self-sustaining over time. Seed money, however, would be helpful to cover start-up costs and to provide an initial pool of risk reserves.

Second, philanthropists and federal and state policymakers could seed the creation of investment funds that would underwrite potentially cost-saving developments by districts working in concert with entrepreneurs. As with any investment fund, the district and its partners would need to make the case that an investment of so many dollars now would return a stream of savings over time, out of which the investment or loan could be repaid. The fund would need to charge a sufficient rate of interest or premium to accomplish two purposes: cover its own costs, and build up a risk reserve that would provide a cushion against losses that would inevitably result from time to time when investments did not have their intended cost-savings effects. Like the insurance funds, these investment pools should be self-sustaining over time, but up-front seed money could help get them established.

Use public policy to encourage financing for entrepreneurial ventures

In addition to using funding structures that are ill-suited to support new innovations, federal and state financing systems underfund and too often ignore entrepreneurial ventures in education. A lack of public investment for innovative start-ups and increased research and development tends to perpetuate a "scarcity mentality" among many educational entrepreneurs, who must perpetually seek out new funding instead of focusing on their core organizational mission.

Barriers

Lack of public financing for start-up and R&D

In the public education sector, few dollars are available for start-ups, new tools, or delivery systems—all of which entail extra up-front development money. In other public sectors, such as national security, aerospace, clean energy, and the Internet, public funds have increasingly been made available to encourage innovations from problem-solvers outside the traditional system of providers. But these efforts are largely absent from K-12 education.

Overreliance on inadequate philanthropic "capital markets"

In the absence of dedicated public financing, educational entrepreneurs have typically relied heavily on financial support from the world of philanthropy and private investment. Several education entrepreneurs have turned to private and non-profit capital markets for start-up and development costs.

But as Smith and Peterson (2006) and others involved in the private and education sectors have described, the capital market for education entrepreneurs lacks many of the elements that make the capital market work for entrepreneurs in other industries—such as shared definitions of "success" and a large and diverse pool of capital providers.[23] As explained previously, without a clear definition of success and stronger information about performance, funders have too little information available to help them make decisions about the best investments in the education sphere. As a result, many spread their available funds thin among multiple ventures, or rely too much upon the character of entrepreneurial leaders. As one funder put it, "in the absence of good, quality data, relationships matter too much."

The inadequacies of the current capital market in education also preclude funders from encouraging activity around mergers, acquisitions, and the exit of ineffective providers that are commonplace in more robust capital markets. As a result, the public education sector tends to support a continuing proliferation of new initiatives instead of an ever-improving set.

Finally, while many foundations, including Casey, Gates, Broad, and others, have made considerable contributions to education innovation and entrepreneurial exploration, these investments are typically not meant for the long term. In many cases, funders do not wish to be the sustaining source of support for their grantees for the duration of their work.

Policy approaches

Design public funding programs in ways that foster entrepreneurial involvement

The federal government provides numerous funding streams to states and districts; states add in further funding streams that flow to districts and schools. Federal policymakers can foster education entrepreneurship by designing these funding streams in ways that allow, or even encourage, the ultimate recipients to tap entrepreneurial providers when carrying out the grant-funded activity.

One example of a program designed this way is Reading First, which required states to implement (and provided funding for) early reading assessment and data systems that met certain specifications. That requirement and funding in turn induced states to turn to entrepreneurial organizations in carrying out the mandate, fueling the organizations' growth. Similarly, under the Teacher Incentive Fund, which uses a competitive process to award grants to districts in support of performance-based teacher and principal compensation programs in high-need schools, grant recipients faced the need—and had the funding—to reach out to entrepreneurial organizations such as the Teacher Advancement Project, which offered readymade teacher compensation and evaluation approaches that met TIF's requirements.

In both of these cases and numerous others, the key ingredients of the grant programs that supported entrepreneurship were strong mandates that required state and district recipients to meet a high bar for implementing well-designed programs, and clear grants of spending flexibility to states and districts to hire entrepreneurial providers that could help them meet those high standards. By designing other funding streams in a similar fashion, federal policymakers can make it much more viable for districts and states to turn to qualified entrepreneurial ventures for help.

Engage entrepreneurs as "parts of the puzzle"

Many of the policy solutions we offer here are focused primarily on fostering widespread innovation in public education—letting a "thousand flowers bloom" with a variety of solutions to address the most vexing problems in the sector. Yet some policymakers may pursue initiatives in public education more like America's mission to the moon in the 1960s: highly organized and high-profile efforts to address a particular challenge. One example of this is the interest in some quarters in efforts to build a world-class national assessment system and companion state data-warehousing capacity to gather and securely share a wide variety of interlinked information about student learning.

