

The Case for Educational Entrepreneurship: Hard Truths about Risk, Reform, and Reinvention

By Frederick M. Hess

Phi Delta Kappan, vol. 89, no. 1

To an unprecedented degree, this is the era of educational entrepreneurship. Unconventional thinkers have waded into the world of K-12 education, founded influential organizations, and upended conventions. They have developed new models for delivering instruction or recruiting teachers and have applied old-fashioned practices with inspired fidelity. While their efforts constitute a still-minuscule portion of schooling, they are responsible for many of the most exciting developments in 21st-century education.

Is this a good thing? What does it really mean? And what does it imply for policy and school improvement?

Consider Wireless Generation, a New York-based firm that provides schools with diagnostic software. The system operates on handheld computers, allowing teachers to diagnose student needs and chart progress while circling their classrooms. Growing Stars is a California-based firm that provides tutoring for American students using dozens of instructors based in Cochin, India. Able to hire educated Indians at a steep discount, Growing Stars and its competitors are charging Americans \$20 an hour for personal tutoring, less than half of the prevailing rate in much of the U.S.

Ventures such as these are among the most discussed in contemporary school reform—many are also among the most respected or most controversial. They include the KIPP Academies, K12 Inc., Teach for America, the Edison Schools, New Leaders for New Schools, Catapult Learning, Aspire Public Schools, and the New Teacher Project.

Entrepreneurship is a slippery notion. There is no universal agreement on how it should be defined. Jean-Baptiste Say, the French economist, explained two centuries ago that “the entrepreneur shifts economic resources out of an area of lower and into an area of higher productivity and greater yield.”¹ Here, with due credit to Peter Drucker, author of the seminal *Innovation and Entrepreneurship*, it may be most useful to think of educational entrepreneurship as a process of purposeful innovation aimed at improving productivity or quality. Rather than accept familiar arrangements as given, entrepreneurs question fundamental assumptions about what is possible.² This might mean harnessing a new innovation or employing overlooked and underused tools, ideas, or approaches. Some of today’s most prominent ventures, like the national Heritage Academies and the KIPP Academies, are resolutely “old-school” in their program design, emphasizing high expectations, respect, and discipline.

WHY ENTREPRENEURSHIP IS IMPORTANT IN EDUCATION

Today, our schools confront challenges that our education system was not designed, and may not be equipped, to handle. Arrangements that may have worked passably well 50 years ago no

longer suffice. Developed haphazardly over the course of two centuries, the status quo is unequal to the requirements of contemporary citizenship, higher education, or employment.

Decades of earnest efforts to reform public schools have shown remarkably little ability to substantively alter either routines or results, even when confronted with changing student demographics and needs. Tides of reform have rolled out and in and out again, with little attention paid to actually implementing new proposals or ensuring that schools and school systems are serious about them. A body of research, including my own volume *Spinning Wheels*, has critiqued the endless reform initiatives that sweep over education.³ Are the kinds of entrepreneurial efforts examined here simply more of the same?

The short answer is no. The problem of “spinning wheels” is caused not by innovation per se but by the failure to root innovation in coherent, focused organizations. Historically, the “spinning wheels” dilemma has been driven by the constant pressure on education to adopt promising reforms in order to reassure constituents that things are getting better. In organizations led by officials without the tools to compel cooperation, where keeping one’s head down is the safest path to professional success, implementation tends to be half-baked, and results are disappointing.

Successful entrepreneurs, on the other hand, build organizations populated by committed, self-selected team members. The ability to build strong, coherent cultures that foster commitment and trust is a critical determinant of entrepreneurial success. Sumantra Ghoshal and Christopher Bartlett have explained, “On the organizational trapeze, individuals will take the entrepreneurial leap only if they believe there will be a strong and supportive pair of hands at the other end to catch them.”⁴ The absence of such hands helps explain the plight of most reforms.

FROM AN INDUSTRIAL TO AN ENTREPRENEURIAL SOCIETY

Why is educational entrepreneurship, largely ignored for so long, now worthy of our attention? For starters, there is widespread agreement that, whatever the failings of the broader American economy, its astonishing performance and adaptability in recent decades have been fueled by entrepreneurial activity.⁵ In the U.S., more than a thousand new business ventures are born every hour of every working day.⁶ The National Venture Capital Association reports that in 2005, 182 venture capital funds attracted over \$25 billion in new investment.⁷

This dynamism has become an organizing principle of American life. In the 1960s, the Bureau of Labor Statistics reported that college graduates could expect to hold five jobs in the course of their lives. Those graduating from college today can expect to hold four jobs by the age of 30. Talented, energetic college graduates no longer automatically queue up patiently to scale a corporate ladder or take their place in a seniority-driven bureaucracy.

