NOVEMBER 2011

Encouraging Social Innovation Through Capital:

USING TECHNOLOGY TO ADDRESS BARRIERS

Bryan Hassel, Julie Petersen, and Kim Smith





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A Case Study of US Education



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A Case Study of US Education

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.



ABOUT PUBLIC IMPACT

Public Impact is a national education policy and management consulting firm based in Chapel Hill, NC, with a team of researchers, thought leaders, tool-builders, and on-the-ground

consultants who help education leaders and policymakers improve student learning in K-12 education. For more on Public Impact and its research, please visit www.publicimpact.com.

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INTRODUCTION

What will it take to make a significant difference in public school students' outcomes—and in the ability of their schools to serve them well and cost-effectively? This simple question is at the heart of the many conversations taking place about education innovation, yet its answer remains elusive, with a wide range of people and institutions forming a complicated "ecosystem" around this innovation, sometimes ushering it along but just as often slowing it down.

With generous support from the Rockefeller Foundation, Bellwether Education Partners' *Innovation for the Public Good: A Case Study of US Education* project has examined various components of this innovation ecosystem in K-12 public education, including federal efforts to stimulate and scale innovation² and the ways in which the needs of buyers and users should better steer innovation.³

This last paper in our series examines the application of a specific lever—technology—to a particularly challenging aspect of that ecosystem: the flow of investment capital to fuel innovation. What role can technology—which so many look to as a potential source of improved productivity in schools and other learning environments—play in addressing the limits of the capital market in education? How can technology optimize the investment resources available from private, philanthropic, and public sectors so they more effectively

identify and support innovations in ways that help achieve the public good of improving students' outcomes and educational productivity? What changes should the developers of the many existing technology tools for investment and philanthropy make to improve their use, and what can government and foundation leaders do to advance this work?

In some ways, this paper builds upon the *Innovation for the Public Good* project's first publication, "Steering Capital: Optimizing Financial Support for Innovation in Public

How can technology optimize the investment resources available from private, philanthropic, and public sectors so they more effectively identify and support innovations in ways that help achieve the public good of improving students' outcomes and educational productivity?

Education," which examined what it would take to foster a robust capital market for public education innovation.⁴ There, we outlined the key elements for an effective capital market. For example, we noted that effective markets require clarity and agreement on the problems, goals, and metrics for success, along with relevant data about these metrics that are transparent, available, comparable, and useful. One of the fundamental issues in the education market is that it has historically lacked this clarity on goals and outcomes measures, not only across states and districts but across stakeholders and sectors. It has also lacked the kind of timely data that make it clear what's working for kids and schools rendering the market unable to incent or reward quality, which in turn leaves the ecosystem vulnerable to political and ideological winds that shift with the electoral tides. Because this challenge keeps many from venturing into education

investing and giving (and limits their ability to identify the highest-potential innovations), this paper will closely examine this issue and call for technology tools and platforms to help identify, explain, and standardize some common outcomes metrics, and simplify their tracking and reporting across different interventions, organizations, and jurisdictions.

Moreover, many have noted that effective markets flourish in evidence-based cultures, where incentives and infrastructure are aligned. The lack of such a culture in education makes for a volatile business environment, and scares away many potential entrepreneurs, not to mention investors and donors. This is compounded in the nonprofit arena by the challenge of obtaining useful information about nonprofits' operations and effectiveness: even GuideStar, which posts a great deal of information about nonprofits, including the Form 990 they must file with the Internal Revenue Service, cautions users that the forms "are virtually useless in comparing one organization to another, unless the organizations are of similar size, age, geography, and field of activity. Further, they tell us nothing about the ultimate or relative effectiveness of an

organization with respect to meeting its objectives." Private companies, bound by nothing like the IRS Form 990, make even less information known about their outcomes except selectively in their marketing materials. To foster an evidence-based culture in education, it is imperative that we improve the availability and usefulness of information about education nonprofits and companies, but also find ways (though they are outside the bounds of this paper's focus) to ensure that this same evidence also informs the decisions of buyers, users, and policymakers, whose adoption patterns are the ultimate arbiter of whether any given innovation succeeds or fails. (See our "Pull and Push" paper for much more on how these demand-side actors and forces affect the supply of education innovations.)

