



“Greenfield Schooling”: How Policymakers Can Cultivate a Garden of Educational Innovation

By Frederick M. Hess

Reform-minded educators often run into obstacles when they try to bring their innovative ideas to schools modeled on twentieth-century factories. The challenge of “greenfield schooling,” as I write in my new book, Education Unbound: The Promise and Practice of Greenfield Schooling, is to cultivate environments that invite entrepreneurial ideas and to provide an infrastructure that allows those ideas to succeed on a wide scale.

“Greenfield” is a term investors, engineers, and builders use to refer to an area where there are unobstructed, wide-open opportunities to invent or build. It is not a term one hears often in K–12 education. This is no surprise. For all their virtues, our nation’s schools are not noted for embracing creative problem solvers. Educators labor in bureaucratic, rule-driven systems that can trace their practices to the legacy of early-twentieth-century factory management.

Far too many educators can relate to stories like that of Larry Rosenstock, who worked in the Cambridge, Massachusetts, schools for eleven years before departing to launch the acclaimed High Tech High charter school in San Diego. Rosenstock’s tales from Cambridge can sound like fodder for the television show *The Office*. “It’s a 353-year-old public high school, and every time somebody did something stupid, they added new rules,” he says of one school. “They don’t take away rules, they just add new rules, so it gets to a point where there’s no oxygen left.”¹

When Rosenstock left to found High Tech High in 2000, he knew it would require financing

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real estate, obtaining authorization, fundraising, meeting regulations, and overcoming dozens of other obstacles. Still, Rosenstock says, “I spent 20 years doing turnaround artistry, and I spent the past decade doing new school creation. There might be some complications and risks to new school creation, but as complicated and challenging as it may be, it is way easier than trying to turn around a pre-existing school.”

Entrepreneurial educators, like Rosenstock, learn early on to keep their heads down and to shut their classroom doors. The greenfield challenge is to create a world that helps these people succeed.

This is not easy even for the country’s most renowned reform-oriented education leaders. In

Key points in this *Outlook*:

- The traditional school district does not provide fertile ground for educational innovation.
- Rather than embracing the “more, better” model of improving schools, the greenfield approach creates room for new ventures to take root.
- Entrepreneurs must embrace outcomes and judge their success by the extent to which new ventures promote new efficiencies, address unmet needs, or perform consistently at high levels.

Washington, D.C., for example, Chancellor Michelle Rhee sought to make information on student performance—including attendance data—more readily accessible to parents. She wanted teachers to begin taking attendance on laptops, so the data would be instantly downloaded and available online the same day (previously, it took a week or more). The problem: the collective bargaining agreement obligated teachers to take attendance but prohibited the district from requiring teachers to do data entry, and the union deemed taking attendance on laptops to constitute data entry. Multiply that tiny incident by a thousand daily obstacles, and one sees how daunting it is to reengineer a district barnacled with contracts, protocols, dated systems, and an ingrained culture.

The greenfield task is to create environments that invite high-quality providers to surface and that provide the infrastructure necessary for them to succeed at scale. This can unfold inside or outside traditional districts. For example, when Joel Klein became chancellor of the New York City schools, he declared his intention to make the system the “Silicon Valley of charter schooling” by attracting the nation’s best charter schools, making it easier for charters to obtain buildings, and funding charters more like district schools. Dacia Toll, president of the Achievement First charter-school network, has said that these moves “allowed Achievement First to be bigger after four years in New York than after 10 in Connecticut.”

Seeding the Greenfield Garden

A greenfield approach requires humility. Policymakers must recognize that there is no single “silver bullet” that they or a single entrepreneur can embrace to improve education outright. No one suggested that Amazon should be taken seriously only if it opened a chain of brick-and-mortar stores and sought to do everything Barnes and Noble already did but better. Yet, in K–12 schooling, reformers, policymakers, and funders consistently imply that devising a great niche service is not enough—the constant expectation is that entrepreneurs should seek to do everything and launch a new “whole-school” model.