Advances in technology and communications have created new possibilities for autonomy, decentralization, and customization. In 1991, when the first charter school law was adopted, the Internet as most of us know it didn’t exist. By 2004, the U.S. Census Bureau reported that 61% of households had Internet access. In 1993, just 23% of households owned a computer. By 2004,

two-thirds did.⁸ The iPod didn't exist in 2000; by April 2007, more than 100 million had been sold worldwide. This technological revolution has created previously unimaginable communication and instructional opportunities.

In the education sector, changes in policy, including charter school legislation and the growth of alternative licensure programs, have made schooling more hospitable for entrepreneurs. As of 2002-03, more than 20% of public school districts had students enrolled in online courses offered by their schools.⁹ By mid-2005, 21 states had statewide online learning programs, and at least one virtual school was operating in almost every state.¹⁰

Similarly, the advent of meaningful educational accountability has made entrepreneurship newly feasible. For nontraditional provision of schooling or services to prove practicable, the providers must be held responsible for the results of their handiwork. Prior to the spread of sophisticated testing and benchmarking systems, the necessary tools simply did not exist.

MAKING ENTREPRENEURSHIP WORK

For all the stirring prose that business books devote to entrepreneurs, the truth is that entrepreneurship is a headache. It entails risks. It presumes that even smart, well-trained experts cannot anticipate needs, develop solutions, and ensure progress in an orderly fashion. Entrepreneurship is a bet on the power of imaginative, talented people. The secret of successful entrepreneurial efforts is the ability to attract and inspire talented risk-takers in a way that professional hierarchies and public bureaucracies do not.

I certainly do not mean to romanticize entrepreneurship. Most proposed ideas are flawed. Scholars estimate that 60% of all new products are abandoned before they ever reach the market, and nearly half of those that do reach the market don't pan out.¹¹ Nonetheless, opening the door to entrepreneurship is valuable in its own right, without resorting to illusions as to what lies beyond. The entrepreneurial promise is its capacity not only to unearth a Fred Smith or a Bill Gates, but also to benefit tens or hundreds of millions by encouraging these pioneers to build large-scale organizations that make high-quality, affordable parcel delivery or software available to all.

The assumption that entrepreneurial activity will improve education is questioned by professional educators and education scholars who deem the entrepreneurial premise counterproductive and misguided. They suggest that the potential benefits of entrepreneurial activity are outweighed by its attendant risks; they argue for the advantages of coordinated efforts to improve current practice, training, and resources. They prefer reform administered through public bureaucracies that draw upon the guidance of professionally sanctioned experts.

These two perspectives are rooted in distinct world views. One is skeptical of bureaucratic processes, conventional expertise, and consensus; the other places great trust in educational authorities and their existing corpus of knowledge. How should one approach this divide?¹²

SEARCHING FOR SOLUTIONS IS MESSY

Hesitant to contemplate “risky” alternatives when dealing with children, most education reformers—on the Right and the Left—prefer solutions that minimize risk. This inspires calls for smaller classes, “best practices,” more discipline, and other seemingly “risk-free” solutions. Even those who champion such proposals as school vouchers typically tout the results of positive studies as a guarantor of happy outcomes. Unfortunately, the assumption that reform can proceed fruitfully in this fashion is rarely informed by frank consideration of how expertise, research, and data are used and how progress unfolds in the larger world.

The entrepreneurial presumption, on the other hand, acknowledges that progress is messy, partly because workable solutions change over time. What worked in 1950 may not prove as effective in 2000. New ideas are, by definition, untested, and new solutions are going to emerge from trial and error. Clayton Christensen, coauthor of *The Innovator’s Solution*, has reported that, in over 90% of all successful new businesses, the strategy the founders deliberately adopted was not the strategy that ultimately led to success.¹³ Entrepreneurship rejects the notion that we can somehow anticipate the future and then race there in an orderly fashion. A key problem impeding progress is that our imaginations are constrained by what we already know. As Chris Whittle, founder of the Edison Schools, has observed, “There was a time in aviation when the propeller was the only way to move a plane forward. Designers could not envision getting beyond a certain speed with a prop. Then came jet engines, and the speed of airplanes doubled overnight and eventually tripled.”¹⁴

Examples of our limited ability to anticipate the utility of advances are legion. In 1861, German inventor Philip Reis created a primitive version of the telephone—but gave up when no one expressed interest and he couldn’t conceive of any viable commercial applications. Fifteen years later, American inventor Alexander Graham Bell had more luck. In 1902, Wilbur and Orville Wright were asked how long it would be before someone would first succeed in building a working airplane; they said probably 20 years. The very next year, they were the first to fly.¹⁵

The Edsel may be the most famous commercial flop of the 20th century. What many people forget is that it was the most carefully designed car in American automotive history. Its massive failure, despite extensive research and planning, led the Ford Motor Company to revisit its assumptions. The unexpected result was the Mustang—one of the most successful cars of the 20th century.