What role can technology play in addressing these market failures? Throughout society, technology has demonstrated a capacity for: *connecting* people and organizations; *facilitating communication*; capturing, analyzing, and presenting rich *data and information*; and *shaping human behavior* in response to these connections and insights. Modern Web 2.0 technologies and social media "allow more people to easily engage and connect, irrespective of geographic distance; they provide us with the opportunity to access a greater diversity of perspectives and expertise; and they can facilitate accelerated learning and on-demand access to information—all while reducing the costs of participation and coordination," notes the Monitor Institute in its report "Working Wikily 2.0: Social Change with a Network Mindset."

Bellwether Education Partners and Public Impact set out to examine how we might marry these technology strengths with these gaps in the education capital market:

- The difficulty of identifying and screening high-potential ventures (especially for promising early-stage for-profits aligned with the public goals of education improvement for lowincome students, and effective growth-stage nonprofits);
- » The massive but worthy challenge of connecting donors with investors to enable or syndicate larger investments and to "layer" and "sequence" their capital for socially minded for-profits; and
- » The need to streamline the funding (and fundraising) process for donors, investors, and the organizations they support so we can minimize the burden of raising capital and shift that energy toward serving students and schools.

To investigate these particular areas of need within the fundraising cycle, we conducted an in-depth examination of tools and platforms related to investments and giving, both within K-12 education and outside the sector, and interviewed more than two dozen stakeholders, including entrepreneurs, private investors, philanthropic donors, intermediaries that connect funders with entrepreneurs, and developers of investing tools and platforms.

What we found is that there is a need to better leverage technology to address key gaps in the capital market, particularly among individual donors and "angel" investors, who provide a great deal of the fuel that drives early-stage entrepreneurial innovation yet are rarely intentionally coordinated in support of a public goal. But at the same time, the current technology-based investment and donation space is noisy and fragmented, with many emerging Web sites and software products, yet little effective connection or coherence within or between these efforts—and a significant dearth of quality information and expert insight about education organizations and ventures in particular. Therefore, we believe that the most useful way to strengthen and diversify the supply of capital for the innovation life cycle in education is to focus on providing better content that is well-informed about both investing and education and aligned with public outcomes goals, and on enabling more effective and actionable connections between investors and donors, particularly individuals. As John Walker, finance director at social entrepreneurship funder Echoing Green, reminded us, "There is a lot of capital sitting on the sideline, and the desire to get involved for the right returns, but there is a disconnect about how to get involved." Such efforts could go a long way in supporting the kind of rational, evidence-based culture in education that attracts capital, steers it toward the best ideas and approaches, and ultimately improves public education's student achievement and school productivity.

INVESTMENT CAPITAL LANDSCAPE IN EDUCATION

Our assessment of where technology could play a role in optimizing the capital market must begin with a basic understanding of the investment capital landscape—for startup and growth capital—in education. Although there are various types of donors and investors that support different stages of organizational development and are willing to assume different levels of risk, in general they are siloed based on corporate status: the philanthropic sector supports nonprofits almost exclusively; and the private equity sector invests only in for-profit companies. (As we'll explain further below, one of the unexploited opportunities in education innovation is the potential to combine this capital in creative ways that meet the goals of both philanthropic and private funders.)

Education nonprofits secure early-stage funding from individual donors, foundations, and venture philanthropy firms. They find they must expend a significant proportion of their time and energy on raising small amounts of project-specific dollars from a large number of idiosyncratic donors who vary greatly in their funding criteria and proposal requirements. In the later stages, fundraising gets even more challenging, as even proven nonprofits struggle to raise sufficient capital to take their work to scale, with only a handful of larger foundations and funding intermediaries like SeaChange Capital Partners and Growth Philanthropy Network willing to help such organizations raise the growth dollars they need.

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For-profit education organizations raise their startup capital from individual angel investors and from early-stage venture capital firms, and tend to raise larger amounts of capital from just a few such investors compared with the many small grants most nonprofits must assemble, which allows them to focus a greater percentage of their time on building their team and product rather than on fundraising. However, the downside is that there have been few private equity investor options in K-12 education, particularly at the seed and early stages. Today, there is increasing interest from the investment community in the potential of education technology, but many of these emerging education-technology investors are not targeting their dollars at products and services that serve schools and students in our neediest communities. Still, in contrast to their nonprofit counterparts, successful for-profit education companies that gain market traction find it relatively easy to finance significant expansion through funding from later-stage venture and private equity firms, publishing companies, and occasionally even the public stock market—but again, market success does not always translate into student achievement and school improvement.