Some reformers are fascinated by high-powered charter schools in urban communities. This enthusiasm is natural, as schools like Achievement First and YES Prep are posting impressive results; however, observers often skip past the fact that these schools generally succeed by hiring extraordinary teachers, extending the school day, and creating disciplined cultures. In other words, these schools do what good schools have always aspired to do, but they do

more of it and they do it better. This “more, better” approach emphasizes conventional, expensive means and tends to favor reformers who augment rather than reinvent familiar school models. At the same time, it tilts the playing field against providers pioneering wholly new—and perhaps dramatically better—ways of addressing challenges.

The expectation that every reformer will create a new, miracle school makes it harder to specialize and requires entrepreneurs to do things they may not be good at. Even if they have expertise in designing curricula for middle school math, would-be entrepreneurs find themselves pushed to launch new schools and to tackle everything from facilities to information systems. School builders, however, are just one element of a vibrant ecosystem. Other, more specialized new providers can ease the burdens on schools and boost the likelihood of dramatic, replicable advances in teaching and learning.

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The greenfield approach creates room for new ventures to take root. School choice and charter schooling can be vital for that effort, but such measures provide only a start. Education lacks the dense networks of talent, funding, and research that characterize fields like biotechnology and software; it is more like a barren garden where few new seedlings thrive. Cultivating these ventures requires providing the chicken wire, fertilizer, and bamboo stakes that can help tender saplings take root and flourish, but it does not involve planting only one or two types of trees. Let us consider some instructive efforts.

Tilling the Soil

Greenfield educators must first knock down obstacles—both those that are formal and visible and those that are more subtle and easier to overlook—that can stifle the emergence and growth of entrepreneurial ventures.

Formal barriers are laws or rules that make it difficult or impossible to launch and expand new ventures. These include statutes that prohibit or limit the number of charter schools, restrict alternative licensure of teachers and administrators, or require lengthy and extensive

textbook-approval processes that only industry giants can navigate or afford. Informal barriers are the political, operational, and cultural routines that make it difficult for new ventures to gain a foothold or pioneer new practices. Most entrepreneurs face both kinds of obstacles. The extent and variety of barriers force them to compromise their models and slow their efforts to win allies and appease enemies.

Greenfield educators should do more than clear away formal barriers; they should provide resources and help new problem solvers negotiate informal barriers and critical relationships.

Because successful entrepreneurial efforts become brand names while unsuccessful ones fade away, we can forget how difficult it is even for providers who have come to be widely admired. Teach for America almost died on the vine in the mid-1990s due to political hostility and nervous funders. The Knowledge Is Power Program (KIPP) Academies might never have gotten started. New Leaders for New Schools is a principal-recruitment and training venture that today operates in close to a dozen cities and is awash in recognition and support. Yet, as a young organization, it struggled mightily just to convince districts to hire its graduates.

Many of today's barriers are not the result of conscious design but the consequence of policies, rules, and practices that have accreted over time. Procurement practices insensitive to cost-effectiveness or budgeting rules that make it tough for districts to reconfigure staffing create barriers that may owe more to inertia than anything else.

A crucial, but often overlooked, barrier is the tendency of district leaders to regard staff time and salaries as sunk costs. Districts typically do not eliminate teaching or staff positions, even if an innovation allows nine employees to accomplish what used to take ten. The result: school and district leaders rarely regard labor-saving technologies or services as cost-effective. Tim Daly, chief executive officer of the New Teacher Project (TNTP), a New York-based venture that helps districts address human resource challenges, explains:

A district would tell us that they loved our work, but that we were too expensive. We'd ask what they

meant by "too expensive." They'd say that our teachers were \$5,000 to \$6,000 per head, and that their Human Resources department could recruit teachers for \$100 or \$150 per head. . . . This calculation was based solely on two expenses: fees paid to attend job fairs and ads placed in newspapers. It didn't include any of the costs for staff salaries or benefits, or office space used by the recruiters, or technology infrastructure, or placement costs, or mentoring, etc. They just added up the most readily-tallied costs and divided by the number of teachers hired.