If it’s tough to anticipate which inventions will prove useful, when inventions will occur, or what products will be popular, it may be even harder to predict which ventures will succeed. In the 1880s, about 1,000 electric appliance companies existed in the industrial world. By 1914, just 25 were still around. In 1910, about 200 American firms were producing automobiles in the U.S. By 1960, just four of these firms were left standing. No one could have predicted in 1910 which firms would be standing 50 years later. These aren’t isolated phenomena; just ask anyone who failed to predict in 1998 that eBay, Google, or Amazon would become icons while hundreds of competitors would fold.

A telling example is provided by one-time computer industry leader Univac, which, based on careful analysis, predicted in 1950 that 1,000 computers would be sold, worldwide, by the year 2000. Of course, the analysts had in mind the hulking, room-sized machines of their day. After all, no one could foresee a day when personal computers, laptops, or handhelds would be casually sold at Wal-Mart. (And for that matter, no one predicted Wal-Mart.) The notion that Michael Dell would one day revolutionize the industry by selling computers out of a dorm room seemed ridiculous to almost everyone—including to those University of Texas professors who passed up the invitation to invest. It seemed ridiculous, right up until he did it.

If industries focused on producing straightforward products face such challenges, it should come as no surprise that the challenges are even greater in knowledge-based sectors. Consider the publishing industry. Today, tens of thousands of new books are published in the U.S. every year, and most of them lose money. As much as two-thirds of book sales are controlled by five publishers, but 78% of book titles are published by everyone else—by all of the little guys.¹⁶ The dominant firms, with all of their resources and market research, have every incentive to play it safe and stick with formulas that have worked in the past. The result is that they reject a lot of books that, if the expert consensus had its way, would never see the light of day. One such volume, passed on by numerous publishing houses, was *Harry Potter and the Sorcerer's Stone*, a children's book that you may have heard of.

Television is another industry in which highly paid experts—backed by enormous resources, equipped with incredibly sophisticated audience research, and operating in an immensely competitive environment—struggle to predict what will amuse or engage. How do the experts fare? Well, each year, the major networks evaluate thousands of new series ideas and purchase approximately 600 pilot scripts.¹⁷ Only about 40 make it to the airwaves, and only a few of those survive more than a single season. For instance, among the 52 prime-time pilots that aired on various networks in 2004-05, just 17 were still on the air in 2006.¹⁸ The high rate of failure isn't for lack of effort; networks spend hundreds of millions of dollars acquiring and producing prime-time schedules.¹⁹ Nonetheless, for all their efforts to anticipate audience tastes, the networks are routinely shocked by the performance of “breakout” shows like “American Idol” and the failure of “can't-miss” propositions. Even when bolstered by research, the predictive power of expertise is uneven.

While these industries obviously differ from schooling in important ways, the point I want to make clear is that expertise, resources, and research offer no guarantees. Indeed, they can become enemies of excellence when they ossify into conventional wisdom and bureaucratic inertia. As Robert Laughlin, a 1998 Nobel Prize winner in physics, has admonished, “The search for new things always looks like a lost cause until one makes a discovery. If it were obvious what was there, one would not have to look for it.”²⁰ If giants in other sectors must rely on trial and error rather than prescience, humility may be in order for education reformers as well.

In education, even leaders heralded for their entrepreneurial bent are often more enamored with yesterday's entrepreneurial successes than with nurturing tomorrow's entrepreneurs. More than a few “cutting-edge” superintendents tackle school reinvention by identifying some seemingly successful models and saying, “I want more of those in my district.” Because today's winners

are, by definition, simply the best at what we already do, enshrining today's best practices in statutes or policies can impede new providers and hinder the next generation of problem-solvers.