We believe there is an approach with great potential for encouraging more capital and more investments in socially motivated for-profits that are aligned with the public good: combining the different goals and strengths of philanthropic and private investment capital. The emerging models are described as "sequencing" and "layering" of capital. In "sequencing," philanthropic commitments come in first, using their flexible and patient capital to help an early-stage for-profit organization get off the ground and reduce startup risk, thereby allowing private investors with a lower risk tolerance to be follow-on investors later, after the business model has moved beyond the proof-of-concept stage. For example, healthy food provider Revolution Foods received early investments from NewSchools Venture Fund and other socially motivated capital providers in order to prove its concept on a small scale, before securing a \$20 million round from traditional venture capital investors impressed by its early results and interested in encouraging its scale. In "layering," different types of capital and funders come together to create a single funding package with different layers of financial and social motivations and risks; philanthropic donors often provide loan guarantees or other leverage or take secondary positions that reduce the level of financial risk and thus encourage more risk-averse private investors to join. The most common use of this "layering" approach is in real estate, such as \$16 million in foundation program-related investments for Aspire Public Schools that allowed them to mobilize a \$4 million in-kind contribution from their host school district and a \$93 million tax-exempt bond—and will save Aspire an estimated \$11.8 million, thanks to the enhanced investment rating the bond received through these philanthropic guarantees.

These layering efforts require complex financial knowledge and careful attention to balancing social and private returns; few funding organizations are aware of these options, let alone have the technical skill and expertise to structure such investments in ways that would satisfy foundations' needs while also attracting private capital. These kinds of technically sophisticated cross-sector investments provide a new opportunity to expand both the volume and alignment of investment capital in education, but there is an acute need to provide easily accessible information about: the legal intricacies, the types of investments best suited to such approaches, how to structure these financing packages, and the donors and investors who are willing to consider these types of complicated transactions. This particular niche is one that could be well-served through technology-enabled information and connections.

Where to Focus: Individuals

An informal segmentation and psychographic analysis of the education innovation investment market reveals a combination of institutional and individual players in both philanthropy and private equity. In each sector, there is a continuum of risk-return profiles, with institutional

Individual donors and investors are generally more flexible and not yet locked into specific strategic priorities, and may be more positively influenced by effective content, informed networks, and simplified transactions that persuade them that their money will make a difference.

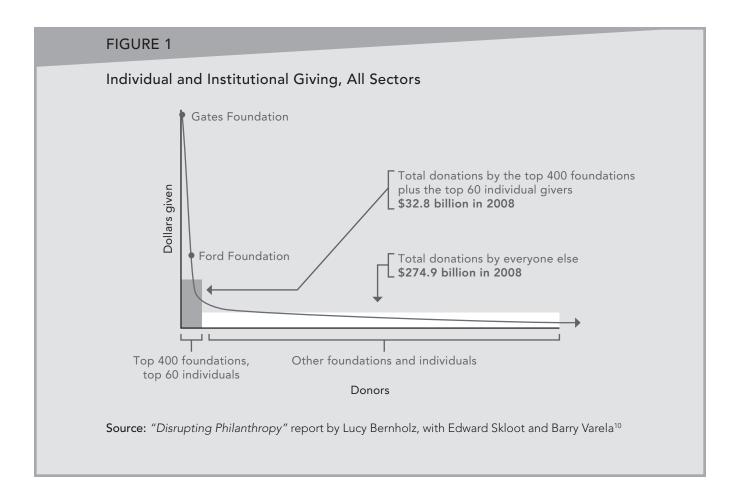
players significantly more risk-averse and more constrained in their investment and operating behavior than individuals. For example, institutional private equity firms can only make large-scale investments in order to bring in sufficient returns on investment to support their staffing and other infrastructure, and institutional philanthropy is often riskaverse and operationally constrained from innovative behavior due to decision-making processes that involve both staff and boards. Our analysis of these capital market players' strengths and needs, coupled with the activity and potential for impact through technology tools, leads us to conclude that nearterm efforts to strengthen investment and giving platforms should focus first and foremost on individuals, including individual donors who are potentially or demonstrably interested in education and angel investors interested in either education or impact investing. These donors and investors are

generally more flexible and not yet locked into specific strategic priorities, and may be more positively influenced by effective content, informed networks, and simplified transactions that persuade them that their money will make a difference (and, in the case of investors, a financial return). Because of this focus on donors and investors that are both risk-averse and

strategically agile, it is also possible to include some institutional investors and donors in this group, including small family foundations and corporate philanthropies, which tend to operate without significant staff and so resemble individuals in their needs and giving patterns. In our concluding recommendations, we will return to the larger capital market to address how institutional funders—especially foundations and venture capital firms—could also play a role, perhaps less as an audience than as a collaborator with useful professional expertise and knowledge to help motivate more individuals to steer more capital toward high-impact educational innovations and interventions.

