

JULY 2011

Supporting and Scaling Change:

LESSONS FROM THE FIRST ROUND OF THE INVESTING IN INNOVATION
(i3) PROGRAM

Kim Smith and Julie Petersen





innovation
FOR THE PUBLIC GOOD

A Case Study of US Education



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Second in the series from **innovation**
FOR THE PUBLIC GOOD

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ABOUT THIS PROJECT

It is widely acknowledged that innovation will be necessary to dramatically improve public services in America. But innovation in the public sector doesn't happen in a vacuum; innovation happens at the nexus of policy, research, capital, and practice. This project looks at one case study – education – by analyzing some of the key aspects of an emerging ecosystem for innovation in public education in the US, including the flow of investment capital for such efforts, the uptake of innovations by buyers and users, federal efforts to stimulate and scale innovation, and ways that technology could facilitate innovation investment and practice. Drawing on surveys, interviews, and working groups, the project highlights recent efforts to fuel and steer more innovation, and frames the remaining challenges that lie ahead for the public, private, and philanthropic sectors. This project culminates in an analysis of the lessons and insights drawn from the recent experience of US public education in comparison to the way leaders are using innovation to address similar intractable social problems in other fields and in other countries.

For more on this project and its publications, visit <http://www.bellwethereducation.org/innovation-for-the-public-good/>.



ABOUT BELLWETHER EDUCATION PARTNERS

Bellwether Education Partners is a national nonprofit organization dedicated to accelerating the achievement of low-income students by cultivating, advising and placing a robust community of innovative, effective and sustainable change agents in public education reform and improving the public and policy climate for their work.

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INTRODUCTION

We are at a critical inflection point in America. The global knowledge age asks more of our schools than ever before—that they educate *all students* and do so to a *much higher level*. But student achievement is mediocre when compared to international benchmarks, and downright appalling in the urban and rural areas that serve most low-income and minority students. We are far from providing our children with universally high-quality public education—the kind that equips all students with the knowledge and skills they need to secure a college degree, earn a good living, support a family and engage productively in society.

To change this equation, and to do so without a massive injection of new resources, we clearly need to do things differently—and fast. Most acknowledge that the solution to this productivity challenge is innovation. But innovation doesn't emerge out of thin air, especially in a public field like education. It emerges from the efforts of visionary people and organizations that try to do things differently, despite being surrounded by people and organizations doing things the way they always have. Accordingly, an innovation ecosystem includes not just the innovators themselves, but also users, buyers, investors and researchers—and in the case of a public good like education, policymakers and the rules and regulations they establish, which can either encourage or hinder these new ways of operating.

This nexus—where a large-scale social problem meets innovation, capital and public policy—is the subject of the “Innovation for the Public Good” series, led by Bellwether Education

Partners and supported by the Rockefeller Foundation. This project considers a variety of efforts to improve the public education innovation ecosystem in the United States, as a case study that may have implications for improvement in other public goods. This particular paper seeks to assess the initial effect of the first round of the U.S. Department of Education’s Investing in Innovation (i3) initiative on specific elements of the innovation ecosystem in education, including the private and philanthropic sectors and the work of innovators themselves.

First established as part of the American Recovery and Reinvestment Act (otherwise known as the “stimulus” legislation), and now continued as a regular Department program in the fiscal 2012 year, i3 was intended to do three very ambitious things at once.

First and foremost, the Department seeks to shift the dynamics in the innovation ecosystem toward greater quantity, rigor and diffusion of innovation, with the belief that this could improve educational outcomes for underserved students in America. At its core, the program created a stream of federal funding directed at increasing and strengthening innovation in public education—a part of the public sector that has long resisted the risk-taking, agility, speed and continuous improvement that come with embracing innovation. Perhaps equally important, it also explicitly sought to avoid the “islands of excellence” phenomenon long a

problem in education and other social sectors, where innovations rarely manage to reach meaningful “scale.”

Second, the Department is attempting to thread innovation into the way its own processes worked. The i3 fund is a far more evidence-based and transparent way of allocating resources than is typical of federal education funding. It also introduced to education the “field scan” mechanism—a common tool in the sciences, where innovation thrives—which is designed to reveal existing innovations in the field rather than dictating strict top-down parameters for government funding. This “field scan” was part of a deliberate

multi-pronged approach to promoting innovation that included improved research and more intentional development of research findings into tangible products and programs (see sidebar on page 4). “In a sector as large as education and learning, there are myriad different efforts and approaches to improve student learning being tried at any given time. Inevitably, some will demonstrate significant promise while others will fail to meet existing needs,” notes a concept paper on ARPA-ED, the piece of the Department’s innovation initiative designed to

“Field scans of efforts by practitioners and others throughout education can help identify and support the most successful, ideally resulting in the spread of effective ideas.”

–U.S. Department of Education

intentionally develop research into usable tools, which was announced in early 2011. “Field scans of efforts by practitioners and others throughout education can help identify and support the most successful, ideally resulting in the spread of effective ideas.”¹ i3 also aligned funding for the “supply” of innovation with the “demand” the U.S. Department of Education had created through other federal programs. By articulating goals and priorities that were aligned with the problems of practice identified by state Race to the Top applicants, and then soliciting the field’s best ideas for how to provide more innovative solutions to those problems, i3 tightened the link between good ideas and the buyers and users that would put those ideas into practice.

Finally, as a public-private partnership, the i3 program explicitly seeks to create greater alignment among innovation investments in the public, private and philanthropic sectors, and

It’s obviously far too soon to tell whether i3 has led to a greater quantity or better quality of innovation, or even to significant improvements in the way philanthropy operates—let alone whether student achievement will rise as a result. But it’s never too soon to begin the learning cycle by getting some early perspective about the program’s initial effects on the ecosystem.

to improve the quality and sustainability of these efforts. The program asked the private sector (especially philanthropy) to rally behind a set of federally identified innovation priorities, to take scale and impact seriously, and to allocate more funding for more evidence of success. Though not explicitly built into the design of the i3 program’s first round, the pace required by stimulus funding pressed the federal government and philanthropic donors to act quickly, which forced them to shake up their usual idiosyncratic decision-making processes.

Taken together, these efforts constituted a significant federal investment in shaping and strengthening the ecosystem for innovation in U.S. education—though not without some challenges along the way. Less than a year after the first-ever i3 grants were disbursed and in the midst of the program’s second round of applications, it’s obviously far too soon to tell whether i3 has led to a greater quantity or better quality of innovation, or even to significant improvements in the way philanthropy operates—let alone whether student achievement

will rise as a result. But it’s never too soon to begin the learning cycle by getting some early perspective about the program’s initial effects on the ecosystem in the eyes of key stakeholders, including grantees, applicants not selected for funding, philanthropic donors and the federal agency itself.

To do so, we began soon after the first round of i3 was complete with a survey of more than 300 people, including i3 applicants and philanthropists, which had a 20 percent response

rate. We also reviewed the extensive set of documents made publicly available by the Department about the process, as well as the relatively limited amount of i3 analysis to date from the education reform community and in the media. Finally, we also conducted nearly 50 interviews with diverse stakeholders, including a selection of applicants (grantees and those not selected), key players in government and philanthropy, and other observers in the

The Federal Cycle of Innovation in Education: Research, Development and Dissemination

Just as innovation spans well beyond an initial “spark” of ingenuity, the i3 effort stands as one piece in a series of interrelated efforts by the U.S. Department of Education to create a more robust innovation ecosystem for American public education.

As we explained in a recent paper, the cycle of innovation has many stages, including what is often referred to as research and development (R&D).² The research phase includes both basic and applied research designed to develop knowledge, and is followed by development, which could be intentional or “directed” development or ways to encourage field-based developments, as i3 sought to do. In an effective system, during the development phase, promising innovations are built, tested and refined quickly in order to identify those with the greatest potential for impact, eventually leading to efforts to take effective innovations “to scale” by distributing them more widely. While the process doesn’t always follow these precise steps, the most effective approaches to innovation pay heed to research, development, iterative evaluation cycles and scale. And, as innovation scholar Amar Bhidé has noted, in effective systems, users and buyers often “play a venturesome or ‘entrepreneurial’ role in the design of new products, bearing ‘unmeasurable and unquantifiable’ risks and developing ground-level knowledge.”³ But in education, this adoption dynamic

has been notoriously weak, and is one of the factors that has inhibited the development and spread of innovation.

While the U.S. Department of Education has historically underinvested in this ecosystem, or occasionally addressed some parts but in a piecemeal way, the current administration appears to be addressing multiple parts of the education innovation ecosystem with these efforts:

Institute of Education Sciences. Most of the federal resources for educational research flow through the Institute of Education Sciences (IES), but a common criticism of the agency has been that its findings rarely translate into meaningful improvements in practice. In late 2010, IES approved a set of new priorities that includes ways of better aligning its resources and knowledge with the greatest needs in the field (by seeking “to identify education policies, programs, and practices that improve education outcomes, and to determine how, why, for whom, and under what conditions they are effective”)⁴ and building local capacity to gather and use evidence. IES is looking for ways both to encourage districts to conduct their own low-cost evaluations⁵ and to design research that allows the context of the intervention to be examined⁶; it also recently redesigned the “What Works Clearinghouse” Web site to make it easier for

ecosystem. Because all surveys, research and interviews were completed before the second round of i3 was announced in June 2011, our analysis focuses exclusively on the first round of applications and grantees. (See page 56 for a consideration of the changes made in the program's second round.)

visitors to sift through applicable research findings.⁷ In addition, the institute is pursuing innovative new approaches to field-based practical research, like the new 90-day research cycle being tested by IES in partnership with the Carnegie Foundation for the Advancement of Teaching.⁸

Race to the Top. Though not an R&D investment per se, the federal "Race to the Top" (RTT) competition sought to intentionally and substantially improve the "demand" dynamic for innovation in education. By providing incentives for states and districts to remove barriers to performance-driven practices, Race to the Top generated greater demand for innovative solutions such as better data management tools and new and better curriculum and assessments. In particular, the emphasis on creating common state standards—an effort already under way that was accelerated by RTT—has removed a significant and decades-old barrier to innovation in tools, assessments and content, a barrier caused by requiring new providers to tackle 50 different sets of state standards.

ARPA-ED. In early 2011, the Department introduced its ARPA-ED initiative to foster the kind of intentional "directed development" that its namesake, the Defense Advanced Research Projects Agency (DARPA), has contributed to the Department of Defense. "Directed development provides the ability

to pursue a small number of high-impact projects, from concept through demonstration or prototyping," notes an ARPA-ED concept paper published by the Department. "Directed development projects begin with a *specific end goal*, rather than the aim to increase broad areas of knowledge, and generally include a defined time period and path forward."⁹ At DARPA, early basic research is targeted at specific problems of practice in the defense community, and can be intentionally and rapidly tested and refined thanks to close partnerships with defense customers. Similarly, the president's FY 2012 budget request included \$12 million for ARPA-ED to "fund projects performed by industry, universities, or other innovative organizations, selected based on their potential to create a dramatic breakthrough in learning and teaching."

Digital Promise. In 2010, Congress finally authorized funds for the National Center for Research in Advanced Information and Digital Technologies, also known as the "Digital Promise," which had been established in 2008. As an independent nonprofit, the Center will draw funds and oversight from across the public, private and nonprofit sectors in order to "harness the increasing capability of advanced information and digital technologies to improve all levels of learning and education, formal and informal."¹⁰

At minimum, it is clear that the first round i3 directed significant attention to the need for more productive innovation in education, contributed significant resources to the work of 49 winning applicants, and mobilized almost \$800 million toward a coordinated set of priorities designed to improve public education, including nearly \$650 million in federal dollars and another \$140 million in matching funds from the private sector. One straightforward piece of our analysis will be a simple breakdown of the i3 applicants and grantees in the first round of i3, as well as the private monies allocated to them, to shed light on where these funds are focused and the kinds of organizations and innovations involved in the process.

In this paper, we will also examine the design and intent of the original i3 program, and the ways in which the Department carried it out—including the progress that was made, but also the opportunities missed. In addition, because i3 was meant to have an impact on the innovation ecosystem by influencing and steering the actions of others, the perception of the program's impact is as important to consider as its direct impact. Therefore, we will convey the mixed opinions we heard among those that i3 sought to influence—including education organizations and capital providers—about whether the Department of Education supported innovation in a meaningful way and how the first round of i3 affected the wider landscape. We will share observations from the field on how i3 has pushed the Department and the innovation landscape forward—by prioritizing student outcomes as the goal for and the metric by which innovations should be judged, establishing a staged approach to evidence and scale, emphasizing the importance of scale as a goal for innovation, and encouraging connections across sectors and between districts and independent nonprofit organizations. We will also convey the concerns of skeptics, who raise questions about the design and implementation of the original i3 program, who wonder if groundbreaking innovation can really be found in the ranks of its grantees, and who question the degree to which it mobilized private capital toward more productive innovation. And we will share some information about the second round of i3, announced just prior to the release of this publication, which has been adjusted to address some—but not all—of these concerns.

Synthesizing the reflections from fans and skeptics alike—along with publicly available information and our own experience in the field—we will assess implications from the initial round of i3 for how the government fuels and funds innovation in education, and how it structures public-private partnerships toward this end. We will conclude with our own recommendations for how the U.S. Department of Education and others could continue to improve i3 in future rounds and other ways to advance and strengthen the American innovation ecosystem in education.

ON INNOVATION IN PUBLIC EDUCATION

In America's public schools, student attainment and achievement are simply not at the level necessary for success in the knowledge age and global economy. Access to a quality public education is a deeply held American value, and taxpayers spend more than \$500 billion per year to accomplish it. But few believe we have succeeded. Although we have ratcheted up our demands for public schools, asking them to prepare an increasing number and diversity of students for success in college, the public resists allocating even more money toward a system that doesn't seem to be achieving enough with existing resources. A poll conducted in 2010 by Education Next and Harvard's Program on Education Policy and Governance (PEPG) found widespread pessimism about school quality, with one-quarter grading America's schools as a "D" or "F"; however, while 63 percent of respondents favored an increase in "government funding for public schools in your district," only 29 percent would support a local tax increase.¹¹

This is a classic productivity problem. We need to do more with less. No one believes this can be accomplished simply by asking educators to work harder. And few believe the current system is set up to achieve these goals. Most efforts to date to reform public schooling have tinkered around the edges rather than redesigning the system in accordance with these ambitious outcomes. But new demands call for entirely new ways of structuring and

overseeing education, coupled with dramatically different approaches to channeling funding to schools and learning, new mechanisms for preparing teachers and leaders, and radically different models for delivering instruction and measuring achievement.

Enter innovation. As we noted in our recent paper “Steering Capital” (also part of the “Innovation for the Public Good” project)¹², while innovation often connotes exciting, shiny, brand-new and wildly different, all innovation really means is new ways of doing things that bring about an improved result at scale. Sometimes those innovations look quite familiar and other times they feel entirely new and unique. As innovation writer and professor Clay Christensen describes, this is because some innovations are “disruptive,” breaking with current practice to serve a new customer base or to serve an existing population in radically different ways, while others are considered “sustaining,” making improvements within the existing architecture of the current system. Education needs more of both of these kinds of innovations.