For instance, while the KIPP Academies boast an impressive track record and national acclaim, the founders are the first to explain that their greatest triumph is proficiently executing a traditional model of schooling—rather than reengineering educational delivery. They have succeeded by relentlessly focusing on results, recruiting talented educators, working long hours, and forging a culture of commitment. KIPP should be celebrated—but as an inkling of what an entrepreneurial environment makes possible rather than the culmination of that process.

THE FOR-PROFIT QUESTION

A word on the controversial role of for-profit entrepreneurs is in order. Nonprofit ventures, such as High Tech High in San Diego or the EdVisions Cooperative in Minnesota, are popular in part because they avoid the unpleasant questions of self-interest implicit in profit-seeking ventures. They have enjoyed glowing press and captured the imagination of funders and public officials. So why muck about with for-profits at all?

The desire to embrace nonprofits is understandable and healthy. Education, like health care, is a complex sector marked by tangled notions of the private and the public good. Nonprofits able to marry idealistic passion and entrepreneurial vigor are a welcome force and enjoy significant advantages. They are more acceptable to public officials, can more readily pursue philanthropic support, and are less likely to encounter organized opposition.

Appreciation for nonprofits, however, ought not blind us to the unique strengths of profit-seeking ventures. For-profits have the potential to tap private equity, good reason to seek cost efficiencies that nonprofits might reject, and a strong incentive to grow relatively rapidly. Driven by a focus on the bottom line, for-profits are also generally quicker to enter new fields or expand services. Conversely, they are also better able to pull back when circumstances warrant, which allows them to reallocate resources more rapidly. Because there are no investors insisting on cost-cutting, nonprofits have less incentive to pursue potentially unpopular measures—such as seeking ways to substitute technology for personnel. Finally, scholars note that for-profits are typically better than nonprofits at attracting managerial and technical talent.²¹ In the end, there is a vital role for both nonprofit and for-profit entrepreneurs.

ENTREPRENEURSHIP IS NOT SCHOOL CHOICE

One common mistake is to conflate entrepreneurship in education with charter schooling or school vouchers. It may be easy to assume blithely that those who support school vouchers or charter schooling are in favor of markets and entrepreneurship and that endorsing entrepreneurship can be reduced to supporting choice-based reform. But that involves a fundamental misunderstanding of entrepreneurship. Ultimately, entrepreneurship isn't about "choices" so much as it is about a process of reinvention and Darwinian selection.

Entrepreneurship is only tangentially concerned with increasing choices; it's ultimately focused on the supply side. It requires choices to be coupled with opportunities for entrepreneurs to enter the field, obtain re-sources, recruit talent, compete fairly, and benefit from their successes.

Choice fosters entrepreneurship only to the extent that it promotes these opportunities. For instance, while Belgium has one of the world's most expansive choice-based systems, few observers would suggest that the country is a hotbed of educational entrepreneurship. In fact, in 1975, Moscow residents could choose from scores of grocery stores, yet few would argue that this yielded a vibrant or entrepreneurial marketplace. The tendency of "school choice" supporters to focus narrowly on charter schooling or school vouchers leads observers to miss this critical point and has fostered much confusion about what choice-based reform is likely to produce.

For instance, while both France and the U.S. have market economies, they vary enormously in the incidence of entrepreneurial activity. Of the 25 largest firms in France in 2005, not a single one had been founded since 1965.²² The American picture is radically different. Of the nation's 25 largest firms in 2005, three-quarters didn't exist in 1965. In fact, the pace of change has accelerated in recent decades. In 1960, if an American company was in the top fifth of its industry, there was a 95% chance that it would still be there five years later. By 1998, the odds were only three in four that it would.²³

One reason not to put excessive faith in choice alone as an entrepreneurial engine is that consumer choice has historically been an uncertain spur for fundamental reinvention. For instance, when radio technology was first introduced, it was primarily used for Morse code and limited voice communication. It wasn't until David Sarnoff's 1915 suggestion that it could be employed to broadcast news, music, and baseball games that the possibilities of the new technology were really exploited. Providers driven entirely by current consumer demand have little opportunity to anticipate unrealized possibilities.

Choice-based arrangements are neither necessary nor sufficient for educational entrepreneurship. They aren't sufficient because removing formal barriers to new schools is only one step toward nurturing entrepreneurial activity. They aren't necessary because, at least in theory, a vibrant entrepreneurial sector can deliver educational services, tools, and products absent additional school choice. For instance, tutoring or education management firms can compete to contract with traditional public schools or districts.