District officials too often overlook the fact that, used in the right way, groups like TNTP could allow districts to downsize their own hiring operation and shift those dollars elsewhere. Management that fails to promote potential cost efficiencies loses an enormous opportunity when trying to convince school systems to buy a product meant to improve performance radically. Rather than ask whether a tutoring program would allow a district to reduce the number of paraprofessionals or whether a more sophisticated diagnostic tool might allow talented elementary teachers to handle more students, district and state officials seemingly operate from the premise that technology and service providers must "supplement but not supplant" personnel.

Untying the Shoots

Greenfield educators should do more than clear away formal barriers; they should provide resources and help new problem solvers negotiate informal barriers and critical relationships. David Harris is chief executive officer of the Mind Trust (TMT) in Indianapolis. Founded in 2006, TMT is a nonprofit organization that promotes education entrepreneurship. Harris explains, "When we launched the Mind Trust, the Indianapolis Public Schools (IPS) superintendent, Dr. Eugene White, was an enthusiastic supporter. . . . But the district administration had little experience working with entrepreneurial partners" and early initiatives were bogged down by bureaucracy, foot-dragging, and confusion about how to proceed.

It soon became clear that IPS needed an internal champion of these innovations who could act on White's behalf and move the initiatives forward. Harris recalls, "We recruited and paid for a former superintendent to assume this role. . . . The Mind Trust continues to pay the cost of the special assistant's services. And that made all the difference."

New ventures face hurdles, and Harris explains that TMT helps knock those down. He says, “We brought Diploma Plus to town, an organization that runs very successful schools for over-age, under credited students. One of the reasons Diploma Plus is so successful is that it designs its schools to work for its student population’s specific needs. But this means changing schedules, allowing for early-release time for working students, and using different kinds of teachers—all of which run up against traditional state and district rules.” So TMT worked with the state board of education to craft the necessary waivers.

Harris says, “We know our city so well that we are able to make all kinds of connections and matches. . . . We’ve made countless introductions that have opened doors for our ventures to find board members and advisers, raise money, and create all kinds of partnerships.” For instance, TMT connected educational entrepreneur Earl Martin Phalen with the superintendent of the Metropolitan School District of Decatur Township, which resulted in the district piloting Phalen’s Summer Advantage USA program. TMT also connected Phalen to key officials at the Indiana Department of Education, resulting in a million-dollar state investment.

Finally, TMT has invested \$4 million in Summer Advantage USA’s initiatives and helped Phalen raise hundreds of thousands of dollars from other national and local funders. Ultimately, though, the money is only one piece of the puzzle. Harris says, “The Mind Trust’s strong ties to the philanthropic, business, and political communities of Indianapolis allow us to support our partners and Fellows in myriad nonfinancial ways too . . . [and] building this support, mobilizing a whole community of local champions, and connecting them with the entrepreneurs is what will ensure that our short-term investments pay long-term dividends.”

Planting New Seeds

Greenfield enterprises require providers to devise new ways to tap and use instructional talent. Eric Schwarz launched the Boston-based Citizen Schools in 1995 with the aim of increasing instructional time, quality, and relevance by providing hands-on learning projects led by local professionals. Today, the program serves 4,400 students at forty-four sites.

Schwarz explains how the program’s adjunct “Citizen Teachers” can spark student engagement and learning: “In many of the schools where we partner . . . full-time teachers are now almost entirely focused on basic math

and reading instruction because kids are so far behind in these topics. Kids might take science just twice a week, and usually in large classrooms with limited lab facilities and insufficient time to perform experiments or to learn about and apply the scientific method. Citizen Schools recruits chemists and engineers and rocket scientists—literally—and gives kids a chance to take 90-minute classes in the applied sciences, where the kids get to build and launch rockets, design video games, [and] examine cells under a microscope.”

Citizen Schools mostly operates after school, but it has also partnered with some schools to offer a longer school day (three hours longer) for all kids. In those cases, the school deputizes Citizen Schools so that Citizen Teachers lead core instruction in some classes.