Innovations also take different forms, as we have identified in a prior paper on the subject.¹³ Most think naturally of product innovations like the personal computer or a new

By addressing the way different people and organizations interact to create value, market innovations push past the old ideologies about the role of governments and markets and can mobilize and organize resources, people, ideas and institutions.

pharmaceutical, but some innovations come in the form of processes (such as the simple hand-washing protocol that has saved millions from hospital infections) and platforms (such as the “app” platform that has enabled thousands of developers to create modular software products for iPhones and iPads). Some observers, like Judith Rodin of the Rockefeller Foundation (which supported this research project), identify a special kind of platform innovation as “organizational innovations,” but the concept is the same: a new way of organizing resources and structures, including a new standard that influences how related products and process innovations emerge. Rodin also adds to the list “market innovations,” explaining for example how Rockefeller has attempted to create better conditions for

“impact investors” to obtain both financial and social returns by setting up a network for those investors to work together but also coordinating entrepreneurs who receive that funding.¹⁴ By addressing the way different people and organizations interact to create value, market innovations push past the old ideologies about the role of governments and markets and can mobilize and organize resources, people, ideas and institutions.

Based on our research and observations, we would posit that the Investing in Innovation (i3) fund represents an attempt to identify field-based product and process innovations—while itself demonstrating an early-stage organizational and market innovation within government. Through i3 and other related efforts (see sidebar on page 4), the U.S. Department of Education appears to be attempting to transform itself from a bureaucratic, compliance-based federal agency into one that uses its unique position in the ecosystem (size, cross-state role and ability to drive national influence) to foster a stronger ecosystem for innovation.

This notion of an “ecosystem” is crucial, because in order for innovation to thrive and grow, it must take into account a wide range of stakeholders and the ways that they work together. This includes the typical players in schooling, including students, parents, teachers and administrators, but also those often considered only at the margin, like institutions of higher education that prepare teachers and leaders, nonprofit and for-profit suppliers of products and services for schools (including large education publishers and entrepreneurial start-ups), the private and philanthropic capital providers that provide funding to start and grow those organizations, and the policymakers. These policymakers define the goals and operating conditions of public education through laws and regulations (at the federal, state and local levels), provide operating capital to schools and related institutions (the vast majority from the state and local levels) and occasionally provide some investment capital for new initiatives (primarily at the federal level).

Like any other ecosystem, the educational ecosystem must also change and adapt as the needs of its participants change—which creates great friction in education. While constant change is considered unavoidable in most other parts of our lives, within education many resist it, and often seem to believe that the full “supply” of tools and talent and ideas needed for public education to thrive in this new global knowledge age already exist within the system and its schools, within higher education programs, and in the methods and products already available to teach students and manage schools. Compared to other fields of similar scale and import (like medicine or energy), there has historically been real resistance in education to the idea of improving or increasing the diversity of supply of any of these resources, especially when doing so threatens the historical dynamics in the ecosystem or implies that useful knowledge, ideas, people and resources might lie outside of the current providers. This inward-looking dynamic oversimplifies the problem, and inappropriately narrows the solution set.

Increasing innovation in education calls upon all these stakeholders to change their behavior in meaningful ways, and to do so over time in a cycle of continuous improvement. As countless innovation researchers have described, the crucial element of an effective innovation

is not just the spark of “new” or even the “better” of the initial results, but the way in which it leads to a continuous learning and improvement cycle within the ecosystem that allows ideas to feed off each other, improve one another and multiply. This is no less true when it comes to evaluating the initial round of i3, as former U.S. Department of Education official John Bailey pointed out when the first round of grantees was announced. He wrote:

Innovation investments, while needed, are insufficient by themselves. More attention needs to be paid to creating the conditions in which innovation can occur - what some refer to as an innovation ecosystem that includes human capital, financial capital, and regulatory environment. It isn't that there is a shortage of ideas or entrepreneurs in the education sector, it is that the tangled web of regulations, entrenched bureaucracies, and outdated policies [makes] it difficult for any of these innovations to be adopted by traditional schools stuck in their traditional system.¹⁵

The premise of this paper is that given the need to improve public schooling across the U.S., the federal Department of Education has a unique and important role to play in creating and sustaining a cycle of innovation and learning for public education. The core questions we shall consider are: to what degree did the initial i3 program make progress toward that goal, and what can we learn from that experience to continue advancing innovation in public education for the benefit of the millions of students who rely on the public school system every day?

THE INVESTING IN INNOVATION PROGRAM

Laying the Foundation for i3

The mission of the U.S. Department of Education, according to its Web site, is “to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.” It does this primarily by distributing federal education funding and creating policies that dictate how it will be spent and monitored, although it also collects data, commissions and disseminates research, and makes sure nobody using federal funds is violating discrimination laws.¹⁶ While the Investing in Innovation Fund comes primarily out of that first bucket of work—putting money to work, as the name implies—it is also an example of how the Department focuses national attention on key educational issues of national importance: the achievement gap and declining student achievement relative to other countries.

Over the last decade, the law that has set the tone for the way the federal government has worked with states, districts and schools—particularly in low-income areas—is the No Child Left Behind (NCLB) Act, which was enacted in 2002 as the latest version of the Elementary and Secondary Education Act, the primary federal education funding law since the 1960s. No Child Left Behind mandated that schools receiving federal funding make annual progress toward moving all students to proficiency, as demonstrated by gains on standardized state

tests, and that schools “disaggregate” those scores by student characteristics like income and ethnicity. It also imposed escalating penalties for schools and districts that failed to make progress. Among other things, NCLB is widely credited with placing a continued emphasis on holding schools accountable for improving student achievement, and on shining a spotlight on the needs of groups of students that had been underserved—whose performance had been masked when only average school scores were reported.

Still, NCLB is far from perfect, and many saw an opportunity to improve upon it when the act’s congressional reauthorization appeared on the horizon in 2007. One relevant piece of legislation introduced during that time—while George W. Bush was president—was the

“I believe it is critical for the federal government and the private sector to collaborate to identify what works and to bring the substantial financial resources required to the table.” –Charles Harris, SeaChange Capital Partners

Bringing Success to Scale Act (HR 3611), whose echoes would be felt several years later in the language surrounding the Investing in Innovation Fund. Bringing Success to Scale sought to establish awards for local education agencies (LEAs) and schools that demonstrated academic achievement and formed partnerships with the private sector that would provide matching funds to bring results to scale. Notably, the bill would also have awarded grants “to school management or support organizations, nonprofit organizations, and human capital providers so that they can work in partnership with the private sector and philanthropic community to expand innovative programs that produce results and share best

practices with schools and LEAs.”¹⁷ The 2007 legislation specified that these organizations could include school management organizations, human capital providers, educational tools, but also those supporting parental and community involvement and those providing before-school, after-school, or in-school academic, emotional and behavioral supports. “The mechanisms to evaluate impact on academic achievement already exist,” noted Charles Harris, a longtime investment banker who founded SeaChange Capital Partners to provide growth funding to education organizations, in his testimony at the time. “I believe it is critical for the federal government and the private sector to collaborate to identify what works and to bring the substantial financial resources required to the table.”¹⁸

Such a competitive program would not have been entirely new, of course. The vast majority of federal funds are disbursed following a set formula, calculated by input metrics like the number of students in a district or state. For example, Title I of the Elementary and Secondary Education Act allocates monies to schools based on how many eligible children they enroll—not the characteristics of those students, nor how well (or poorly) those schools are doing at

educating those students or otherwise performing. However, the Department also awards competitive grants; depending on the program, these funds may be awarded to agencies like districts and states, but also to outside organizations and individuals. But competitive grants

“While federal spending on innovation is a vanishingly small part of the overall education pie, such funding is almost non-existent at the state and district level, so federal dollars have outsized influence.” –Larry Berger, Wireless Generation and Patrick McGuinn, Drew University

are still a relatively small percentage: in fiscal year 2010, just \$7.2 billion of the \$64.1 billion in discretionary federal education spending was allocated through competitions¹⁹; by comparison, more than \$43 billion was allocated through three of the largest formula-based programs: Title I under ESEA, the Individuals with Disabilities Education Act (IDEA) grants to states, and the Pell Grant program for college students.²⁰ Roughly \$2 billion of these discretionary programs sit within the relatively new Office of Innovation and Improvement (OII), which was created in 2002 and managed the i3 grants program. With the combination of vast formula-driven funds and narrowly focused competitive grants, these streams of federal money are rarely coordinated in ways that encourage the development of brand-new innovations or the

scale-up of successful solutions. Moreover, as entrepreneur Larry Berger and scholar Patrick McGuinn recently pointed out, “While federal spending on innovation is a vanishingly small part of the overall education pie, such funding is almost non-existent at the state and district level, so federal dollars have outsized influence.”²¹

Education and the Economic Stimulus

As the 2008 presidential election approached, ESEA reauthorization moved to the back burner, awaiting a new presidential administration and Congress to determine its future course. The economic crisis also came home to roost in education as in other parts of the economy, with school systems making massive job cuts and sharply limiting spending. With its emphasis on creative problem-solving and its promise of greater productivity—better outcomes for less money—“innovation” became a buzzword on both sides of the aisle in education and beyond. By late 2008, it was becoming clear that it was time for the government to take drastic action to address the economy, and by early 2009, Congress passed the American Recovery and Reinvestment Act—commonly known as the economic stimulus package, which promised to put \$787 billion to work in reviving the economy by saving jobs, creating new infrastructure and spurring technological advances as a means to long-term economic growth.²²

The \$100 billion education component of the stimulus package included about \$54 billion in the form of the State Fiscal Stabilization Fund to be delivered to state governors, who would distribute funds to local education agencies and institutions of higher education. While more than \$48 billion of that fund was awarded directly to states on a traditional formula basis to help prevent job cuts in early learning, K-12 and higher education institutions, the remaining \$5 billion was carved out to advance reform.²³ With so much pressure to support the status quo in education, setting aside this sum to be awarded competitively was no small feat. President Barack Obama had appointed as his Education Secretary Arne Duncan, who brought a reform-oriented approach to the role of the federal government. As CEO of Chicago Public Schools, Duncan had embraced entrepreneurial reforms like charter schools as mechanisms for improving student achievement and sparking wider change in the city's schools. "Too often our department has focused on bureaucratic compliance and audits, not on accelerating student achievement," he noted in a 2009 speech to grantmakers. "I want our department to become an engine of innovation, not a compliance machine. I want the department to provide powerful incentives to states, districts, and nonprofits to innovate—but at the same time leave most of the creative thinking and entrepreneurship for achieving our common goals in local hands."²⁴

Of the \$5 billion set aside for reform under the stimulus, the competitive state grant program known as "Race to the Top" made up \$4.35 billion and would be awarded to states that demonstrated they could make advances against the four education policy "assurances" that the stabilization fund specified: progress toward rigorous college- and career-ready standards and assessments, pre-K to college and career data systems, teacher effectiveness and equitable distribution, and interventions for the lowest-performing schools. By requiring certain reforms to be in place to qualify states for Race to the Top grants, the Department established incentives for states to make significant changes to policies that would advance performance-driven practices and innovation, including the development of common state standards and corresponding assessments.

The remaining \$650 million was set aside into another fund that districts and nonprofit groups "with a strong track record of results" could apply for—the program that would eventually be called Investing in Innovation.

"The Invest in What Works and Innovation Fund"

The original stimulus legislation made reference simply to an "Innovation Fund" that would be a part of the education package. However, initial speeches and regulations in early 2009

began to hint at the shape the program would take, focused less on early-stage innovation than on taking successful practices to scale, as embodied in its original name: the “Invest in What Works and Innovation Fund.”²⁵ But by the time the program had made its way through the congressional policy-making process and was formally unveiled in August 2009, the unwieldy but precise name had been shortened to the “Investing in Innovation” (or “i3”) Fund, which was easier to remember and pronounce but set up a misperception in the field that the fund would focus only on the popular connotation of innovation as purely new and different. In fact, Secretary Duncan went to great lengths to try to clarify this in his speeches unveiling the program. “Educational innovation should not be confused with just generating more great ideas or unique inventions,” noted Secretary Duncan. “Instead we need new solutions that improve outcomes—and that can, and will, be used to serve hundreds of thousands of teachers and millions of students.”

Unlike many of the Department’s discretionary grant programs, which are narrowly proscribed and result in a relatively small number of applicants, the i3 program was designed to increase and spread education innovation in several specific ways:

- » To increase the “**supply**” of innovative practices and programs in a way that was aligned with “demand” from schools, districts and states attempting performance-based reforms inspired by and/or supported by federal Race to the Top funds;
- » To shift the Department’s allocation of resources toward **evidence** anchored in student achievement outcomes;
- » To encourage **scale** based on those outcomes, by establishing a graduated evidence framework that would provide a rigorous bar for demonstrated proof of successful student-level progress—and by providing more funds for more evidence; and
- » To mobilize and **align** private sector resources around key priorities defined by the Department, and a common definition of evidence, so that supported innovations would be stronger and more sustainable.

As explained earlier, the full cycle of innovation does include both early-stage ideas and the growth of proven approaches and tools. However, although combining the two in a single ambitious grant program may have been politically necessary, doing so with a name change that emphasized *only* innovation set up unrealistic expectations in the field with respect to the novelty of what would be funded. In our survey of funders and i3 applicants, respondents acknowledged the i3’s intent to do both, but funders chose “increasing scale by investing in what works” as the most important goal of i3, whereas applicants said “increasing innovation activity.” As we’ll explain further below, the path forward may be to address different stages

of innovation in different ways. As a respondent to a survey conducted by Whiteboard Advisors put it, “The real issue is not whether to fund one or the other. The real issue is that there are no mechanisms to determine how to price and distribute capital to these very different sorts of areas.”²⁶

Rolling Out the Investing in Innovation Program

The announcement of the first round of the Investing in Innovation program unleashed a great deal of pent-up excitement and interest in educational innovation. “When I first heard about i3, I thought it could make a big difference in the way schools work together and get supported in different ways,” noted one of our interviewees, who later applied for an i3 grant. “The problems we are chasing down are so massive that if government money isn’t involved, there’s no chance of success,” one grantmaker told us. During the 30-day public comment period following the original Notice of Proposed Priorities on Oct. 9, 2009, more than 300 letters and 1,000 comments were submitted by districts, states, entrepreneurs, grantmakers and interest group associations.