Entrepreneurial organizations can be integral to these large-scale ventures. While government agencies may be best suited to set the goals for and oversee such large initiatives, contracting with outside organizations may often be the best way to carry out the actual work. And since moonshot-like initiatives involve more than the implementation of already tried-and-true approaches, entrepreneurial contractors may be particularly valuable contributors.

Invite intermediaries to invest in education innovation

While advocates of education entrepreneurship disagree about whether public or philanthropic funds are best suited to support *new* entrepreneurial start-ups, many agree that public funding—at either the state or federal level—would be highly effective at scaling innovative programs that have a record of success. Several leading thinkers and education entrepreneurs have recommended the creation of a federal "grow what works" fund to recognize and invest in educational entrepreneurs that already have demonstrated results.[24] Such a fund could make strategic investments in proven models, leverage the power of other funders and intermediaries, and hold grantees strictly accountable for their results. Existing federal grant programs to states could also include discretionary funds for programs that work and promising new ventures at the state level.

Directing investments in this way would not only communicate an important commitment to smart innovation, but it would also greatly enhance the ability of the most promising educational entrepreneurs to achieve scale. In addition, an increase in the number of intermediaries would likely help address the barriers to consolidation raised in the previous section—as funders sought to invest in entrepreneurs to tackle a particular challenge, they could also encourage sensible mergers and acquisitions, while keeping options open for start-ups to fill new niches.

As New Leaders for New Schools co-founder Jon Schnur puts it: "Funding streams do not reward things that are working to get greater scale. Right now, organizations have to demonstrate additional inputs in order to get additional funding. What if we were to say instead, 'you are getting results and serving more kids and serving kids better and therefore you get more funding?'"

Locally based intermediaries that provide financial and other types of assistance to education entrepreneurs are also an important piece of the puzzle. Organizations such as The Mind Trust, based in Indianapolis, provide financial support to help new entrepreneurial start-ups and scale proven models. In addition, these organizations can also serve as local advocates for promising innovations, helping entrepreneurs navigate bureaucracies, forge partnerships, and advance policy reforms on a local level. Investment in these types of intermediaries can help channel both public and private dollars toward promising and proven models, and support on-the-ground assistance to help them thrive.

Develop models of performance-based operating funding

One way to reward performance is to make investments in successful entrepreneurial organizations so they can grow. But some of our interviewees suggested an even more direct form of performance-based funding: federal, state, and local policymakers could design ongoing funding streams that are contingent upon outcomes. As Joe Keeney and Daniel Pianko suggest, contingent funding could take the form of explicit bounties or prizes for outcomes achieved.[25] Districts, for example, could receive a monetary reward for each of their graduates who goes on to enroll in postsecondary education, which would in turn encourage them to seek entrepreneurial partners willing to provide services in the hope of a share of these contingent rewards. On the other hand, some interviewees argued that such purely contingent funding would make it difficult for entrepreneurs to build organizational capacity, since their revenues could swing widely due to factors that are, at least in part, outside of their control.

In the abstract, it is impossible for policymakers to know how much of this kind of contingent risk entrepreneurs would be willing to tolerate. One way to handle that uncertainty would be for public agencies to use auctions to set the "right" level of risk. Entrepreneurs could bid on the level of funding they would require to provide a given service, and the proportion of the fee they would be willing to let ride on the outcomes they achieved. Among qualified bidders, agencies could choose the set of providers that gave them the best expected results for the money.

Catalyze private investment by creating new organizational forms

The current generation of educational entrepreneurs has chosen both for-profit and non-profit forms to pursue reforms in public education. But in practice, their work increasingly blurs the lines between the non-profit and for-profit structures. Federal and state policymakers could enable a new organizational form—supported by changes in relevant tax policy—to respond to these changes and help encourage new innovation. As Ted Mitchell of NewSchools Venture Fund suggests, "we could unlock much more private capital in the education sector if investors could rely upon a greater potential for financial return to accompany the social return. More favorable tax treatment of their investments would make it more beneficial for individuals and organizations to invest in these entrepreneurial organizations in education."

This type of reform has already been proposed in North Carolina. Recent legislation would create a new "Low-Profit Limited Liability Partnership Company" or L3C, which would be permitted to generate a modest profit while pursuing charitable or educational goals. This new tax structure would make it much easier for foundations to use loan guarantees and program related investments, or PRIs to invest in for-profit organizations whose main goal is to bring about public reforms.[26]