“Ultimately, Citizen Teachers—particularly in the arts and sciences—could bring a lot to schools, whether they show up to teach at three in the afternoon as they do now or at nine in the morning,” Schwarz said. “They could co-teach with full-time teachers, adding real-world flair and providing a great professional development experience. Or they could lead pull-out classes and apprenticeships, focusing on small groups of kids struggling with traditional instruction or, alternatively, focusing on the highest performing kids who need an extra challenge.” Exploiting these opportunities, however, requires reducing statutory and contractual barriers.

Pruning the Plants

In the past decade, we have come to think about K–12 quality control almost entirely as a question of test-based, one-size-fits-all state accountability systems. Creating room for problem solvers—whether terrific foreign-language instruction or management streamlining—requires additional, more supple metrics, like those routinely collected in other sectors. And it requires a ruthless, creative commitment to quality control that transcends bureaucratic, No Child Left Behind–style monitoring.

Matt Candler left the KIPP Academies in 2004 to become chief operating officer with the New York City Center for Charter School Excellence. With \$40 million at its disposal, he explains, the center “would not protect weak schools. In fact, we pleaded for school leaders to self-police and put pressure on one another.”²

“I wanted to build a team of seasoned and accomplished educators . . . to get control of the pipeline and put KIPP-like practices in place, both in terms of picking quality operators and getting them ready for opening

day,” Candler writes.³ He aimed to make the center “attractive enough to all applicants to have them want to work with us” and then to cherry-pick “the very best of that group.” Twice a year, the center hosted free sessions to explain the basics of starting charter schools. Those efforts helped screen possible applicants and identified strong prospective school founders.

The quality-control strategy had three key components. The first was to seek strong candidates; the second was to do early, initial quality screening; and the third was to support and nurture new ventures. After the information session, interested applicants would fill out a simple technical-assistance application. If approved, they were eligible for \$10,000 worth of free start-up advice.

Candler explains that the center encouraged the most promising candidates to apply for a larger, more intensive, \$35,000 planning grant. “We were willing to lose the \$35,000 investment in a school if during that grant period we learned a school was not up to the challenge. . . . \$35,000 was a small price to pay to keep a bad school off the street,” he writes.⁴ Once schools were approved, they applied for \$50,000 start-up grants, and the founding team was introduced to similarly situated “teammates,” providing a network of mutual support as they tackled the operational and instructional challenges of launching a new school. “We asked schools to use part of their start-up grant to hire operations directors early in the year,” he writes.⁵ This enabled the schools to avoid logistical headaches that plague so many charters and to focus from day one on delivering high-quality instruction.

Making the Garden Bloom

Entrepreneurs must embrace outcomes and judge their success on the extent to which they promote new efficiencies, address unmet needs, or perform consistently at high levels. It is not enough, however, for greenfield ventures simply to be good. They must also be inclined to replicate and grow. While it is extraordinarily challenging to launch even a single school or specialized service successfully, greenfielders measure themselves against a much more demanding standard: whether they can scale their innovation to deliver transformative educational improvement.

Transformative ventures must also be cost-effective. Entrepreneurs who succeed through a “more, better”

strategy can make a valuable contribution, but their impact is inevitably limited. In the same way, schools that rely on scarce talent or extraordinary support hit ceilings when those resources grow scarce. The most compelling entrepreneurial ventures are those that find ways to deliver average or above-average results for less money and with less manpower.

In practice, would-be reformers disproportionately embrace boutique “whole-school” and “more, better” ventures, even when these will likely be difficult to scale. In considering the potential impact of a given venture, there are at least three key factors to weigh. First, how fearsome are the political and institutional barriers? What are the formal and informal obstacles that must be overcome?

Second, are there metrics that can gauge the appropriate outcomes? Those innovations that fit most cleanly into the metrics at hand (for example, third grade to eighth grade reading and math scores) have enjoyed an enormous leg up in recent years. Encouraging other kinds of ventures requires additional metrics.