REJECTING A NEW 'ONE BEST SYSTEM'

What, then, does all this mean for policy and for school reform? Since the 1974 publication of education historian David Tyack's seminal *One Best System*, much analysis has proceeded from the premise that the factory-inspired urban school systems we've inherited need to be redesigned.²⁴ Many efforts have centered on devising "best practices" that could provide a new, improved template. In many ways, the struggle has been to replace the "one best system" of the 20th century with a new model for the 21st century that incorporates the "best" instructional practices, staffing patterns, reading programs, and governance arrangements.

The entrepreneurial presumption rejects that aim. Rather than determine what schooling "should" look like in 2030 or 2040, it recommends a system that continuously welcomes talent, focuses on results, rewards success, purges failures, and doesn't stifle the emergence of better solutions. Five essential principles should guide the design of such a system.

First, the system must be dynamic and responsive to the challenges presented by a changing world. This requires the dissolution of familiar monopolies and the removal of barriers that stand in the way of new providers. A dynamic system demands new knowledge, produced by a rigorous model of research and development and supported by public and private investment. This “R&D” model should emulate such areas as medicine and technology, where products and services deemed state of the art in 1987 now seem hopelessly antiquated.

Second, a healthy entrepreneurial environment is transparent, with clear accountability for learning, service provision, and financial practices. It requires readily available data on student learning and various other performance considerations (from procurement to maintenance to hiring) and compels providers to compete on both quality and cost.

Third, the system should strive to attract and nurture excellence. Whereas today’s school systems too often favor seniority, obedience, and uniformity, the entrepreneurial aim should be to create a culture of meritocracy in which teachers and school leaders have the opportunity and tools to succeed. The training pipeline for educators should be rethought accordingly to reduce the emphasis on formal certification while focusing on selecting high-quality candidates and adding value.

Fourth, today’s funding arrangements discourage creative problem solving, the emergence of niche providers, and the search for new efficiencies. State and federal regulations require nearly every district to provide similar bundles of services, while districts rarely use specialized providers to improve performance when it comes to services such as human resources, facilities, or remedial instruction. Education finance should be configured to accommodate nonprofit and for-profit providers of niche instructional services and to reward cost-effective performance.

Finally, schooling must move decisively away from a system governed by inputs and regulation to one ordered around individuals and results. This requires recognizing students’ varying needs and conceding that education is not a one-size-fits-all enterprise. For instance, the kind of accountability favored by No Child Left Behind, which is premised on tracking average student performance across conventionally organized grades, constricts the scope of entrepreneurial activity. In fact, for all the claims by proponents of NCLB, the law has done little to reduce the tangle of rules and procedures that enmesh schools and providers. Indeed, in more than a few places, it has sprouted new ones. Such policies create new obstacles for nontraditional problem solvers, without regard to their promise or performance.

The challenge is to design a system in which tomorrow’s entrepreneurs can focus on solving problems rather than dismantling the roadblocks we have unwittingly strewn in their path. For that reason, popular proposals to limit class size or to require that districts spend 65% of their funding “in the classroom” are counterproductive. Such mandates will stifle a new generation of educators just as thoroughly as collective-bargaining provisions and licensure regulations have hampered the current one. The goal ought not be to erect new “21st century” buildings and policies that will serve as monuments a half century from now, but rather to create a system capable of growing with those it exists to serve.

CREATING AN ENTREPRENEURIAL ENVIRONMENT

Broadly speaking, there are three sets of obstacles blocking the way: barriers to the entry of new providers, a lack of venture capital, and a pinched pipeline for human capital. The discussion below is not intended to be exhaustive, but it does sketch out the shapes of potential reforms and some of the relevant considerations.

1. Barriers to entry. Barriers to entry are the laws, rules, and practices that make it harder or more costly to launch a new venture. Such barriers include everything from regulations hindering the opening of a charter school to textbook approval systems so onerous that only the largest publishers can successfully compete. Barriers worth particular attention are those measures that inhibit the opening of new schools or impose restraints on how new providers can operate.

New charter schools, for instance, face enormous difficulties gaining access to venture capital and facilities. Because current practices presume that local districts will own and manage school buildings, it is frequently difficult for entrepreneurs to secure appropriate facilities.²⁵ New entrants find themselves forced to plead with the conventional public schools—their ostensible competition—or to scramble to make do with nontraditional facilities. The Education Commission of the States has reported that less than a dozen states provide startup or planning grants for charter schools and that barely half of those with charter laws provide any support for facilities.²⁶ Meanwhile, state regulations make school facilities prohibitively expensive. A New York City school commission reported in 2002 that it cost about 40% more per square foot for the city to build schools than to build local office towers, luxury condos, or hospitals.²⁷

One step that could significantly level the playing field for entrepreneurs would be removing control of school facilities from local districts and handing it over to a special-purpose entity. One promising approach to this would be to develop independent “real estate trusts” in which the construction and management of school facilities would be separate from the traditional school district. Such a trust could ensure that the facilities are professionally managed while enabling alternative providers to compete more readily for suitable facilities.²⁸

Formal barriers to entry may be highly visible, but they are coupled with less obvious obstacles that can prove equally significant. For instance, state financing systems consistently fund charter schools at lower levels than traditional district schools and restrict their ability to hire nontraditional teachers.