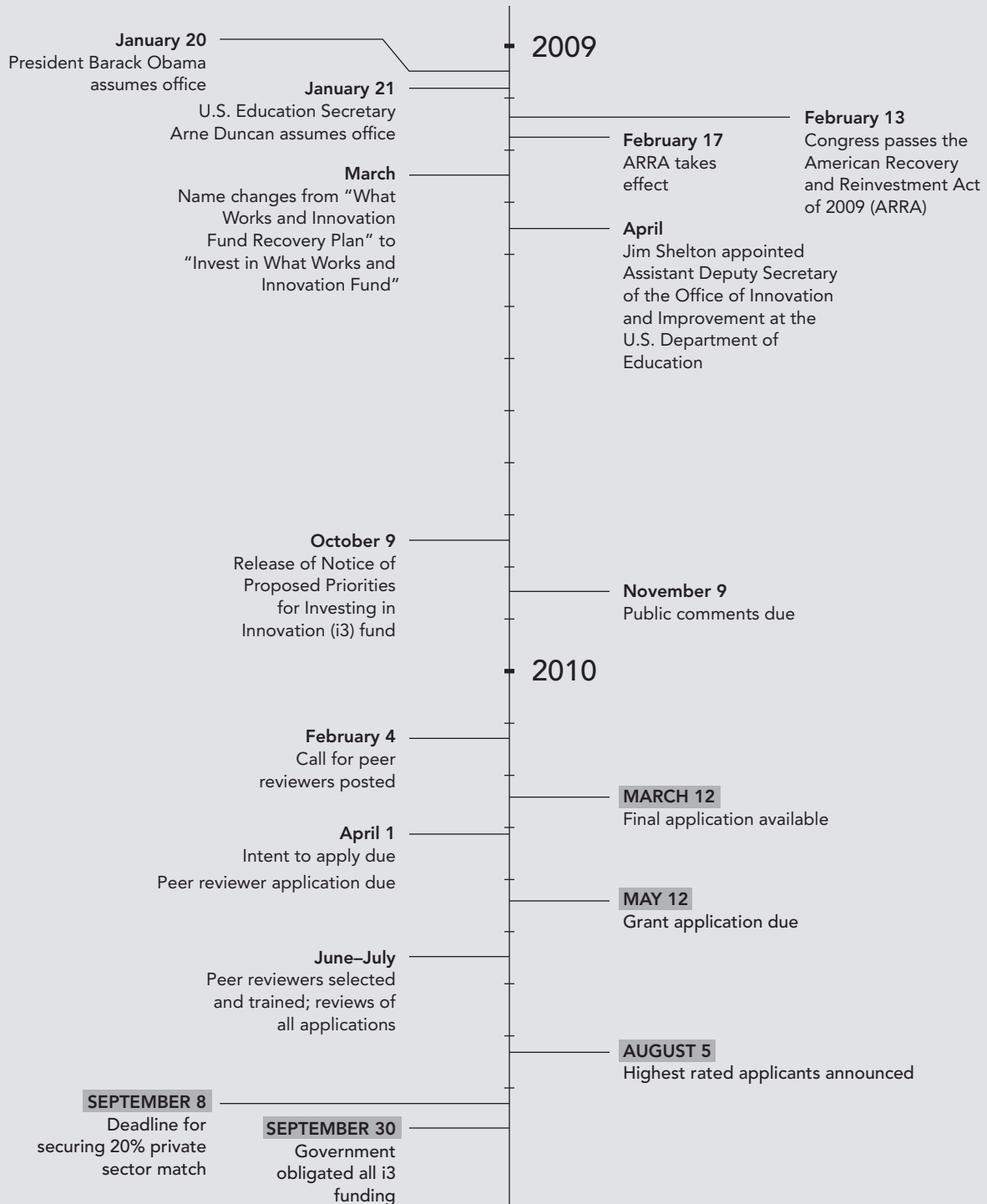
Who Could Apply: Eligibility and Partnerships

On March 12, 2010, final regulations were released that nailed down the shape of the initial program. It would “provide competitive grants to applicants with a record of improving student achievement, attainment or retention in order to expand the implementation of, and investment in, innovative practices that are demonstrated to have an impact” on student achievement and attainment. The original Notice of Proposed Priorities in October 2009 actually sought to standardize this track record by requiring applicants to demonstrate that they had met or exceeded their state’s No Child Left Behind (NCLB) progress objectives for two or more consecutive years, or at least increased student achievement for the subgroups of students targeted under NCLB. This was one of the biggest bones of contention during the public comment period. “Many school districts objected to the requirement in the proposed rules that applicants show strong evidence of past success in order to justify funding for an innovative strategy, while many education researchers thought the department should be even stricter,” noted *Education Week* at the time. Siding with the prospective applicants in the field, the final regulations dropped this NCLB-based requirement.

The final regulations also spelled out clearly the kinds of organizations that were eligible to apply: local education agencies (LEAs)—typically districts, although some individual

FIGURE 1

Timeline



schools and public charter school organizations are structured in this way—and nonprofits (including colleges or universities) partnering with one or more LEAs or a consortium of schools. This was unlike the “Growing What Works” legislation proposed back in 2007 that would have channeled funding toward LEAs but also a wider range of other organizations. The congressional statute for i3 explicitly excluded for-profit organizations from participating as applicants or official partners, and barred them from receiving subgrants outside of the traditional cumbersome procurement process that anyone receiving federal funding must adhere to. Some of our interviewees felt that the Department interpreted the legislation conservatively and could have specified wider latitude on how subgrants worked in order to better engage private-sector companies, but they offered no specific examples for how to accomplish this or how other agencies have done so. The field of prospective applicants was narrowed further by requiring nonprofit organizations either to name the specific partner LEAs they would work with, or at least describe the characteristics of such partners and the process that would be used to select them. Similarly, LEA applicants had to demonstrate partnerships with the private sector, including commitments to match 20 percent of the requested federal funding with private funds (more on this later).

Together, these eligibility requirements foreshadowed a pool of applicants and grantees made up of existing organizations that had already addressed K-12 schooling in some way, and limited to those who were willing and able to partner with LEAs or specific schools. By barring for-profit organizations from participating, it was virtually certain that the applicant pool—and the eventual grantee list—would miss out on some of the most promising technology advances, where the predominant support has come from private investors and most entrepreneurs have chosen to create for-profit businesses to attract engineering talent. “I think it is an incomplete attempt to spur innovation. There’s no reason to assume that K-12 or higher education or nonprofits have a lock on innovation,” said one nonprofit leader whose organization later won an i3 Development grant. “Why not get the best of the best to push the envelope?”

Requiring the organizations either to be a local education agency (LEA) or to have already demonstrated success in working with LEAs or schools emphasized respect for a track record in the field, but it also meant that few truly new organizations were eligible to apply—and those that consisted of newly formed teams were penalized in the application scoring for that newness, which may also have inhibited new efforts and contributed to the sense expressed by some that it was largely “the usual suspects” who participated. “A partnership that includes a nonprofit organization must demonstrate that the nonprofit organization has a record of significantly improving student achievement, attainment, or retention through its work

with an LEA or schools,” noted the Department’s Frequently Asked Questions document, which was updated no less than five times throughout the application process. “Although a partnership is not prohibited from including a ‘new’ nonprofit organization as an official partner, such a nonprofit organization would be unlikely to have such a record.”²⁷ While this language referred to the lead partners only and those applicants were free to engage any other partners—including those that might be newer or lack a K-12 education track record of any kind—the Department’s communication about this issue and the complication of interpreting such subtleties led most applicants to shy away from pulling any new organizations into their efforts lest it jeopardize their chances of winning a grant.

Also missing from the equation were nonprofits that couldn’t (or didn’t want to) partner with a local education agency—some because of their structural focus on learning outside of school, others because of a belief that they could have a bigger or better impact working independently. And many small organizations and LEAs, especially rural districts, simply didn’t have the capacity—time or people, or money to buy either one—to take on such an extensive application. (Although Department officials point out that applicants with limited access to resources could request a waiver of some or all of their match, no one requested such a waiver.)

What Applicants Had To Address: Absolute Priorities, Competitive Preferences and the Evidence

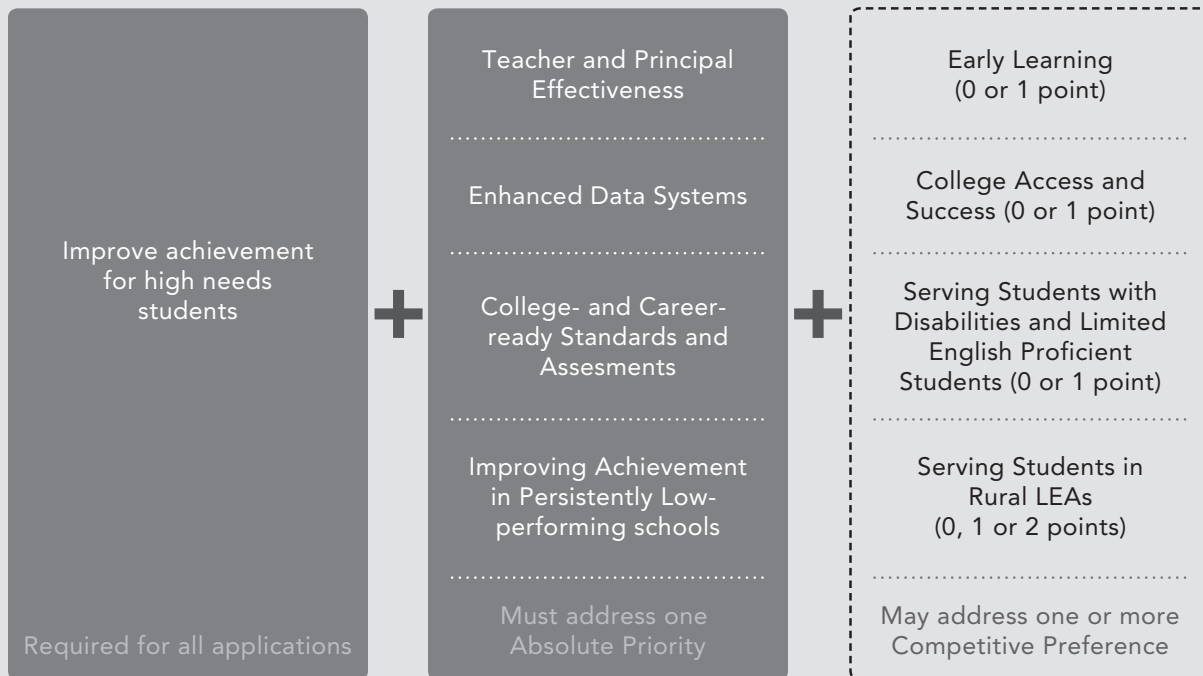
The original i3 legislation approved by Congress allowed the Education Secretary wide latitude to define in the regulations what applicants had to focus on and what their applications would need to include. First and foremost, the Department required all applications to focus on high-need students and the extent to which the LEA or partnership had significantly closed achievement gaps or increased student achievement, graduation rates, teacher or principal quality or other factors among those groups. Each application also had to focus on one of four “absolute” priorities, aligned with the four “assurances” of the State Fiscal Stabilization Fund part of the stimulus legislation (and thus also aligned with the related Race to the Top state competitive grants process): improvements in teacher effectiveness, enhanced data systems, college- and career-ready standards and rigorous assessments, and improving achievement in low-performing schools.²⁸

By orienting its priority areas around the same “assurances” that drove the Race to the Top program through which a large infusion of state spending would be funneled, i3 sought to align the “supply” of new solutions with the “demand” being generated by the 12 states

that won RTT funds—not to mention the many other states that pursued related reforms in the hopes of winning RTT funds. These four “absolute” priorities also opened the door for a diverse range of organizations and initiatives to apply for funding, appropriate to the “field scan” structure. Many applicants appreciated this approach, and saw it as a way for the federal government to actively empower leaders in the field as legitimate sources for innovation. But applicants were required to choose just one absolute priority, which may have had the effect of favoring narrower solutions rather than more comprehensive or integrated innovations.

FIGURE 2

Absolute Priorities and Competitive Preferences in i3, 2010



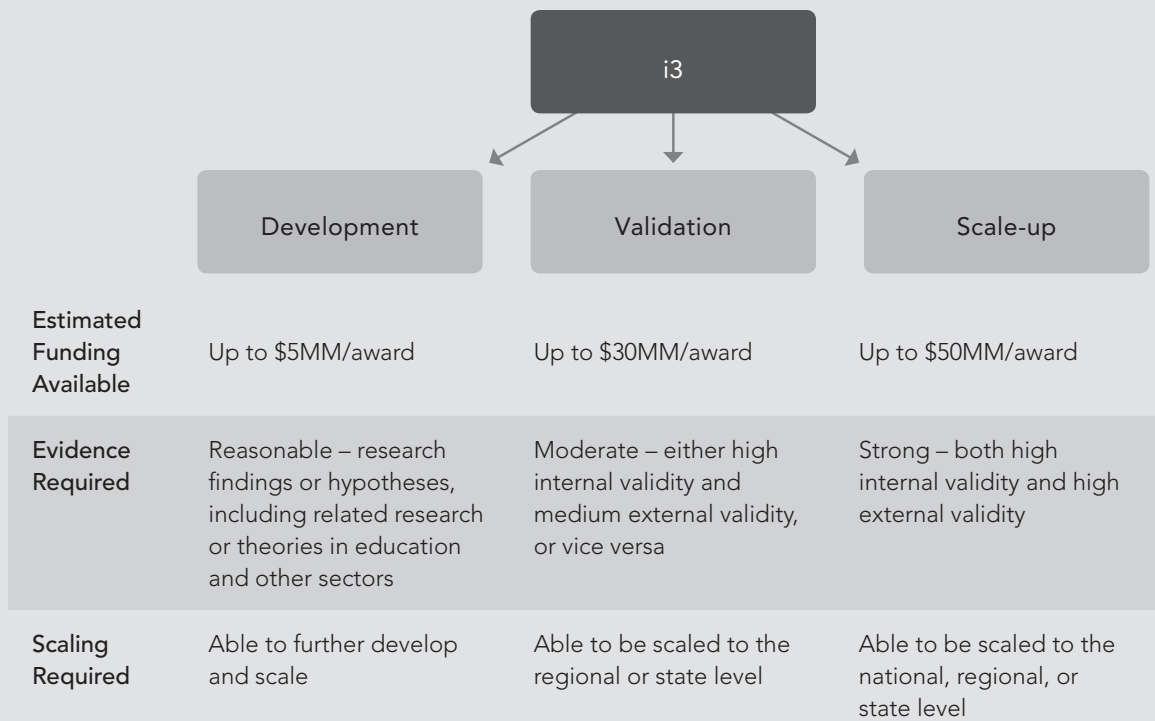
Source: U.S. Department of Education

Applicants could also earn a few bonus points on their applications for addressing as many as four “competitive” priorities: improve early learning outcomes, support college access and success, address the unique needs of students with disabilities or limited English proficient students, or serve schools in rural LEAs.

By far the most significant innovation that i3 brought to the table was its evidence framework and the related establishment of stages, which acknowledged that innovation progresses through a series of stages of maturity, from novel to promising to proven to replicable. Though controversial, this evidence framework established a rigorous level of evidence across all stages, even the very earliest; dictated that different amounts and types of evidence

FIGURE 3

Types of Awards Available Under i3



Source: U.S. Department of Education

would be required at each stage of an innovation’s development; and drove more funding toward innovations with more evidence. This was a novel approach for a Department whose programs often specify one narrow range for “winning” applications rather than a full cycle of progress. “Development Grants” would be awarded to proposals with “reasonable” levels of evidence of “research-based findings or hypotheses,” with a maximum award size of \$5 million, and with the explicit expectation that they would plan to take the program to some greater scale. “Validation Grants” were established for proposals with “moderate” evidence, including at least one experimental or quasi-experimental study that warranted further research in other contexts, with awards up to \$30 million and an expectation that the project would scale to the regional or state level. The Department estimated that it would make up to 100 awards in each of these lower-level categories. Finally, the “Scale-Up Grants” category was reserved for just five awards, and would grant up to \$50 million apiece to applicants that demonstrated “strong” evidence, including multiple experimental or quasi-experimental studies but also at least one “large, well-designed and well-implemented randomized controlled, multisite trial.” These Scale-Up grants were expected to scale up to the national, regional or state level. Across the three levels, there was no requirement for the specific number of students, schools or locales that needed to be reached by applicants, but the application did require “an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 250,000, and 500,000 students”—a level of specificity that confused many applicants and led them to pitch their scale in one of those directions.