Finally, how replicable is the core innovation? Computer simulations, web-based tutorials, or tightly scripted programs may be easier to replicate than a school or service that depends heavily on talent.

Best practices are great, but they need to be embedded in organizations that are passionate about executing them the right way. That is rarely possible in the systems we have inherited. We must create the conditions for an array of solutions to take root and grow; then best practices can be delivered as intended. And that is the greenfield challenge.

Notes

1. Unless otherwise noted, all anecdotes and quotes are drawn from Frederick M. Hess’s newest book, *Education Unbound* (Washington, DC: ASCD, February 2010).

2. Matt Candler, “Supply-Side Reform on the Ground,” in *The Future of Educational Entrepreneurship: Possibilities for School Reform*, ed. Frederick M. Hess (Cambridge, MA: Harvard Education Press, 2008), 149–50.

3. Ibid.

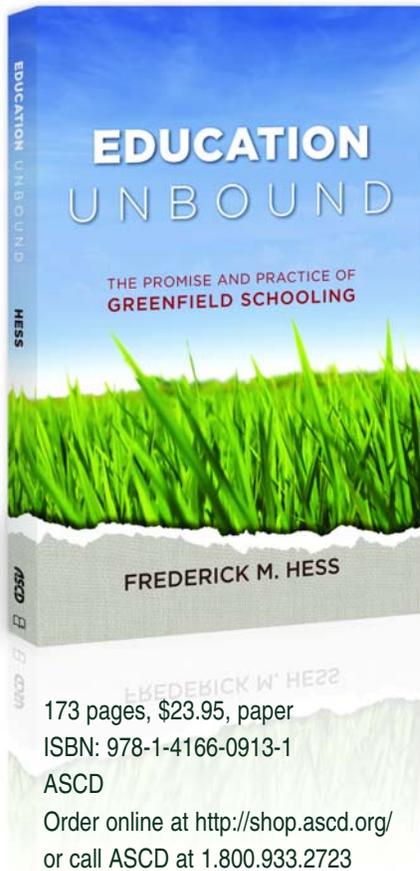
4. Ibid.

5. Ibid.

EDUCATION UNBOUND

The Promise and Practice of Greenfield Schooling

By **Frederick M. Hess**



“Other than starting with the same letter, education and entrepreneurship have had almost nothing in common. Rick Hess is determined to change that. Eschewing silver bullets, “best practices,” and other expert bromides from the educational establishment, he presents a well-thought-through analysis of how to enable entrepreneurialism and innovation to flourish in a way that will drive truly dynamic school reform. Fortunately for our children, Hess is on to something big.”

—**JOEL I. KLEIN,**

Chancellor, New York City Department of Education

“Rick Hess’s Education Unbound offers a refreshing approach to our education dilemma. It is well past time we face the reality that the “find and fix” methods we have so energetically and honestly applied to our educational problems have not worked and continuing the same is unwise. This book is a must-read for those who seek authentic educational improvement.”

—**ROD PAIGE,**

Former U.S. Secretary of Education, 2000–2005

“Rick Hess continues to expose the toughest issues of transforming public schooling in America. An esteemed scholar who is always willing to speak his mind and shake up the status quo through innovation, he is someone we should listen to as we apply policy to practice. I look forward to hearing the dialogue that this book will create.”

—**MICHELLE RHEE,**

Chancellor, District of Columbia Public Schools

In sharing the examples of numerous organizations whose bold alternative strategies represent promising shifts in K–12 education, Frederick M. Hess builds a case for reconfiguring schools so that they are capable of growing and evolving with the students and society they serve. *Education Unbound: The Promise and Practice of Greenfield Schooling* is a catalyst for conversation and change and a must-read for practitioners, policymakers, would-be education entrepreneurs, and anyone committed to school excellence and the next steps in education reform.

Frederick M. Hess is director of education policy studies at the American Enterprise Institute. A nationally recognized author and commentator on schooling, his books include *Educational Entrepreneurship*, *Common Sense School Reform*, and *Spinning Wheels*.



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