As a general rule, making schooling more hospitable to entrepreneurship requires, where appropriate, improving the clarity and rigor of outcome expectations while removing the hurdles that hinder new ventures. In today’s environment of accountability, this shift is feasible to a degree inconceivable even a decade ago.

2. Venture capital. New ventures can neither launch nor grow without money. There are three general sources that can be tapped to support educational start-ups: profit-seeking investors, nonprofit associations, and public agencies. Historically, in most sectors, profit-seeking dollars have driven the entrepreneurial engine. Most of that money is provided either by venture capital funds or by wealthy individuals.

The K-12 sector is dominated by government spending. State, local, and federal governments spent over \$500 billion in 2005 on K-12 schooling—about 90% of all money expended on public and private schools. However, the vast majority of this spending is dedicated to salaries, benefits, school operations, and other routine line items. Vanishingly little is available for research, development, or new ventures.

As University of Washington professor Paul Hill has concluded, “Public school systems can be fully open to entrepreneurship only if money that is now tied up can be released and reallocated.”²⁹ Bart Peterson, the mayor of Indianapolis, is exploring the possibility of a public/private partnership in which the city would develop an incubator and support entrepreneurs for a year or two while they plan and launch new charter schools. Joel Klein, chancellor of the New York City schools, has relied on a mixture of public and private funds to recruit new leaders and develop new schools. Promising measures to reallocate public funding to support entrepreneurial efforts might include providing loan guarantees for new ventures, helping finance startup costs, and financially assisting public/private partnerships.

For-profit investment has been rare because capital typically flows to ventures that offer an attractive, risk-adjusted return, which has generally not been the case in schooling. There are steps that would help K-12 schooling attract more private funding to support research, development, and creative problem solving. For instance, clear standards for judging effectiveness can reassure investors that ventures will be less subject to political influence and better positioned to succeed if demonstrably effective. Entrepreneur-friendly reform is also undermined directly by statutes that restrict the involvement of for-profit firms in school management.

Given the dearth of private investment and the constrained nature of public spending, entrepreneurial ventures to date have been disproportionately funded by the tiny sliver of money philanthropies contribute—especially the funds contributed by younger foundations with roots in the new economy. Traditionally, philanthropic givers have sought to avoid controversy, pay heed to professional direction, and foster consensus. Today, however, several of the most influential educational philanthropies—including the Gates, Walton, and Broad foundations—are consciously supporting riskier, less conventional endeavors. Perhaps the most interesting example is the NewSchools Venture Fund, a “venture philanthropy” that secures investments from third parties and then seeks to provide start-up capital to scaleable, sustainable breakthrough ventures—both nonprofit and for-profit.

3. Human capital pipeline. Reducing barriers to entry and increasing available capital are all well and good, but they will matter little unless there are people willing and able to take advantage of new opportunities. The challenge is to attract a mass of talented and energetic individuals, retain and cultivate promising problem solvers, and develop an infrastructure that can support their efforts.

Today, licensing requirements are among the factors that deter people from entering the education sector. Hiring practices in many large districts are painfully slow, which alienates potentially attractive candidates and deters many altogether.³⁰ Inflexible compensation systems

penalize mobile workers, do little to reward high performers, and provide expansive benefits that are most attractive to those who stay in place for decades. In short, schools are organized much like factories in the 1950s. Measures to produce a more entrepreneur-friendly environment include loosening certification barriers, basing compensation more on performance than on seniority, and multiplying opportunities for professional growth and advancement.

Some of the greatest successes in expanding the talent pipeline have been the result of entrepreneurial activity. Teach for America (TFA) has brought more than 17,000 high-achieving college graduates into schooling since 1990. TFA alums launched the KIPP Academies; created high-achieving schools, such as the HEROES Academy in the Rio Grande Valley, Texas; and founded the New Teacher Project, itself a program for recruiting new urban teachers. Since 1997, the New Teacher Project has, itself, recruited over 13,000 teachers.³¹ Meanwhile, organizations like the Ed-Vision cooperatives are attracting and retaining educators who might otherwise leave education for more hospitable environs.