Applications would be screened and scored by peer reviewers, rather than department staff, based on a set of seven selection criteria that were consistent across all applications (see Figure 4 on page 23). The regulations specified different points available for each criterion in each evidence level—requiring evidence at all levels, even the earliest, though with a nod to the varying importance of different types of evidence and data based on the stage of an organization or program. “In the largest, scale-up grants, evidence is what matters most: It’s worth 20 percent of an applicant’s grade,” noted *Education Week*. “For the smallest, development grants, evidence is worth just 10 percent. But those smallest grants place a significant amount of weight on the need for the project, and the applicant’s track record—each is worth 25 percent of the final grade.”²⁹ The chart that follows shows the number of points available for each category across each of the evidence levels, beginning with the highest bar. For Scale-Up grants, strength of evidence (B) counted most strongly. For Development grants, the need for the project (A) mattered more, as did the applicant’s experience (C). While this made some sense given that these applicants would have little evidence of effectiveness, it meant that funding geared toward new ideas would go toward legacy players, rather than the kinds of new organizations that tend to come up with breakthrough concepts and products.

FIGURE 4

Points Available for i3 Applications, 2010

Selection Criteria	Scale-Up Grants	Validation Grants	Development Grants
A. Need for the Project and Quality of the Project Design	15	20	25
B. Strength of Research, Significance of Effect and Magnitude of Effect	20	15	10
C. Experience of the Eligible Applicant	15	20	25
D. Quality of the Project Evaluation	15	15	15
E. Strategy and Capacity to Bring to Scale (Scale-Up and Validation grants); Strategy and Capacity to Further Develop and Bring to Scale (Development grants)	15	10	5
F. Sustainability	10	10	10
G. Quality of the Management Plan and Personnel	10	10	10
Total Points	100	100	100

Source: U.S. Department of Education

In our interviews and analysis, we found almost universal appreciation for the fact that i3 emphasized evidence and acknowledged the different stages of an innovation's development. Compared with other discretionary grant programs in education, applicants and funders agreed that i3 took a giant leap forward by setting forth a rigorous framework of evidence rooted not in input metrics like size of staff or hours of work but rather in outcomes metrics like the quality and scale of student achievement. "Steering money to effective programs is loads better than mailing ten billion bucks to districts so they can keep doing the same old

thing,” i3 skeptic Rick Hess of the American Enterprise Institute grudgingly conceded.³⁰

“Unlike most federal grant programs, this program required an evidence base—you needed to

“Steering money to effective programs is loads better than mailing ten billion bucks to districts so they can keep doing the same old thing.”

—Rick Hess, American Enterprise Institute

show that your program actually impacts achievement for kids,” one applicant, whose organization ultimately won a Development grant, told us. “There need to be more grants programs that give money based on how students are achieving versus based on demographics or location.”

In general, the overwhelming focus on evidence in the application—regardless of stage—forced applicants to consider deeply the impact they sought and the role of evaluation in their work. Done well, evaluation is time-consuming and expensive, and the ability to use philanthropic

or government resources to support this work is relatively rare. “i3 legitimized the importance of third-party research,” noted one winning Scale-Up applicant. “We didn’t have to spend it out of our own money and the results will probably play a huge part in our fundraising goal,” agreed another winning Scale-Up applicant. “We were grumpy about the evidence base initially,” one Validation grantee told us. “What it did do was motivate us to go get some quality research—it cost us some money but we had the resources to do so.”

However, there were mixed opinions about the appropriate evidentiary requirements at each level. At the Development stage, there was a sense that the selection criteria might have encouraged more break-the-mold innovations and organizations if the applicant’s experience, capacity to scale, and quality of the management team were assessed in other ways. “Neither the iPhone or iPad teams at Apple would have been able to meet this standard to get the funds to initiate these projects,” noted one Development applicant who did not win a grant. “It would have been helpful for the USDOE to better define what it means by innovation and how much risk it is willing to bear.” The applicant suggested that the USDOE replace questions about the applicant’s experience with ways to assess the organization or team’s past innovations and their capacity to manage risk, and noted that individuals’ newness to the organization should not be mistaken for lack of experience. “When an organization embarks on a new project, it is typical to hire talented individuals with expertise in the area. Organizations should always try to apply the best talent to the goal at hand,” the applicant added.

At the Validation and Scale-Up stages, many felt that, prior to i3, very few organizations—nonprofits and LEAs alike—had the necessary financial resources to invest in the expensive

experimental or quasi-experimental studies required to meet these criteria. This rigid evidence definition may have skewed the applicant pool toward more of the “usual suspects.” “We weren’t able to have the gold standard of evidence because we didn’t have the foresight to randomly assign students or study lottery grantees versus losers,” notes one winning Development applicant. “They defined success in a way that was really difficult to accomplish. They needed to allow for more flexibility for metrics and let organizations develop the best ways to show the results and how they make them work.” The rigorous evidence requirements (especially applied through a rigid peer review process that seems to have drawn more-traditional “peers,” as we’ll explain further below) also favored those whose work could be easily and definitively measured, rather than new, comprehensive or multidimensional interventions. “I think there certainly should be high standards in doing this work, [but] I think we have to have a mixed set of evidence standards rather than just a randomized field trial to see what is working,” noted one Development applicant who did not win a grant.

The Application Process

The Department released regulations on March 12, 2010, and strongly encouraged applicants to send an email indicating their intent to apply by April 1—naming the applicant, the evidence level the project would apply under, and the absolute priority—so that the Department could get a sense of how it would have to structure its decision-making and peer review processes. More than 2,500 organizations filed an intent to apply³¹, with final applications due just six weeks later, on May 12.

Applicants worked quickly, and many of those we interviewed appreciated this forcing function and the opportunity to focus on some of the things they had wanted to do but hadn’t yet prioritized due to a lack of funding. In a matter of weeks, applicants pulled together partnerships and consortia that would otherwise have taken months or years. “Half of the value of i3 is just getting ideas on paper and forcing the execution,” said one Scale-Up grantee. However, other organizations (mostly those at the later Validation or Scale-Up stage) were adamant that the i3 process was only valuable because its field-scan approach allowed enough latitude to complement and align with their existing plans or sustainability goals. “We couldn’t bank on the scoring process and didn’t want the grant to pull us away from our strategy,” said one Validation grantee. “We saw this as an opportunity to build stability in our contracts, as a way to build five-year relationships with districts with initial dollars coming from the federal government and then having the districts assume more costs.”

The requirements that applicants partner with one another—mandating that LEAs partner with the private sector for their matching funds, and that nonprofits apply in partnership with schools and school systems—fostered a collaborative approach that some of the applicants we spoke with appreciated as a learning opportunity. One tool touted as a solution for this need was the Open Innovation Portal, which was launched in February 2010 as a public-private partnership itself (operated by the Department, the White House Office of Science and Technology Policy and STCI/VenCorps.org). It was open to applicants, partners and potential funders, and was described as “a Web 2.0 innovation ecosystem” that would create a collaborative community around ideas and also a marketplace “that taps the ‘wisdom of the community’ to identify and resource the most promising ideas in education.” While none of our interviewees cited the Open Innovation Portal as a resource for finding money or partners in the i3 process, the Department says more than 5,000 members have joined the Portal, creating more than 1,000 connections and posting more than 250 ideas to improve education.³² The Department also asked applicants to “participate in, organize, or facilitate ‘communities of practice,’ which are defined as a group of grantees that agree to interact regularly to solve a persistent problem or improve practice in an important area.” In addition to at least annual meetings for all project directors, the Department is also considering providing several tools to support grantee communities of practice around thematic areas and grantee challenges. But the value of this collaborative effect will be unclear for quite some time, and if history is any indicator, assessing the impact of this knowledge development part of the program is likely to take a backseat to the evaluation of individual grantees’ activity.

The Department made many elements of the process very transparent relative to other competitive grant programs, which one Validation grantee called a “breath of fresh air.” Generally one critique of federal grants processes is that officials publish only application guidelines and criteria, and then little to nothing is shared before they finally announce award grantees. In this instance, the Department of Education published the notice of proposed priorities to obtain public comment (which is not usually necessary for the first competition under a new program) months in advance of issuing final regulations. The Department also hosted three application workshops with more than 1,000 attendees (and another 2,000 joining by webinar), posted materials from those sessions online, regularly updated an expansive list of frequently asked questions (FAQs), and posted interim lists of all those organizations that filed an intent to apply, along with detailed information about the winning applications and other highly rated applications that did not make the final cut. However, this transparency may be an example of the theory of rising expectations: even though this program was vastly more transparent than most in the federal government’s history, releasing

so much information may have paradoxically spurred a demand for even more detailed information, including how eligibility was determined and how raw reviewer scores were standardized into scale scores (more on the latter in the next section). The Department also estimated that it would award up to five Scale-Up awards and up to 100 Validation awards and 100 Development awards, unintentionally setting the unrealistic expectation in the field that hundreds of organizations would benefit—though just a few dozen would ultimately win.

By the time mid-May rolled around, 1,698 applicants chose to throw their hats into the ring—a remarkable number, but less than 70 percent of the more than 2,500 that had indicated their intent to apply six weeks earlier. As prospective applicants mulled their options, the Scale-Up level surely proved the most daunting: although 87 indicated an intent to apply at this evidence level, just 22 percent of them (19 applications) were ultimately submitted, while more than 65 percent of the expected number of applications at the Validation level and close to 80 percent of those at the Development level made their way in.

FIGURE 5

Intended and Actual i3 Applications, 2010

Grant Type	Intent to Apply	Applications Received
Scale-Up	87	19
Validation	527	355
Development	1666	1324
NA/Unclear	165	0
TOTAL	2445	1698

Source: U.S. Department of Education

Decision-Making Process: Peer Review and Application Scoring

Recognizing the difficulty of identifying effective innovations—particularly at the early stages—the Department initially had hoped to engage intermediaries in the process, but congressional statute did not allow it. As a result, the Department had to handle selection in-house, and ended up engaging peer reviewers to score the massive stack of applications. While the use of peer reviewers is not unusual for a government grant program, many questioned the decision to rely solely on the scores of a large pool of peer reviewers to identify quickly—and on paper alone—which innovative ideas were worthy of support and which established programs demonstrated sufficient evidence to merit enormous sums of money to help them grow. As a comparison point, other federal programs designed to award grants for innovative programs and practices, such as the National Science Foundation and the National Institutes of Health, rarely put all the power in the hands of peer reviewers. More often, peer reviewers are a check on the government’s process and a way to supplement government knowledge with industry expertise. A number of interviewees hypothesized that perhaps the recent Reading First controversy led Department officials to err on the side of caution by relying exclusively on peer review judgment and leaving aside their staff’s own judgment about the peer review process and the resulting grantees.

The process of choosing those peer reviewers was itself daunting: more than 1,400 peer review applications were submitted, with 346 reviewers ultimately chosen to sift through and score the nearly 1,700 applications. Some reviewers were chosen for their subject matter expertise and others (with selection help from the Institute of Education Sciences) for their knowledge of research and evaluation.³³ The need for so many reviewers made it challenging to find qualified reviewers who had no conflicts of interest with applying organizations. Stringent criteria designed to eliminate conflicts of interest meant that many knowledgeable people were disqualified: not only employees and consultants hired by i3 applicants were off limits (not to mention anyone else with a personal financial stake in the outcome), so were reviewers with what was termed an “indirect conflict of interest” who had provided any kind of advice or assistance to any of the i3 applicant projects.³⁴ Many of the most knowledgeable people were taken off the table—or, if allowed to review, were assigned to applications from different content areas and different states, and were unable to chair a review panel.³⁵ Who was left? “District data officers and retired professors,” observed one reviewer. “After working in this field for eight years, I only recognized five names on the list of 346 peer reviewers,” another innovation observer told us. While expertise is important for peer reviewers, another observer noted that those with academic credentials in education per se are often more interested in

content and curriculum, rather than systems change, and may have biased the peer review process in favor of more incremental innovations.

Once applications were submitted by May 12, the process of screening and scoring applications kicked into high gear, where it remained throughout the summer. Those who were selected as reviewers were organized into “panels,” or groups of reviewers, according to the absolute priority their applications addressed. Each panel was made up of three to five peer reviewers who read the same set of 10 to 20 applications. For Scale-Up and Validation, the panel included three who looked at subject matter and two who rated based on research/evaluation. Development grant applications took a slightly different path, with all applications scored first by subject-matter reviewers, and then the top 100 applications advancing to a second tier, where they were then reviewed by two research/evaluation experts.³⁶ Reviewers were given explicit instructions to review and score each application separately, and not compare similar applications directly with one another.

Given the tight timeline and sheer volume of applications, reviewers received limited training: one orientation conference call to help them navigate the 10 to 20 applications they and their fellow panelists would be screening³⁷, and several additional calls during the process to “norm” their scores with those of other reviewers who had scored those same applications. This may have had the effect of watering down the reviewers’ assessments: one peer reviewer we spoke with felt that when a small group of reviewers brought differing perspectives to the evidence, they found themselves “regressing to the mean” and deferring to the most conservative reviewer. The Department took some measures to try to reconcile the tension between detailed scoring specifications intended to protect against bias or fraud, and the inevitable array of skills and judgments across a large set of reviewers. To adjust for reviewer bias, the Department converted raw scores into scaled scores for the Development and Validation categories—a calculation whose specifics weren’t publicized, but which raised questions for some. “In large-scale competitions, the Department uses a statistical standardization process which adjusts for the effect of any large-scale differences in reviewer approaches to assigning raw scores,” noted the Department’s i3 FAQ. “However, the smaller number of applications in the Scale-Up category did not support the use of standardization, and therefore raw scores were used for these applications.”

Applicants who later read reviewers’ comments noted that reviewers did not seem to have a strong grasp on the content areas they scored, nor on the practice of effective evaluation. “It was obvious that the peer reviewers were not all trained on understandings of what good evaluation is, nor were they well versed in the topic,” noted one Scale-Up applicant who did

not win a grant. Another Development applicant who did not win suggested that individual reviewers' scores could have been weighted based on their content knowledge, with more knowledgeable peer reviewers' comments counting for a greater share of the score. Although applicants who did not win may have been most critical of the peer review process, this criticism was fairly widespread. Among respondents to the Whiteboard Advisors survey, 65 percent agreed that "The scoring was too random with insufficient protocols and controls for the reviewers." Several of our interviewees thought the outcomes might have benefitted from throwing out the highest and lowest scores, as is done in some Olympic sports (where it is called "trimmed means") to minimize the effects of extreme ratings by judges biased in one direction or the other. (Notably, although the second round of i3 will continue to rely upon peer review, reviewers will not assign scores based on the strength or weakness of the evidence itself; instead, actual evidence will be included as an appendix and reviewed by the Institute of Education Sciences.³⁸)

A final criticism of the application scoring process was that it reduced programs and organizations to their paper applications, with no in-person diligence to meet teams, visit sites or review evidence deeply. "An application process like this is not a very good way to assess the full weight of the evidence of a project's effectiveness, because applicants can choose what to highlight or exclude from their proposals," noted Sara Mead of Bellwether Education Partners in her blog (where she also disclosed that she had helped write some i3 applications). "So as long as an applicant has at least some evidence that can be presented as meeting 'moderate evidence' criteria, the points that applicants actually receive depend on savvy grant-writing as much as what the full weight of the evidence actually says."³⁹ This was a sentiment repeated by a number of applicants as well—both grantees and those not selected.