Overview of recommendations for federal, state, and local policymakers

Recommendation	Actor		
	Federal policymakers	**State policymakers**	**Local policymakers**
Use dramatically better information to foster a performance culture	• Encourage the formation of a consortia of states that could agree to adopt a core set of common standards • Commission the construction of multiple quality indices at the state level, including collection and reporting standards	• Participate in a consortia of states that adopts a core set of common standards • Invest in improvements to state data systems to enable better tracking of multiple quality indicators, including management data	• Invest in improvements to local data systems to enable better tracking of multiple quality indicators, including management data
Open the public K-12 system to a diverse set of providers	• Redirect existing funding streams to support the growth and expansion of highly successful networks of charter schools as well as other providers who are creating alternatives to K-12 exclusive franchises	• Review education codes and charter or cyber school laws for unnecessary constraints upon the location or delivery of schooling • Revise textbook adoption guidelines to create incentives for quality and demonstrated effectiveness; empower districts, schools, and teachers with greater decision-making authority over instructional materials • Revise legislation to allow nonuniversity providers to train and license teachers and principals; tie accreditation or funding for preparation programs to their graduates' results in schools and classrooms • Invest in the growth and expansion of highly successful networks of charter schools • Revisit funding formulas for all public schools to ensure that money follows the child	• Transform school districts into portfolio managers, operating schools via multiple arrangements with different providers
Make districts and other buyers into real "customers"	• Seed the creation of "insurance" funds to enable investments in prevention • Seed the creation of investment funds that could underwrite innovative and potentially cost-saving practices	• Revise funding formulas to enable money to follow the child • Create meaningful standards or approved vendor lists to facilitate contracting at the local level	• Act like a quality-oriented buyer, always seeking out the best ways to accomplish core tasks, whether in-house or via contractors • Speed up local procurement cycles by replacing up-front requirements with after-the-fact transparency and audits
Use public policy to encourage financing for entrepreneurial ventures	• Design grant programs with strong quality standards and clear grants of spending flexibility • Revise relevant tax policy to encourage formation of "hybrid" for-profit and non-profit entities • Reallocate resources to a "grow what works" fund to recognize and invest in proven innovations	• Integrate performance-based funding into existing and new local grant programs • Reform state corporation and tax laws to enable formation of "hybrid" for-profit and non-profit entities	• Integrate performance-based funding into existing and new grant programs

Conclusion

In addition to the recommendations outlined above, four overarching themes arose from several of our interviews. First, a critical state and federal role in supporting educational entrepreneurship is using the "bully pulpit." The new administration has a critical opportunity to serve as a vocal advocate for the power of innovation to dramatically improve the education we provide our students. Federal and state leaders can help educate philanthropists and private investors about the success and potential of educational entrepreneurs, communicate a national commitment to support promising innovations, and provide a forum for addressing the barriers that hinder even effective ventures.

Second, policymakers at both the state and national level should consider inventorying agencies involved in the provision of services in public K-12 education, to assess and publicly report upon each agency's openness to entrepreneurship and the status of its current performance metrics. They should conduct a similar exercise with regard to longstanding rules and practices that may have once made sense but that today impose too great a burden relative to the benefits they convey. These assessments should be both public and actionable—leading to meaningful, practical improvements within state and national agencies.

Third, while we have focused primarily on the role of state and federal policymakers—to spur local action, target funding, build and revise policies—there is a critical role for private funders to play in supporting greater innovation as well. Foundations and private investors could help jumpstart many of these proposals by providing seed funding for new initiatives and co-funding alongside publicly financed ventures.

Finally, it is important to note that although some of the recommendations above would involve significant changes at the local, state, or federal level, they are based largely on continuation of the traditional structures in public schooling, such as school-based instruction. They generally are designed to make that existing set of arrangements more conducive to entrepreneurship. By carefully revisiting these institutional assumptions, policymakers could begin to open up even more opportunities for entrepreneurship. As long as we imagine that almost all instruction will happen via teachers who work on-site with students as employees of a school district or CMO, there is only so much scope for entrepreneurial innovation. If, by contrast, states and districts allowed schools (or even students directly) to tap into instruction from a variety of sources—including new technology-driven solutions—that could be evaluated and replaced on an ongoing basis, there would emerge vast new opportunities for entrepreneurial activity on the supply side.[27] Just as government invested in the Internet's backbone, it could invest now in backbone platforms into which a myriad of entrepreneurial offerings could then be "plugged and played."

We should be encouraged and inspired by the current generation of educational entrepreneurs who have captured the public imagination, challenged our assumptions about what is possible in public K-12 education, and provided a higher-quality education to thousands of students. Recent federal efforts to identify funding for innovation in the 2009 American Recovery and Reinvestment Act suggest that policymakers today view entrepreneurial problem-solvers as a significant part of education improvement in the years ahead. Now is the time for state and federal officials to tackle the anachronistic policies and regulations that hinder these ventures. The recommendations we have gathered here from some of America's best innovators suggest several steps to make public K-12 education a more enticing and hospitable sector for social entrepreneurship. By removing barriers to innovation and reform, fostering an education system more sensitive to performance and quality, and providing greater support for entrepreneurship, we can spur the critical new solutions that we need to meet many of public education's greatest challenges.

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