Such efforts have brought individuals with an entrepreneurial bent into schooling, but potential entrepreneurs require seasoning and experience as well as energy and a fresh perspective on familiar challenges. Unfortunately, in schooling, the vast bulk of TFA recruits and other high-achieving new entrants depart within a few years of entering. This is a problem because most successful entrepreneurs get their ideas through their previous employment and experience; a 2004 study of the nation's 500 fastest-growing companies found that more than half of the founders got the idea for their new venture in the industry they already worked in and another quarter, in a related field.³² There is no substitute for a pipeline of energetic veterans who have worked in the sector, gained experience, and accumulated contacts.

Networks that allow potential entrepreneurs to experience education from various vantage points, find mentors and potential backers, and link up with kindred spirits are critical in any entrepreneurial ecosystem. Organizations such as KIPP, TFA, and the NewSchools Venture Fund are forging informal networks, but such efforts are only a tentative first step.

Today, little machinery exists to cultivate would-be educational entrepreneurs, allow them to grow, or bring them into contact with potential funders. Young educators work alone in their classrooms, gain little non-classroom experience and responsibility, develop networks restricted to fellow teachers, and obtain no insight into team management or the demands of launching a new enterprise. In other entrepreneurial fields, younger workers move easily among ventures, gain experience and responsibility, build expansive networks of mentors and peers, and learn to imagine and design new ventures. Helpful steps might entail creating new roles, inside or outside of school districts, that would allow qualified candidates to work with teams on improving processes or practices in such areas as curricular design, training, data management, technology integration, or recruiting.

LITTLE VENTURED, OR GAINED

In the end, an entrepreneurial perspective raises the question: In the 21st century, is it possible to educate children in radically more effective ways? If familiar arrangements will not do, who are

the pioneers willing to stumble forward in the dark to find better answers, and how willing are we to provide the opportunities, tools, and support they need?

The paradox of entrepreneurship is that it accepts the risk that some ventures will fail so that it can address a larger risk—that of ending up mired in a staid mediocrity. The entrepreneurial premise can frustrate educational specialists because it doesn't deliver clean "solutions"—whether particular brain-based theories of learning or pat guidance on instruction. Instead, it opens the field to emerging models of excellence.

Entrepreneurship is not about quick solutions to today's problems. In K-12 schooling, where all parties are quick to declare grandiose aims and then demand immediate solutions, such a stance approaches apostasy. Nonetheless, the greatest educational risk we confront today lies not in embracing entrepreneurship but in continuing to cling to an inadequate and increasingly anachronistic status quo.

The failed ideas, providers, and schools produced by entrepreneurial activity are surely a high price to pay. Indeed, it is one worth paying only when compared to the stagnation and ceaseless tinkering that have for so long been the face of school reform.

FREDERICK M. HESS, a former high school teacher and professor of education, is director of education policy studies at the American Enterprise Institute, Washington, D.C. He is the editor of Educational Entrepreneurship: Realities, Challenges, Possibilities (Harvard Education Press, 2006). E-mail: rhess@aei.org.

¹ Peter F. Drucker, *Innovation and Entrepreneurship* (New York: HarperBusiness, 1985), p. 21.

² W. Chan Kim and Renée Mauborgne, "Value Innovation," in *Harvard Business Review on Breakthrough Thinking* (Boston: Harvard Business School Press, 1999), p. 200.

³ Frederick M. Hess, *Spinning Wheels: The Politics of Urban School Reform* (Washington, D.C.: Brookings Institution, 1999).

⁴ Sumantra Ghoshal and Christopher A. Bartlett, *The Individualized Corporation: A Fundamentally New Approach to Management* (New York: HarperBusiness, 1999), p. 93.

⁵ Carl J. Schramm, *The Entrepreneurial Imperative* (New York: Harper-Collins, 2006); and Paul A. London, *The Competition Solution: The Bipartisan Secret Behind American Prosperity* (Washington, D.C.: AEI Press, 2005).

⁶ William D. Bygrave, "The Entrepreneurial Process," in idem and Andrew Zacharakis, eds., *The Portable MBA in Entrepreneurship*, 3rd ed. (Hoboken, N.J.: Wiley, 2004), pp. 1-27.

⁷ Thomson Financial Venture Economics/National Venture Capital Association, "Private Equity Enjoyed Record Fundraising Year in 2005," January 2006, available at www.nvca.org/pdf/FundraisingQ42005final.pdf.