According to Department officials, they initially hoped to have a two-stage process for Development stage applicants—the ones with the least to show on paper about the results and promise of their work—that would have included an initial executive summary, followed by full proposals solicited from some, and then site visits and interviews with the finalists. However, the process of drafting, vetting and implementing i3 regulations—combined with ARRA requirements for getting money out the door by September 2010—precluded such a staged application process.

Selection: Announcement of Highest-Rated Applicants and Reactions From the Field

The list of the 49 "highest-rated" projects—eligible for \$646 million in grants once they had secured their 20 percent in matching funds—was released on Aug. 5, 2010. Nearly half of

the funds would go to 15 Validation grantees, with four Scale-Up applicants awarded \$195 million between them, and 30 Development grantees splitting \$140 million. The grantees spanned 42 states and two territories (D.C. and American Samoa) and 250 project locations. California was home to the greatest number of i3 grantees, with eight, followed by five in both Massachusetts and New York, four in Washington, D.C., and three in Maryland.

FIGURE 6

Highest Rated i3 Applications, 2010

CATEGORIES AND APPLICANTS	AMOUNT
Scale-Up Grants (4)	\$194,878,659
KIPP Foundation: Success as the Norm: Scaling-Up KIPP's Effective Leadership Development Model	\$50,000,000
Ohio State University: Reading Recovery: Scaling Up What Works	\$45,593,170
Success for All Foundation: Scale-Up and Evaluation of Success for All in Struggling Elementary Schools	\$49,285,513
Teach For America: Scaling Teach for America: Growing the Talent Force to Ensure All Our Nation's Students Have Access to a Quality Education	\$50,000,000
Validation Grants (15)	\$310,699,851
ASSET Inc. (Achieving Student Success through Excellence in Teaching): ASSET Regional Professional Development Centers for Advancing STEM Education	\$ 22,308,433
Children's Literacy Initiative: Children's Literacy Initiative's Model Classroom Innovation for Raising Teaching Quality and Increasing Student Literacy Achievement	\$ 21,726,296

CATEGORIES AND APPLICANTS	AMOUNT
Validation Grants (continued)	
Council for Opportunity in Education: Using Data to Inform College Access Programming in the 21st Century High School (Using DICAP)	\$ 20,264,447
George Mason University: Virginia Initiative for Science Teaching and Achievement (VISTA)	\$ 28,455,346
Johns Hopkins University – Center for Social Organization of Schools: Validating the Talent Development-Diplomas Now Secondary School Turnaround Model	\$ 30,000,000
New Schools for New Orleans: Scaling the New Orleans Charter Restart Model	\$ 28,303,909
Niswonger Foundation: Northeast Tennessee College and Career Ready Consortium	\$ 17,751,044
Parents as Teachers National Center: Improving Educational Outcomes for American Indian Children	\$ 14,253,165
President and Fellows of Harvard College – Graduate School of Education: Project READS: Using Data to Promote Summer Reading and Close the Achievement Gap for Low-SES Students in North Carolina	\$ 12,773,136
School District No. 1 of the City and County of Denver, State of Colorado: Collaborative Strategic Reading Colorado (CSR-CO)	\$ 25,202,752
Smithsonian Institution – National Science Resources Center, LASER: The LASER Model: A Systemic and Sustainable Approach for Achieving High Standards in Science Education	\$ 25,581,105
The Curators of the University of Missouri – eMINTS National Center, Academic Affairs: eMINTS Validation Project	\$ 12,277,674
The New Teacher Project, Inc.: Teacher Effectiveness and Certification Initiative (TEACH Initiative)	\$20,829,095
Utah State University – Center for Persons with Disabilities: New Mexico K-3 Plus Extended School Year Validation Study	\$ 15,282,720

CATEGORIES AND APPLICANTS	AMOUNT
Validation Grants (continued)	
WestEd – Teacher Professional Development Program: Scaling Up Content-Area Academic Literacy in High School English Language Arts, Science and History Classes for High Needs Students	\$ 18,166,181
Development Grants (30)	\$140,399,885
Advancement Through Opportunity and Knowledge – Children Youth and Family Collaborative: District-wide program development, expansion and evaluation of the Education Pilot Project (EPP) for foster youth and preparation for statewide scale-up.	\$ 3,649,580
Alliance for College-Ready Public Schools: CollegeYes	\$ 4,989,786
American Federation of Teachers Educational Foundation – AFT Educational Issues: American Federation of Teachers Educational Foundation Educator Evaluation for Excellence in Teaching and Learning Consortium	\$5,000,000
AppleTree Institute for Education Innovation: Every Child Ready	\$5,000,000
Bay State Reading Institute: The Data Driven School Transformation Partnership. A project of the Bay State Reading Institute and 12 Massachusetts Elementary Schools.	\$ 4,997,492
Beaverton School District 48J – Teaching and Learning: The Beaverton School District Arts for Learning Lessons Project	\$ 4,041,659
Bellevue School District: Re-imagining Career and College Readiness: STEM, Rigor, and Equity in a Comprehensive High School	\$4,149,813
Board of Education of the City of New York – Division of Talent, Labor and Innovation, Office of School of One: New York City Department of Education School of One	\$4,999,560
Boston Plan for Excellence in the Public Schools Foundation: Boston Teacher Residency: Building the Pipeline of Effective Teachers for Turnaround Schools	\$4,855,617

CATEGORIES AND APPLICANTS	AMOUNT
Development Grants (continued)	
Boys & Girls Clubs of Greater Milwaukee: The Milwaukee Community Literacy Project	\$4,142,965
California Education Round Table Intersegmental Coordinating Committee – Alliance for Regional Collaboration to Heighten Educational Success (ARCHES): STEM Learning Opportunities Providing Equity	\$ 4,982,527
Corona-Norco Unified School District Curriculum and Instruction, Educational Services: Write Up	\$ 5,000,000
District 75/New York City Department of Education: Everyday Arts for Special Education	\$ 4,633,397
Education Connection – Center for 21st Century Skills, School Services: Science, Technology, Engineering, and Math Education for the 21st Century (STEM21)	\$ 4,473,481
Erikson Institute: Achieving High Standards for Pre-K-Grade 3 Mathematics: A Whole Teacher Approach to Professional Development	\$ 4,999,993
Exploratorium – Institute for Inquiry: Integrating English Language Development and Science: A Professional Development Approach	\$ 2,984,628
Forsyth County Schools: EngageME P.L.E.A.S.E.	\$ 4,738,500
IDEA Public Schools: Rio Grande Valley Center for Teaching and Leading Excellence	\$4,945,998
Iredell-Statesville Schools: COMPASS: Collaborative Organizational Model to Promote Aligned Support Structures	\$ 4,999,036
Jefferson County Board of Education DBA Jefferson County Public Schools – Jefferson County Public Schools, High Schools: Making Time for What Matters	\$ 4,999,458

CATEGORIES AND APPLICANTS	AMOUNT
Development Grants (continued)	
Los Angeles Unified School District – Office of the Superintendent: L.A.'s Bold Competition – Turning Around and Operating Its Low-Performing Schools	\$ 4,880,392
Montgomery County Public Schools – Office of Curriculum and Instructional Programs: North Star	\$ 4,999,634
National Forum to Accelerate Middle-Grades Reform: Schools to Watch: School Transformation Network	\$ 4,999,969
Plymouth Public Schools: New England Network for Personalization and Performance (NETWORK)	\$ 4,992,945
Saint Vrain Valley School District – Priority Schools: St. Vrain Valley School District i3 Project	\$ 3,608,880
School Board of Miami-Dade County, Florida – Intergovernmental Affairs, Grants Administration, and Community Services, Grants Administration: Florida Master Teacher Initiative	\$5,000,000
Search Institute: The Building Assets-Reducing Risks Program: Replication and Expansion of an Effective Strategy to Turn Around Low Achieving Schools	\$4,999,711
Take Stock in Children Inc.: Graduation and Higher Education for Tomorrow	\$ 4,999,947
The Achievement Network LTD: Improving Data Use in Schools: Expanding the Achievement Network Model	\$ 4,999,987
The Studio in a School Association, Inc.: Arts Achieve: Impacting Student Success in the Arts	\$ 4,372,801
TOTAL GRANTS AWARDED	\$645,978,395

Source: U.S. Department of Education

All absolute priority areas were addressed, and mostly evenly across the board, but at the Scale-Up stage, the four highest-rated applicants were divided across just two of the priority areas, teacher and principal effectiveness (Teach For America and KIPP Foundation) and school turnarounds (Success For All Foundation and Ohio State University’s Reading Recovery program). Largely because of the size of those four grants, those two absolute priorities gobbled up more than two-thirds of the total dollars allocated through i3. The standards and

FIGURE 7

i3 Awards by Absolute Priority and Stage, 2010

Absolute Priority	Development	Validation	Scale-Up	TOTAL
1. Innovations that Support Effective Teachers and Principals	6 (\$27,418,676)	4 (\$96,213,489)	2 (\$100,000,000)	12 (\$223,632,165)
2. Innovations that Improve the Use of Data	7 (\$33,385,066)	2 (\$33,037,583)	0 (\$0)	9 (\$66,422,649)
3. Innovations that Complement the Implementation of High Standards and High-Quality Assessments	10 (\$47,002,639)	5 (\$96,084,437)	0 (\$0)	15 (\$143,087,076)
4. Innovations that Turn Around Persistently Low-Performing Schools	7 (\$32,631,375)	4 (\$87,839,794)	2 (\$94,878,683)	13 (\$215,349,852)
Total Grants (Funding)	30 (\$140,399,885)	15 (\$310,699,851)	4 (\$194,878,659)	49 (\$645,978,395)

Source: U.S. Department of Education

assessments priority claimed the greatest share of grantees (33 percent) but just 20 percent of the funding, with data use innovations making up the final 20 percent of grantees and 10 percent of the funding.

When the highest-rated applicants were announced, the reactions were somewhat predictable within the context of the program design. Many were expecting more revolutionary, unexpected players and projects, given the name of the program, but the eligibility requirements barring for-profits and selection criteria favoring established organizations made that unlikely. “To some degree, the program was misnamed,” noted one Validation grantee. “From the name, people thought it was an opportunity to try new, untested ideas. That wasn’t actually the goal. The name drew great amounts of interest and lots of competition, but that wasn’t what you found in the requirements of the grant.” Moreover, the evidence framework emphasized experimental and randomized controlled studies, which are expensive to conduct, meaning only the most-well-heeled organizations had been able to conduct such research prior to the competition. While almost everyone we interviewed gave the Department credit for trying to establish rigorous evidence frameworks, many expressed concerns about the appropriateness of the exact standards for each level. On a survey of D.C. “Insiders” conducted by Whiteboard Advisors in October 2010, shortly after the grantees were announced, “the majority of Insiders (68%) believed these standards were not effective in terms of helping the Department identify and scale innovative practices and programs.”

Finally, as noted above, the makeup of the peer review panels and the way they were asked to screen proposals may have foreordained a relatively “safe” list of final grantees. This was also a political reality, as pointed out by one Validation applicant who didn’t make the cut. “In a country that is only just beginning to understand what educational innovation looks like, it’s not entirely surprising that the Department would make bets on some strong, well-proven organizations and ideas, which have an excellent chance of showing the American public the good that this kind of work can do,” said Ted Mitchell of NewSchools Venture Fund. “Such successes may open space for a mix of grants that tilts further toward pure innovation in future rounds—but the Department, and those of us who support innovation, will need to make the case now in order for future rounds to even exist.”⁴⁰

Mitchell was an outlier, though. When the grants were announced, dozens of reactions were posted online and featured in the media—mostly critical of either the lack of novelty of Development stage winners or of the game-changing prospects of Scale-Up grantees. “The essence of an innovation is the degree to which its novelty captures imaginations and the way its influence alters expectations as though mere word of its existence might provoke an

involuntary ‘Wow, that’s really cool!’ reaction,” wrote Steve Peha of Teaching That Makes Sense. “I am not hearing this involuntary reaction very much this week.” Investor Tom Vander Ark of Learn Capital (and a former foundation official) agreed, but gave the Department some credit for the later-stage grantees, noting, “The i3 program funded credible scaling efforts that will make incremental improvements to traditional schools—solid investments but not innovation.” A survey of D.C. “Insiders” conducted around the same time by Whiteboard Advisors found similar reaction. “In reading a majority of the i3 proposals, I am struck by the lack of innovative ideas that were submitted and ultimately funded,” noted one respondent. “Not enough real cutting edge stuff was funded. Almost nothing for technology and teacher effectiveness/quality,” noted another.

At the Scale-Up level, some worried that funds were merely being allocated to continue growing organizations already on a path to do just that, rather than taking those programs to new places, solving new problems, or connecting with wider change. “I wouldn’t consider all those that won at scale to be able to fix the infrastructure, especially at a national level,” said one Development applicant who did not win a grant. Department staff point out that many of the larger grants contained less product innovation but more process innovation, with different ways of taking something that “works” to scale in a way that is sustainable and effective, such as Reading Recovery’s train-the-trainer model and KIPP’s development of school leaders.

Given that much of the public criticism included minimal analysis of the winning programs’ actual goals and strategies, it is unclear if this skepticism is based on a thorough review of what the winners will do, or merely a review of names on a list. For example, many in the entrepreneurial sector expressed disappointment with some of the districts that won, but may not have understood that some of those districts’ projects echoed innovative entrepreneurial ideas. For instance, Department officials pointed out that in Georgia, Forsyth County’s project features personalized learning similar to the lauded School of One (also a highest-rated applicant), and that Los Angeles Unified School District is gearing its turnaround strategy toward a “portfolio school system,” an approach that many innovators have called for over the last decade to improve the management of large school districts.

On the other hand, some experienced observers (whose expectations were perhaps a bit more sanguine) expressed appreciation for what had been accomplished. “This changed how we talk about education and made ‘innovation’ a center—which is different from just reform,” said one interviewee. “In many ways this was an unbelievable success,” another interviewee told us. “In a remarkable timeframe, they achieved significant things, including changing the

FIGURE 8

i3 Awards by Competitive Preference and Stage, 2010

Competitive Preference	Development	Validation	Scale-Up	TOTAL
5. Innovations for Improving Early Learning Outcomes	7	3	3	13
6. Innovations that Support College Access and Success	14	5	1	20
7. Innovations to Address the Unique Needs of Students with Disabilities and Limited English Proficient Students	19	3	4	28
8. Innovations that Serve Schools in Rural LEAs	7	8	3	18

NOTE: Applicants could select more than one competitive preference, so totals add up to more than the number of winners.

Source: U.S. Department of Education

way the government operates and introducing a serious focus on evidence into the process, even though there were bumps and bruises along the way.” “It is true that some good projects were left out but any process is imperfect,” said one funder who has worked in the federal government. “It’s important to recognize that, do the best we can, and move on.”

Some also expressed concern that there was insufficient attention to the pre-kindergarten, higher education and rural solutions that were submitted. As noted above, the Department awarded a small number of “competitive preference” points to applications that addressed these issues. “The i3 framework assigns very few points to these competitive priorities, with the effect that they serve only as tie-breakers for applications of equivalent quality under the selection criteria,” noted an Education Counsel analysis of the scoring system, although a look at the final scores shows that the difference between winning and losing did come down to just a few points in the Validation and Development categories. The most popular was competitive

preference 7, with more than half of the highest-rated applicants addressing the needs of students with disabilities or limited English proficient students—the latter of whom make up a significant proportion of the population in high-need communities where i3 applicants were concentrated, such as California and Texas. Among the highest-rated applicants, competitive preference 5 (Innovations for Improving Early Learning Outcomes) was the most rare: just 14 percent of applicants noted it as competitive priority on their application, but a higher percentage (27 percent) of winners did.

A number of our interviewees noted that although the competitive preferences channeled some funding toward areas that are often overlooked—particularly rural learning, early learning and college access—the way competitive preferences were structured and written proved to be largely ineffective for encouraging meaningful innovation in these areas. The competitive preference related to rural populations drew the most heated criticism. While the same proportion of winners addressed rural populations as picked the higher education preference, rural applicants felt that the deck was stacked against them. “The vagueness of the criteria and the extra value assigned to it encouraged many applicants with limited rural education experience to attach a small rural effort onto an otherwise urban program,” claimed a Rural Trust report. Of the 19 highest-rated applicants who made the claim, “only two proposals are designed to operate entirely in rural schools. For most, the proportion of the total project effort that is rural-focused is small relative to the scale of the project, or too indeterminate to be estimated. In one instance there was actually no intent to engage in any rural school district.”⁴¹ Department staff pointed out that while the actual number of rural i3 grantees was low, the per-capita dollars that will flow to those areas are relatively proportionate. (Nonetheless, this concern seems to have been heard loud and clear, given that the second round of i3 bumps “Improving Achievement in Rural LEA’s” up to an absolute priority.)

The effect of winning or losing out on i3 funding has echoed beyond the direct flow of federal and private funds. Those who were chosen have enjoyed more positive attention in the press and from funders, they told us during our interviews. “i3 brought monetary value, but more importantly, it brought us visibility and affirmation of our work,” noted one Development grantee. Those not chosen as grantees worry about the stigma of not winning—particularly at the later stages where there were fewer applications—and about its impact on their ability to raise capital in the short term, while i3 looms large in the minds of funders. “It was a huge negative that we didn’t get money,” noted one Scale-Up applicant. “I think it might actually hurt us a little because people [that] gave to some other [similar] organizations might have given to us had we won.” In some of these cases, non-grantees are moving forward with the projects they had proposed (even, in at least one case, with the support of those funders

who had committed matching resources) but on a slower timeline; others reported dropping their projects entirely due to lack of funding (see below for more on the impact of i3 on philanthropic funding).

Notably, in addition to differentiated evidence requirements and point allocations, the i3 regulations acknowledged that different stages of programs and organizations need different types of support and accountability. Development and Validation awards were structured as traditional government grants while Scale-Up grantees entered into “cooperative agreements” with the Department. “That legal structure signifies that USED intends to be significantly involved in a partnership-type relationship with Scale-Up recipients in order to actively oversee and guide the projects, but will exercise the ordinary level of discretionary grant oversight for Validation and Development projects,” notes an Education Counsel analysis.⁴² In both cases, reporting requirements are fairly standard: grantees must submit a final report after the project is complete, as well as quarterly reports required of all ARRA-funded projects that focus mostly on the use of funds and their relationship to saving or creating jobs (though the Department has added a question to this list about “the project’s progress in reducing inequities in the distribution of highly qualified teachers, implementing a longitudinal data system, and developing and implementing valid and reliable assessments for English language learners and students with disabilities”). However, as is typical of most Departmental funding and especially under the requirements of the stimulus, all funding was disbursed upfront, rather than in tranches as organizations meet specific progress milestones; the Department says it will monitor organizational spending over the course of the project, but funding isn’t explicitly tied to the accomplishment of intended outcomes, although future funding may be. Other government innovation investment efforts like the Defense Advanced Research Projects Agency take a more staged approach to funding, based on progress and milestones, particularly for early-stage innovations.

The Public-Private Partnership: Matching Funds Requirement

From the beginning, i3 was intended to be a public-private partnership. In the stimulus legislation establishing the i3 awards, one basis listed for the awards—right alongside “expand their work and serve as models for best practices” and “identify and document best practices that can be shared, and taken to scale based on demonstrated success”—was “to allow such eligible entities to work in partnership with the private sector and the philanthropic community.”⁴³ Over the past 50 years, such public-private partnerships have emerged as a way to address public or social needs through collaboration with the private sector, which can

include some combination of businesses, private investors, nonprofit organizations and philanthropies. The public sector is responsible for looking out for the common good, and

By leveraging the different capabilities and funding sources of the [public and private] sectors, more can be accomplished—and in a more efficient way than either operating alone.

brings deep and relatively predictable funds and operational capacity to the table, while the private sector tends to have access to a wider pool of talent and to operate in a more nimble way. The idea is that by leveraging the different capabilities and funding sources of the sectors, more can be accomplished—and in a more efficient way than either operating alone. However, public-private partnerships are also challenging because they require two (or three) very different sectors to work together across different constraints and operating norms.

As detailed earlier, one element of the public-private partnership in i3 was the eligibility requirement that nonprofit applicants partner with LEAs or a consortium of schools. Whether a nonprofit or an LEA, each applicant had to demonstrate “that it has established one or more partnerships with the private sector, which may include philanthropic organizations, and that the private sector will provide matching funds in order to help bring results to scale.” It was this latter piece—the requirement that all grantees match 20 percent of their i3 funding with private funds—that stands as one of the most talked-about aspects of the i3 fund. Financial support for grantees from the philanthropic community was intended to help provide a window into sustainability as well as a more nimble partner for ongoing support and accountability with grantees. The match could also serve as a “check” on the Department’s selection process: if a selected grantee couldn’t raise the required match, it might be a “false positive” that was not a viable innovation in the market (but, as some philanthropic critics have noted, there was no such mechanism for identifying “false negatives” that were not chosen for i3 grants but that philanthropists believed were more worthy of public and matching funds).

On the whole, the philanthropic sector was very receptive to the federal government’s interest in applying innovation to improve public education. “With the downturn, foundations were retreating, and this was a good way to get them to increase spending to leverage government funds,” one funder explained. In spring 2009, national foundation leaders joining together as the Foundation Executive Group invited Arne Duncan to a meeting where he shared his emerging agenda and they gave him a paper summarizing their education priorities. In fall 2009, Vartan Gregorian, president of the Carnegie Corporation of New York, organized a follow-up meeting with 10 foundation presidents that identified several overlapping priorities

between the foundations and the Department, including innovation in teaching and leadership and in new school models and designs. Those foundations agreed to work closely with one another and with Jim Shelton, Assistant Deputy Secretary at the Department and head of its Office of Innovation and Improvement, to coordinate philanthropic resources with the Department's efforts. This group of foundation presidents and their staff became very engaged in ongoing conversations about how best to structure i3 as a successful public-private partnership.

Early conversations between Department officials and the foundation community—including through the Foundation Executive Group—included several ideas for how to structure this partnership. The Department floated the idea of creating a pooled fund for the statutorily required matching funds, which did not sit well with foundations because they did not want to give up authority over the use of their individual funds. Still, in April 2010—shortly before i3 applications were due—12 foundations did announce that they had committed \$500 million in 2010 funds “aimed at similarly aligned investments, making more than \$1 billion available to help expand promising innovations in education.”⁴⁴

Another area of discussion was the order in which a match would be required—before or after the government peer review process. In the initial proposed regulations, applicants would have been required to show evidence of their match in their application. Funders did not like this option, as it would have put them in the awkward position of prioritizing among their grantees—and doing so without knowing what the real full level of need would be across existing grantees and other interesting prospects. “[The match] is unworkable in its demands of the philanthropic organizations,” noted Allan Golston, president of the Bill & Melinda Gates Foundation's United States program, during the public comment period on proposed i3 regulations in fall 2009. “It makes philanthropies de facto gatekeepers for applicants by requiring the match at the time of application; it privileges those organizations that already have relationships with large foundations.”⁴⁵ In the final regulations, the match requirement was shifted to follow peer review, so that only the finalists would be required to secure matching funds.

While this change met the needs expressed by funders during the public comment period, it left a few other funders displeased that they would have to follow the federal government's decision-making process, rather than engaging with it in a true side-by-side partnership. Explicitly aligning their work with federal government priorities is relatively uncharted territory for philanthropists, especially individual donors and small local or regional foundations, but even for the big national foundations. Most foundations pride themselves on

their own distinct theories of change and giving strategies, and prefer to put money to work at their own pace. The structure of i3 flipped this on its head, laying out specific priorities and a timeline by which matching money had to be committed. “Letting the private partners only partner on funding of already selected ideas does not seem like much of a partnership,” said one grantmaker. “I think it runs the risk of narrowing the focus of private funding for education to those things the Department has cited as priorities,” agreed another. “This has the potential to limit greatly both the scope of innovations and the issues that need to be addressed across the very diverse education landscape.” *Education Week* quoted Chris Tebben, executive director of the affinity group Grantmakers for Education, as saying that the competition had highlighted a tension between funders’ desire to “leverage resources beyond philanthropy” and their need to “maintain [an] independent role ... and a perspective that is not limited to one [presidential] administration.”⁴⁶

When the highest-rated applicants were announced, funders told us they faced two challenges: many funders were unsure of or disappointed by the names on the list (which could be termed “false positives”) and displeased by some of the names that were missing, whom they had hoped to fund (“false negatives”).

Moreover, this sequencing of the match at the end of the process meant that although they had advance warning of the timeline, funders would have just five weeks—from the notification of finalists on Aug. 5 to evidence of the match required by Sept. 8—to determine which applicants to match, due to ARRA regulations mandating that funds be committed by Sept. 30. As school organizations ramped up for the coming school year and many donors and foundation boards went on traditional summer holidays, August was not an ideal time for such decisions to be made. “For the first time in a hundred years of education grantmaking, August was the busiest month,” noted one foundation executive.

When the highest-rated applicants were announced, funders told us they faced two challenges: many funders were unsure of or disappointed by the names on the list (which could

be termed “false positives”) and displeased by some of the names that were missing, whom they had hoped to fund (“false negatives”). Two foundation leaders estimated that less than 40 percent of the applicants that they were ready to provide a match for were selected as grantees—although given that less than 3 percent of applicants won, this is actually a significant overlap. Another funder said it provided no match at all because only one of the handful of applicants its staff hoped would win did so, and that organization did not need that foundation’s help on the match. Skepticism was most palpable in the Development category. “My excitement at the outset was finding the new exciting thing; this process didn’t surface

that,” noted the funder who didn’t provide matching funds to any of the i3 grantees. “Out of the Development grants, I would be amazed if these grantees really develop into game-changers,” noted another funder, who did provide some matching funds nonetheless. However, others reported they were excited to learn about new efforts and welcomed the opportunity to engage with organizations that were not yet on their radar. “We tried to remain open to new organizations and ideas that fit our criteria,” said one grantmaker. “We wanted to learn about new things, and it was pretty understandable that this would require more diligence than partnering with a group that we knew well.” “This broadened the universe of connections in the space and enabled philanthropy to learn about new projects and initiatives,” said another funder, despite the fact that her foundation didn’t end up providing matching funds.

The goal of aligning investments around Department priorities, combined with the compressed timeline, led to some positive process innovations by philanthropists. “I’m excited about the way that i3 forced changes in the normal ways of doing business,” one interviewee told us. The program coordinated resources for specific attention to innovation in a way that simply hadn’t been done before, and pushed philanthropists to support innovations backed by evidence. “Many nonprofit organizations with proven results, such as America’s Choice, Aspire Public Schools, Citizen Schools, KIPP Schools, the New Teacher Center, the New Teacher Project, the Success for All Foundation, and Teach for America, get passed over for funding by large private foundations,” noted a recent *Stanford Social Innovation Review* article written by executives from the William and Flora Hewlett Foundation. “In fact, the 19 nonprofits that ranked highest in the U.S. Department of Education’s Investing in Innovation (i3) competition, which was based on evidence of impact, on average had grants in 2010 from only three of the nation’s top 50 education foundations before winning the i3.”⁴⁷ The funders we interviewed generally agreed that the emphasis on evidence, particularly at the later Scale-Up stage, was important. “The evidence goal was huge,” said one interviewee. “It sparked very different conversations [with grantees] than the usual conversation of ‘we need money.’”

The philanthropic funding market tends to be idiosyncratic and slow, and is often missing a sense of urgency among funders compared with the need by nonprofit managers and organizations. The very design of i3 influenced these behaviors, acting as a coordinating force, with the ARRA timeline adding an accelerating factor. Some funders organized new streams of work around the i3 matching opportunity, including the W.K. Kellogg Foundation, which provided \$1.4 million in technical assistance to rural applicants and \$4 million out of a total \$11 million in a pooled match fund for rural organizations, and JPMorgan Chase, which worked hard to rally many individual donors to make matches. Foundations had to work far more quickly than their typical grant cycle, making final matching decisions in just over a

month (though many were already monitoring the scene throughout the spring and summer)—lightning speed compared to the quarterly or annual grant cycles at most foundations. Many foundations found ways to make these decisions quickly, such as requesting pre-approval for program staff to make final match decisions during the August window when boards of trustees would be out of reach. Those funders that did contribute matches found they had to work not only quickly, but also had to set up different decision-making processes. For example, one foundation told us that it had set aside funds from other non-education areas of the budget to use for i3 matches. Another secured the approval of its board in advance to allow just its education committee to approve i3 matches. Yet another scheduled a special meeting of its board to approve i3 matches in time for the September deadline.

Despite the stress it induced, this sense of urgency was welcomed among some applicants. “It’s a fundraiser’s dream,” said one Scale-Up grantee. “There is an ultimate benefit, painful as it is, to having a shorter runway and forcing decision making.” Another interviewee saw some funders turn into development directors, “rolling up their sleeves and acting like board members to recruit others” by holding conference calls to help their grantees secure a match from other funders. Decisions came down to the wire, with the Department waiting until Sept. 20—nearly two weeks past the official deadline and just 10 days before stimulus funds had to be obligated—to announce that all 49 finalists had secured their match.