⁸ *Computer Use in the United States* (Washington, D.C.: U.S. Bureau of the Census, Current Population Survey Reports, October 1993), Table A.

⁹ *Distance Education Courses for Public Elementary and Secondary School Students: 2002-03* (Washington, D.C.: National Center for Education Statistics, March 2005), pp. 4, 10.

-
- ¹⁰ John F. Watson, *Keeping Pace with K-12 Online Learning: A Review of State-Level Policies and Practices* (Naperville, Ill.: Learning Point Associates, October 2005).
- ¹¹ Clayton M. Christensen and Michael E. Raynor, *The Innovator's Solution: Creating and Sustaining Successful Growth* (Boston: Harvard Business School Press, 2003), p. 73.
- ¹² For a fuller discussion, see Frederick M. Hess, ed., *Educational Entrepreneurship: Realities, Challenges, Possibilities* (Boston: Harvard Education Press, 2006).
- ¹³ Christensen and Raynor, p. 221.
- ¹⁴ Chris Whittle, *Crash Course: Imagining a Better Future for Public Education* (New York: Riverhead Books, 2005), p. 129.
- ¹⁵ For a more comprehensive history of entrepreneurship in America, see Drucker, chaps. 9 and 15.
- ¹⁶ Book sales figures are from Jim Milliot, "Top Five Pubs Take Half of Sales," *Publishers Weekly*, 25 April 2005, available at www.publishersweekly.com (search on the title). The figure for percentage of titles is reported by PMA, the Independent Book Publishers Association, on Dan Poynter's ParaPublishing website, www.parapublishing.com.
- ¹⁷ William T. Bielby and Denise D. Bielby, "Controlling Prime-Time: Organizational Concentration and Network Television Programming Strategies," *Journal of Broadcasting & Electronic Media*, December 2003, pp. 373-96.
- ¹⁸ My calculations here are based on the *2004 Pilot Bible* (Los Angeles: National Association of Television Program Executives, May 2004) and two television database websites, www.tv.com and www.imdb.com.
- ¹⁹ James R. Walking and Douglas A. Ferguson, *The Broadcast Television Industry* (Boston: Allyn and Bacon, 1998), pp. 111, 120.
- ²⁰ Robert B. Laughlin, "Reinventing Physics: The Search for the Real Frontier," *Chronicle of Higher Education*, 11 February 2005, p. B-6.
- ²¹ J. Gregory Dees and Beth Anderson, "For-Profit Social Ventures," in Marilyn Kourilsky and William B. Walstad, eds., *Social Entrepreneurship* (Dublin: Senate Hall, 2003), pp. 1-26.
- ²² Anne Dumas, "What's American and Envied by France?," *Washington Post*, 5 June 2005, p. B-2.
- ²³ Diego Comin and Thomas Philippon, "The Rise in Firm-Level Volatility: Causes and Consequences," in *National Bureau of Economic Research: Macroeconomics Annual 2005* (Cambridge, Mass.: MIT Press, forthcoming); a working paper version from July 2005 is available online at <http://pages.stern.nyu.edu/~tphilipp/papers/diego.pdf>.
- ²⁴ David B. Tyack, *The One Best System: A History of American Urban Education* (Cambridge, Mass.: Harvard University Press, 1974).
- ²⁵ Sara Mead, *Capital Campaign: Early Returns on District of Columbia Charter Schools* (Washington, D.C.: Progressive Policy Institute, October 2005).
- ²⁶ *Charter School Finance* (Denver: Education Commission of the States, April 2003).
- ²⁷ Joe Williams, *Cheating Our Kids: How Politics and Greed Ruin Education* (New York: Palgrave Macmillan, 2005), pp. 23-25.
- ²⁸ Michael DeArmond, "Getting Out of the Facilities Business: A Public School Real Estate Trust," in Paul T. Hill and James Harvey, eds., *Making School Reform Work* (Washington, D.C.: Brookings Institution Press, 2004), pp. 26-40.

²⁹ Paul T. Hill, “Entrepreneurship in K-12 Public Education,” in Kourilsky and Walstad, p. 71.

³⁰ Jessica Levin and Meredith Quinn, *Missed Opportunities: How We Keep High-Quality Teachers out of Urban Classrooms* (New York: The New Teacher Project, 2003).

³¹ As reported on The New Teacher Project website, “Who We Are” section (www.tntp.org).

³² Bygrave, p. 4.