Grantmakers themselves admitted that they appreciated the spur to action. “Funders were forced to operate on a short timeline, work together in new and different ways, and go beyond their comfort zone in ways that were really helpful to the sector,” said one funder we interviewed. “The manufactured crisis was helpful. It created a sense of urgency and urged people to take a leap of faith,” one grantmaker told us, adding that she would have still preferred more time to vet the grantees and connect them in-person with prospective donors to strengthen the connection (and perhaps boost the amount of money donors were willing to contribute). Likewise, other donors found they were able to work quickly, but still managed to squeeze in some of their usual diligence, including calls to applicants. “No one in the private sector would think it is too little time. There, people make decisions all the time in short order,” noted one foundation leader. “Foundations need to do what they can to create a more agile and nimble field. We have to build in this flexibility in philanthropy to be able to respond to these opportunities and not assume that existing processes are the only way or the only template in which everything else should fit.”

In our interviews, there was also general appreciation from philanthropic leaders for the opportunity to collaborate and leverage their work and resources, with some griping about

the process and timing. “Anything we can do to get traditional funders and newer ones to get out of their silos is good, and the process of drawing people out and creating a platform for them to work together was great,” said one funder we interviewed. To help facilitate the matching process, a collaborative of foundation leaders worked with the Bill & Melinda Gates Foundation in spring 2010 to create the Foundation Registry, a Web site where applicants could post abbreviated versions of their proposals for interested funders to sift through and review, and where funders could share diligence with one another about applicants and applications. Nearly 50 foundations signed up for the Registry, and nearly 700 applicants (less than half of the 1,700 total applicants) loaded summaries into the system. The site was developed by experienced product designer and manager Kartik Raghavan, an experienced Microsoft technologist recruited by the Bill & Melinda Gates Foundation with guidance from a collaborative of foundation leaders including Richard Laine of the Wallace Foundation, Barbara Chow of the William and Flora Hewlett Foundation, Stefanie Sanford of the Bill & Melinda Gates Foundation, and Leah Hamilton and Michele Cahill of the Carnegie Corporation of New York, who all saw the need to help foundation officials quickly review and assess a large group of prospective grantees and make informed matching decisions.

Core Registry functionality included basic application searching and sorting by grant type, the “absolute priority” address and the date the application was uploaded. In addition to creating a short “common application” that saved grantees from having to submit multiple match requests, the Registry also featured the ability for foundations to mark “favorite” proposals and share notes about their impressions of applications or applicants. It is important to acknowledge that this type of shared diligence is rare in the philanthropic sector, where opinions and analysis by foundations are tightly guarded and almost never shared openly online. In at least one case, this feature led to one of the foundations we interviewed providing \$350,000 in matching funds to an organization it had not funded before, based in large part on persuasive diligence notes uploaded by another foundation about the strength of the organization’s outcomes and evidence.

The final press release announcing that all i3 grantees had secured their match showed that more than half had received some support from at least one of the Registry members⁴⁸, but few would assert that the Registry was wholly responsible for all those connections. Still, a significant number of foundation staff we interviewed found the Registry very helpful. A local funder noted that the Registry was indispensable in identifying in short order all the applicants doing work in its target geography. Another funder noted that it made extensive use of the filters and categories to determine which applications would be worth reading in full. “The information was consistent for the various categories” which made it “easy to directly

FIGURE 9

Summary of i3 Matching Activity, 2010

Type of Contribution	Total Match (\$MM)	Foundation Registry Members* (\$MM)	Other Matching Funders (\$MM)
New Cash	\$101.6	\$48.1	\$53.5
Repurposed Cash	\$9.1	\$7.2	\$1.9
In-Kind (Not Applicant or Partner)	\$19.5	\$0.3	\$19.2
In-Kind (Applicant or Partner)	\$8.3	–	\$8.3
Total	\$138.6	\$55.6	\$83.0

Totals may not match due to rounding

* Funding provided by members of the Foundation Registry, whether or not the funding occurred through the Foundation Registry.

Source: U.S. Department of Education

compare applications for [similar] projects,” this funder explained. It is worth noting that unlike peer reviewers, who were instructed not to compare similar applications, grantmakers naturally tended to do so, to ensure that their funds would go to the organization they thought was most promising within a given focus area.

Besides providing funders with specific diligence support such as sorting capabilities, a short common application to review and shared diligence notes, the Registry seems to have been an important conversation-starter. “The Registry opened up conversations about how to reduce inefficiencies, such as through common application and reporting forms,” said one foundation executive. “The process of talking to each other has the potential to reduce the

cost of due diligence and introduce significant economies of scale.” Some other funders felt the Registry was underused, and worried about security of confidential information, though the Registry creators assured us there was extensive security surrounding who could access what information. “The Registry didn’t seem confidential to the point where people could be really honest about their experiences with grantees,” said one foundation leader, who suggested the shared diligence might have been better suited to topical or regional phone calls. Still, most viewed the tool’s mere existence as a real step toward philanthropic collaboration and one that could be a springboard for future efforts. In the words of one funder, “technology should just be the starting point, and it is only as good as the conversation it drives.”

While most funders appreciated the Registry, applicants generally didn’t give much credit to the Registry for mobilizing matching funds. In some ways this shouldn’t be surprising, given that the platform was designed largely to help donors, and provided little transparency for applicants into funders’ actions or progress. Applicants could see which funders were “considering match” but not any indication of real progress or how to follow up proactively. Rather than appreciating the fact that the Registry enabled them to provide only one common application for multiple funders to consider, many applicants instead viewed the Registry’s proposal format as an unfair additional amount of work beyond the federal application. Others believed (incorrectly, as it turned out) that if they already had a match cited in their application that they were disqualified from submitting their application to the Registry. (This was not the only area of confusion about matching funds for applicants. In one of the many ironies of this process, the Department tried to be more flexible and open about what “counted” as a match, but was inundated with so many questions about it from applicants who wanted to know exactly how to be in compliance that the agency added five rounds of frequently asked questions and answers to its Web site from March through July. Eventually, the Department even provided six sample match letters to illustrate the different types of acceptable matches.)

Ultimately, i3 can claim credit for directing at least \$140 million in private matching funds to the highest-rated applicants—but it is difficult to say for sure just how much of that was truly “new” money steered from other sectors or from other, less-effective educational efforts. Incomplete information about the breakdown of winning applicants’ matching grants—combined with a lack of clarity in some cases about whether those funders were “new,” or not—creates only a partial picture. The Department has reported that more than 250 different organizations provided more than 325 matching grants to the 49 i3 grantees. According to Department analysis, more than \$100 million of the matching funding came in the form of new cash commitments to support the 49 projects, \$20 million as in-kind donations, nearly

\$10 million in repurposed cash, and the remaining \$10 million as in-kind donations from the applicants or partners themselves. About half of that new cash came from foundations, and the rest was somewhat evenly divided among private companies, corporate foundations, and the applicants or partners themselves.⁴⁹

However, full information about the details of each applicant's match was not made available, especially the degree to which "new" commitments came from brand-new sources, from past donors or from hybrids of the two, such as donors that had given to local offices but never before to the main organization. In our (admittedly unscientific) sampling, the degree to which i3 mobilized new resources seems to have differed by stage. The match requirement seemed to bring in proportionately more "new" money to Development grantees, who may not yet have been on the radar of funders and for whom the visibility of i3 made a disproportionate impact. One Development stage grantee reported it raised more than 95 percent of its match from new sources, admitting, "The last \$500,000 of that was the hardest money I've ever raised." It is worth noting that many of these new donors for Development-level grantees are smaller foundations or involve individual donors. A number of interviewees hypothesized that perhaps the Development level was a sweet spot for mobilizing new donors: the size of the match required was more moderate, and the efforts were newer or less well known, and thus made new donors feel like they were "getting in on the ground floor" rather than just following larger national funders into supporting more-established organizations.

At the Validation level, we talked with grantees who reported raising their matching funds strategically—some focusing on existing donors, while others purposefully focused on mobilizing new donors. "Because we did the bulk of fundraising locally, for the most part, we were able to work with partners who work with us on a regular basis for other reasons or extended what they would have done," said one district Validation grantee, while a nonprofit Validation grantee told us it used i3 as an opportunity to widen its base of support and raised 40 percent of its match from new sources. At both the Validation and Scale-Up levels, it proved difficult for these large, established organizations to find truly "new" funders they had not already encountered over the years. Most of our interviewees at those levels told us that even their "new" monies came from donors they had already been courting, but that i3 provided a forcing function that accelerated action.

Besides the challenge of the compressed time frame to secure matching funds, it appears that the most significant lesson of the matching process is that it did not differentiate the appropriate percentage of private funding required for each of the stages of an innovation's development. Many of our interviewees questioned the decision to require the same 20 percent

match across all stages of applicants. “There should be a sliding match scale: the greater the evidentiary base, the greater share that government should bear,” noted one funder. “Philanthropy typically can be most impactful in riskier situations,” agreed another funder. “The question here is if scale-up really needs the same attention and percentage of private dollars, versus those ideas that need it to get off the ground and have a chance to develop.” (It is worth noting that the second round of i3 does differentiate the match required at each stage, with just a 5 percent match required at the Scale-Up level, 10 percent for Validation, and 15 percent for Development; see page 56 for more on the program’s second round.)

Some suggested that the public-private partnership was most successful in engaging smaller donors and putting innovative efforts squarely on their radar. The individual donors and local foundations we spoke with appreciated the opportunity to learn from other, larger players through the process. “We not only had the benefit of being forced to prioritize collectively, but also we had the opportunity to work with national funders in a way we do not often do and to learn from them,” said one local foundation representative. Similarly, an interviewee who aggregates individual donations said her donors liked the idea of the federal government leveraging their dollars and the way i3 asked the field to put its best ideas forward. Some applicants suggested that, given the difficulty of getting large national foundations to move beyond their established focus areas (by subject or geography), it might even make sense for these smaller, newer education funders to be an explicit target of future matching requirements, along with other funders that don’t have dedicated education giving programs, like corporate foundations. “National foundations have multi-year strategies and grants, and it doesn’t seem to make sense for them to have funds diverted to a match,” said one philanthropic interviewee. “Individual donors can get to know grantee organizations well over the next three to five years through a process like this, and then help them expand their network of individual supporters.”

Finally, with respect to philanthropic funding, it remains unclear whether the onetime matching funds directed toward i3 grantees will translate into longer-term improvements in support for education innovation and evidence-based improvements. For example, the Department of Education has made several efforts to highlight the unfunded “highly rated” applicants—those applications receiving a score of 80 or greater—especially at the Scale-Up level, in order to mobilize what the agency refers to as “secondary” funding. A section of the Department’s Web site shares those project narratives and their peer review scores, and a January 2011 event with the Aspen Institute on education innovation included, in addition to panels on innovation investing in education, an “expo” to showcase these promising concepts to prospective donors and investors.⁵⁰ Several applicants told us they did not feel the “expo”

led to productive donor activity, and they are skeptical about whether the secondary funding efforts will lead to any new money. Many non-grantees worry that the projects they spent months putting together will fail to secure any traction or additional funding. The funders we surveyed were more optimistic, with nearly a quarter saying they have provided funds to applicants that did not win (including those that had established dedicated pools of funding to use on i3 matches that were not spent down during the matching process), while others are still considering whether to do so. As in the analysis of whether “new” funding flowed to i3 grantees, it is unclear whether these funders would have made these commitments in the absence of i3.

One final issue about public-private collaboration that came up repeatedly in our interviews was the absence of for-profit applicants and investors. There was general appreciation of why it might have been difficult to include for-profit applicants. However, many of our interviewees—including applicants, funders and observers alike—emphasized that in order to support the kind and scale of innovation required to transform public education, the financial and talent resources of the private sector must be tapped. The i3 fund was set up in a way that constrained most matches to the philanthropic sector, with the private sector participating only through corporate philanthropy or in-kind donations. Allowing innovative for-profit companies to enter the competition would have invited matching funds and greater interest from the vast field of for-profit investment capital. This was particularly problematic with regard to technology-enabled innovations: with so many qualified for-profit players shut out of the process, it is no surprise that there were few applications of technology to the innovations proposed by i3 applicants and grantees.

KEY TAKEAWAYS, RECOMMENDATIONS AND CONCLUSION

The Investing in Innovation program was the first of its kind in education. As such, it represents a potential object lesson about what happens when a massive government bureaucracy best known for mandating compliance and disbursing formula funds attempts to reorient itself—and the very ecosystem around it—toward increased innovation among practitioners, improved evidence-gathering, and better outcomes for students and communities at scale.

The experiment is still under way with current i3 grantees, who will be joined later this year by a new crop of grantees from the program's smaller (\$150 million) second round. In addition to carrying out the actual work behind their funded projects, initial i3 grantees will also be convened at least annually by the Department for project directors meetings to compare notes, conduct evaluations of their work (and at the Validation and Scale-Up levels, share their data sets with third-party researchers) and find ways to document and share their efforts through communities of practice and other means. The Institute of Education Sciences has contracted with Abt Associates to conduct a five-year, \$9.4 million evaluation of the first round of the i3 program itself, including a meta-analysis of the individual grantee evaluations.

It is premature to assess the ultimate impact of the i3 program, its grantees and the innovation ecosystem writ large. However, it's not too soon to learn from i3 as an attempt at organizational and market innovation initiated by the public sector.

Key Takeaways

As we noted throughout this paper, our analysis of the design and initial effects of i3 showed areas of real progress and real challenge.

Progress:

- » Focus of **national attention on the need for innovation** in education;
- » Emphasis on **scaling up what works** to address the country's significant educational problems;
- » Introduction of a **graduated evidence framework** that tied federal investments to impact and allocation of **greater resources toward those who met the most rigorous evidence bar for impact on student outcomes**; and
- » Steering and accelerating resources toward a **specific set of investment priorities aligned with important emerging demand in the field**—and doing so in a more **transparent, collaborative and evidence-based** way than is typical of the federal government.

Challenges:

- » **Narrow eligibility requirements** that shut out new or very early-stage organizations and nearly all for-profit providers (and their investors);
- » **A limited definition of acceptable evidence** that skewed and constrained the potential applicant pool in significant ways;
- » **An over-simplified process** inadequate to the complicated task of selecting emerging, promising and proven innovations; and
- » **A timeline that left little room for meaningful diligence.**

At its heart, the i3 program had two important goals that were fundamentally in tension: “innovation,” which implies new ways of doing things; and “scale,” in which things that have been demonstrated to work are replicated and disseminated. **To create real change, both innovation and scale are required, but implementing them well requires different decision-making and support systems, as well as different people and matching processes.** For example, requiring a “proven track record” may have shut out applicants that could have delivered more truly break-the-mold innovations. And, as we will explain further below, scale requires

cautious assessment of demonstrated evidence and relatively little risk-taking, and as such may be well-suited to the public sector, while early-stage innovations often require more intuitive assessment of opportunity and future directions, and greater risk tolerance to support new or emerging organizations, both of which may lend themselves more naturally to the private and philanthropic sectors.

Moreover, while scale matters and it is important to invest funds to get there, **using education innovation in a smart way to urge the system toward performance-based practices will require better assessments of productivity and return-on-investment (ROI) for the funds that are invested—including public funds.** In the simplest terms, ROI would be the cost per unit of impact. The original i3 requirement to specify the cost of the innovation on a per-student-served basis and to encourage scale (by asking applicants to specify the cost to scale to serve hundreds of thousands of students, even if they didn't actually intend to) began to move in this direction; a competitive preference in the program's second round awarding a bonus point to projects that improve productivity (see page 56) may represent another small step forward. The Department could lead the field forward significantly by assessing ROI across different kinds of programs and interventions at early and later stage or scale—and incorporating such metrics into grant decisions. Certainly, ROI is a complicated notion in a complex field like education where diverse outcomes are often difficult to prioritize (from reading on grade level by third grade, to on-time high school graduation, to mastery of critical thinking and problem-solving skills that are critical for success in college and life). It won't be easy to assess trade-offs between investments in programs and interventions that can reach many more students versus those that can accomplish deeper or broader kinds of impact for fewer students. But as progress continues toward a more outcomes-driven education system while holding educational spending steady (or even decreasing it), it would be worthwhile to have real outcomes and cost data to inform that policy debate.

In addition, **optimizing the participation of all the sectors—government, private and philanthropic—in education innovation is necessary, even though it is difficult and controversial.** The designers of the i3 program may not have gotten all the details right here, but they were on the right track: the government must join with the nonprofit and business sectors to help create an ecosystem that embraces a continual learning cycle and effectively taps robust innovation engines to deliver constantly improving outcomes for all students. This means both that the private sector must be involved and that the government must play a crucial role in defining clear acceptable *outcomes* and holding all three sectors—including public agencies and nonprofits, too—accountable for outcomes aligned with the public good. To do this well will require: clearer metrics for the desired educational outcomes;

better and deeper assessments and effective indicators of progress along the way; and useful accountability mechanisms that open up the process to more providers (and investors) while also ensuring that their efforts make a real difference for the students and communities this public agency is charged with serving.

Likewise, just as different learners require differentiated instruction, **it is vital to differentiate selection and support for the various types and stages of innovation that receive public funding.** While the differentiated evidence levels and scoring rubrics of i3 were a very important step in the right direction, the various stages of innovation need even more distinct approaches to due diligence, investment decision-making, private sector match, and ongoing support and accountability. In particular, it seems clear that the traditional peer review process is ineffective for assessing early-stage innovations, and that requiring one level of matching funds across multiple stages of applicants failed to optimize the way the private and philanthropic sectors could support innovation. (Of these, the level of private sector match appears to be the only element that was differentiated further in the program's second round.)

Recommendations for the Department of Education

Investing in Innovation

Some of the immediate lessons of the first round of i3 have influenced the design of its smaller \$150 million second round, which was announced in June 2011, with applications due August 2 and grant awards to be made by year-end. The new round drops the absolute priority focused on data, and adds two new absolute priorities, one focused on rural schools (which replaces the similar competitive priority there) and another focused on science, technology, engineering and mathematics (STEM) education; applicants choosing the rural priority are also “encouraged” to address one of the other four priorities. Competitive preferences related to improving productivity (“projects that are designed to significantly increase efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes”) and technology (“projects that are designed to improve student achievement⁴ or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials”) were also added, though applications can only receive points for up to two such preferences. In a nod to the differing levels of support required from the private sector at different stages, the percent of matching funds required will be scaled, with Development grantees required to secure a 15 percent match, Validation grantees 10 percent, and Scale-Up grantees just 5 percent. However,

the program will continue to rely on peer reviewers – though they will not assign scores to the actual evidence, leaving that for the review of the Institute of Education Sciences—and will still limit eligible applicants to LEAs alone or in groups, or nonprofits in partnership with LEAs.⁵¹

While we applaud these changes, we recommend that the Department consider going even further, embracing the need for greater differentiation across all elements of its innovation grantmaking process: using different approaches according to the unique needs of different priority areas; continuing to differentiate the types of evidence required based on the maturity and comprehensiveness of an innovation; supporting different kinds of innovations in ways tailored to their needs; and engaging the private sector to optimize the strength and scale of innovations and their impact on the field. This might mean, for example, supplementing direct grants with incentives that would mobilize more risk-tolerant funders—such as small foundations and individual donors – in support of public goals, and possibly even adding private-sector incentives like tax breaks for angel investors that back companies tackling important educational priorities or accomplishing important educational goals. (Some of this private-sector work could be done through the Digital Promise effort rather than i3).

As for supporting specific stages of innovation, there was broad consensus that the i3 program's eligibility requirements, peer review process and rigid confines of government decision-making together may have been ill-equipped for identifying the most promising early-stage innovations. **We agree with those we interviewed who proposed that the best way for the federal government to support early-stage innovation might be to provide incentives or to direct funds to expert intermediaries who are more inclined to spot promising innovations and embrace and manage their risks;** these intermediaries could then invest in both nonprofit and for-profit companies that fit the bill. Some interviewees hypothesized that the best use of future rounds of i3 funding might be at the Validation stage, where the flexibility and risk tolerance of the private sector had brought a promising new idea to a point where larger-scale government resources would be well spent to build and assess a stronger evidence base and lay the foundation for potentially broader scale. Most also felt there was an important role for government to play in scaling up successful programs, but there was genuine and widespread confusion about how to accomplish that given how out of favor earmarks have become.

We recommend that the Department continue its path toward greater differentiation of support across the types and stages of innovation (including field scans and intentional development) as well as throughout the life cycle of innovation, increasing the ways that the process, metrics and supports are differentiated by stage. The following table outlines one possible way to think about some of the salient points of differentiation for future efforts.

FIGURE 10

Recommended Approaches to Federal Funding of Education Innovation

	Development Stage	Validation Stage	Scale-Up Stage
Goal	<p>Mobilize new activity and experimentation around specified problems of practice from the field, and identify disruptive solutions not yet under development</p>	<p>Provide funds to organizations with promising results that could be game-changing, and prepare those solutions for greater scale by testing them for efficacy across more contexts and by investing in more robust evidence evaluation</p>	<p>Provide funds to programs that have demonstrated significant impact in multiple locations but need growth capital to reach optimal scale</p>
Features	<p>Limited track record; direct track record often inversely correlated to novelty of innovation</p> <p>New and existing organizations with new programs</p> <p>Consider including for-profit players to help steer them toward priority impacts</p>	<p>Some track record of success with specific innovation</p> <p>May be organizations and programs emerging from earlier-stage pipeline, or new entrants that surface</p>	<p>Long track record of success and well-developed evidence base, including multiple independent evaluations</p>

	Development Stage	Validation Stage	Scale-Up Stage
Evidence	<p>Identify criteria for success and use judgement to establish appropriate interim indicators</p> <p>Assess and learn from efforts in other agencies such as the Department of Energy, National Institutes of Health, National Science Foundation and Defense Advanced Research Projects Agency about how to allow flexibility on means for tracking indicators of success</p>	<p>Require clear evidence of success and provide funding for experimental or quasi-experimental studies</p> <p>Consider alternative approaches to gathering evidence more amenable to holistic/comprehensive interventions</p>	<p>Require demonstrated success through wide range of studies—including randomized controlled studies—that demonstrate efficacy in multiple contexts</p> <p>Require ongoing evaluation and assessment of results in new contexts</p>
Decision Making	<p>Screening of team’s ability to take and manage relevant risks as well as specific relevant skill sets</p> <p>Decision makers must be able to exercise judgment based on industry expertise; not well-suited for standardized rubrics or peer review</p> <p>Work through a set of qualified independent intermediaries</p>	<p>Interviews and site visits to assess capacity of team and organization</p> <p>Qualified peer reviewers without direct conflicts of interest may serve as advisors, particularly to assess evidence and contribute content expertise</p> <p>Public and private sector representatives should be involved to optimize both public good and organizational development</p>	<p>Compare multiple types of similar interventions to compare outcomes and return on investment (ROI)</p> <p>Decisions may be made by peer review (combination of content and evidentiary experts) with appropriate screening for direct conflicts of interest</p>

	Development Stage	Validation Stage	Scale-Up Stage
Investment Funding Mix	<p>Goal: Use public funding to stimulate investment in priority outcomes/ areas by private and philanthropic sectors</p> <p>Private and philanthropic sectors more nimble, risk-tolerant and able to apply judgment, so more than 50% should come from private and philanthropic sectors in most cases</p> <p>To maximize participation from private and philanthropic sectors, include both for-profit and nonprofit organizations</p> <p>Examples: the Small Business Administration offers 1:1 matching of private funding for qualified small businesses; Social Innovation Fund required 1:3 matching of federal dollars to private or philanthropic resources</p>	<p>Goal: Use public and private/philanthropic resources together to advance evidence-gathering for promising innovations</p> <p>Much of the early-stage risk has been removed, qualifying the organization for greater public investment, which can leverage philanthropic capital (where funding for scale is limited)</p> <p>Robust public-private partnership should capitalize on public sector research/ evaluation capacity and private/philanthropic sector organization-building expertise</p> <p>Public share of funding for nonprofits at this stage should be at least 50%</p> <p>Public share of funding for for-profits minimal at this stage—should be able to access growth capital with proven product—and reserved for cases where research would be broadly shared and inform the wider market</p>	<p>Goal: Ensure proven innovations meet the scale of the need</p> <p>Proven nonprofit and for-profit innovations should be supported largely by revenues (state, local and federal dollars, ideally with policies that incent or require some percent of formula funds to be used on proven programs)</p> <p>Additional growth investment capital should also be available to nonprofits only; for-profits have access to late-stage private equity funds</p> <p>Public share of funding for additional growth and R&D should be as high as 90% for nonprofits, as public sector bears little risk (but significant potential social good) at this stage</p>

	Development Stage	Validation Stage	Scale-Up Stage
Support	<p>Active, hands-on, iterative, from experienced practitioners</p> <p>Define clear milestones for progress and exit quickly if insufficient progress</p>	<p>Focus public support on nonprofit capacity for scale and on strengthening evidence base</p> <p>Focus philanthropic support on organization-building and talent recruitment</p>	<p>Require some percent of public formula funds (such as Title I) to be used on programs with this kind of proven impact at scale, which will provide incentives and rewards for effective programs and products across nonprofit and private sectors.</p>

Source: Bellwether Education Partners

Public-Private Partnerships

Advancing innovation in public education will require the involvement of the public sector and the private sector, including the philanthropic and nonprofit communities. The proposed ratios of funding contributions laid out in the table above emphasize that **the private sector can and should take on greater risk in the earlier stages of education innovation, and that the burden of support should be shifted toward the public sector as products, services and approaches prove their merit for serving a larger scale of the public and therefore deserve more funding from public sources.**

At the Validation level, for example, innovations need capital for both program expansion (traditionally the bailiwick of the more nimble and experienced private and philanthropic sector) and for robust evaluation and efficacy research (where the government's objective research capacity and greater resources may excel).

Many would argue that programs that meet the high bar for evidence found at the Scale-Up level should even be 100 percent publicly funded, as they better accomplish public goals than many status quo programs and should be allowed to access public funds to meet student needs, thereby insuring a higher ROI to the public for tax dollars spent. Some have suggested

that perhaps one way to do this would be by steering funds that are currently allocated on a formula basis (like Title I, the piece of the Elementary and Secondary Education Act that directs federal funds to schools serving high-need students) toward programs that have demonstrated effectiveness. For instance, if 10 percent of the roughly \$14 billion in annual Title I funds were allocated in this way, \$1.4 billion could more effectively fund scale and shift Title I funding toward a more outcomes-driven approach. As a publication by the Center for American Progress so astutely put it in a memo arguing for more competitive federal funding, “Activities that lead to improved educational outcomes and results could be identified and rigorously evaluated, and future spending across major formula grant education programs could then help support such reforms across all high-poverty schools.”⁵² As we have addressed in previous papers⁵³, nonprofit organizations in particular struggle to raise capital to grow their programs to scale, in part because of the quirks of the philanthropic capital market and also because of the way nonprofit growth funding tends to have to be categorized as revenue rather than as equity. If larger scale revenues were provided through formula funds for effective organizations, such organizations could use philanthropic capital and competitive grants like i3 to grow and scale their organizations more effectively.

Other ways to support these programs include efforts like Race to the Top, which provide the demand side (particularly buyers like states and districts, who act on behalf of users like teachers, students and families) with incentives to measure, track and reward outcomes, thus increasing the likelihood that effective innovations will be adopted.

One final way of optimizing the role for each sector in a public-private partnership for education innovation deserves special mention here: allowing for-profit organizations—or at least investment intermediaries that can support for-profit investments—to enter the ring. This would enable the federal government to tap some of the extraordinary innovations taking place in the private sector for the good of public schools, including adaptive learning technologies and productivity tools from other industries that could be specialized for educators (the way In-Q-Tel invests in emerging technologies in service to the national security community), not to mention opening the field up to the vast financial and talent resources that sit in the private sector.

Recommendations for Grantmakers

As for philanthropy, donors need to go beyond simply keeping the Foundation Registry alive as a tool for i3 grantees. There is room for a great deal of process innovation in the way

grantmakers work together in application, diligence and reporting, and tools like the Registry may be useful in moving toward common application and reporting tools that can minimize the compliance and fundraising burden on nonprofit innovators.

While attempting to align donor efforts with desired outcomes and to standardize some of their processes to lighten the load on nonprofit managers, it is also valuable to **consider ways of better differentiating among segments of donors to optimize their support for different stages of innovation.** Individual donors, local or regional foundations, large national foundations and corporate philanthropy all have different levels of risk tolerance and unique value to add, and we should be more explicit about these choices and priorities in order to maximize their impact on individual organizations and on the field of education innovation. Each of these segments may also require different tools and types of information to make decisions (some more data driven and others more intuitive), and it is worth considering whether donors in different categories may be better suited to different stages in the innovation cycle than others.

Finally, philanthropists should also **continue to support other forms of evidence beyond the randomized controlled studies emphasized by IES and the federal government,** which are useful but very expensive and relevant only to certain kinds of interventions. Education innovation will also require more holistic approaches that will demand alternative ways to build a rigorous and compelling evidence base, and philanthropy needs to continue to invest in this kind of broad-based evidence building, as well as in knowledge-sharing tools and platforms that can inform the field better than do government clearinghouses.

Conclusion

Ultimately, i3 will be most successful if it leads not only to specific improvements in the amount and quality of education innovation, but also to changes in the ecosystem for educational innovation and continuous improvement—and to changing the perception of education innovation in the minds of voters and policymakers who can either support risk-taking in the interest of student achievement, or shy away from it in favor of continued mediocrity. In the words of one of our applicant interviewees, “Unless public demand says that we need to shift the way dollars are spent, we’re not going to change anything.” As another interviewee reminded us, this is part of a much larger cultural shift for the Department and the field: “Whether i3 continues in new rounds or not, this is our shot to be intentional about continuing the conversation and pressing for a way of thinking that gets us to ask even

tougher questions, to create a more friendly environment for innovation and allocate resources to support innovation, both on the front end and to scale.”

To get there, it will be important for both the Department and philanthropy to invest in ways to identify and disseminate useful information and lessons from the first pool of i3 grantees, and to also help fix the broken demand side of the education innovation equation by encouraging and funding broader adoption of programs and tools that work. In addition to the second and any future rounds of i3, the Department should continue to seek out other public-private partnership efforts that direct funding toward promising solutions, toward evidence of outcomes and toward scale. Together, these values should become more often and more deeply embedded in the ways government works to align public and private resources alike toward better outcomes for students.

ENDNOTES

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