Individual Donors

Education nonprofits receive about \$42 billion in donations per year, representing about 14 percent of all giving.⁸ Individual donors likely make up about \$30 billion of that money, given that about 73 percent of all nonprofit donation dollars come from individuals (see Figure



1 below) and 80 percent of high net-worth households report that they give to education.⁹ However, this giving includes donations to colleges and universities, as well as private schools, so we should not assume that all this support is being directed toward efforts aligned with improving social outcomes for K-12 students in underserved communities. Nonetheless, this represents a diffuse audience that has demonstrated an appreciation for the power and importance of education, and could hold great promise for being tapped or steered more efficiently with the help of well-designed and thoughtfully implemented technology tools.

However, there are some barriers to overcome. First, most of this giving is channeled to personal or local causes, such as the donor's alma mater or neighborhood school, and nearly three-quarters of individual giving is repeated year after year rather than being channeled into new programs or organizations. 11 This suggests that once won over, individual donors tend to be extremely loyal—which can be incredibly useful when supported organizations seek to raise growth capital, but presents a challenge for dislodging capital from low-performing nonprofits. Moreover, high net-worth donors are currently less willing to take risks with their donations than they are with their personal investment portfolio¹² and view the act of giving as highly personal, often relying on peers and mainstream media for information about causes and organizations, and turning to traditional investment advisers or their banks' philanthropic service offices for further advice and transaction assistance. Research by the Center for Philanthropy at Indiana University and by the Center for High Impact Philanthropy at the University of Pennsylvania has found that, in the words of the latter, "accessibility, not quality, drives the use of information by high-net-worth philanthropists. When deciding where to give, most [of our interviewees] got their information from the easiest sources to access: their personal acquaintances and the mainstream media, neither of which is especially well positioned to provide reliable data on effectiveness."13 Other research confirms this tendency of individual donors to defer to information that is easiest to find from trusted personal sources: although most individual donors profess to care about nonprofit performance, few donors agree on what quality really looks like, and only 30 percent do any research to validate their choice, finds the *Money for Good* report compiled by Hope Consulting. Even in those instances, donors generally look to a nonprofit's own staff or materials for basic facts like numbers of beneficiaries as a proxy for impact. However, the Money for Good study concludes that it is possible to direct more capital toward the most-effective organizations by making impact and outcomes data easily available for donors to access in their limited upfront research efforts, and by ensuring that those motivated donors can find ways to easily give to the highest-impact nonprofits—both areas that technology can help address.14 We would add a third, less conventional activity: acknowledge the need to tug on individual donors'

heartstrings by communicating that data in an engaging and accessible way and by illustrating organizations' impact using compelling visuals, such as through interactive infographics and online video.

Finally, it is clear that despite the rise of nonprofit and social good information online, and the buzz surrounding "crowdfunding" platforms like Kickstarter and DonorsChoose, donors are not yet giving away significant amounts of money online. Although online giving by

There is plenty of room to make high net-worth individuals more comfortable with online giving and with giving larger amounts there, which we believe can be accomplished by harnessing individual donors' existing relationships and networks and by ensuring that those channels are chock-full of useful information about high-quality education organizations.

individuals has grown substantially—from \$250 million in 2000 to nearly \$5 billion in 2005¹⁵—it still represents less than 3 percent of all individual giving, though some estimate online donations may have accounted for 7.6 percent of all fundraising in 2010 but just 2.7 percent of education fundraising. 16 (This is still low compared with other online transactions, such as the nearly 40 percent of households that use online banking and bill payment regularly¹⁷ or the 27 percent of travel arrangements booked online. 18) Blackbaud, a maker of software for nonprofits, doesn't report the average online gift size, but found that in 2010, the median online gift over \$1,000 was \$1,250, and that the largest online gift was \$100,000—a steady increase from years past but still tiny relative to the kind of capital nonprofits really need to launch and grow. 19 This suggests that there is plenty of room to make high net-worth individuals more comfortable with online giving and with giving larger amounts there, which we believe can be accomplished by harnessing individual donors' existing relationships and networks and by ensuring that those

channels are chock-full of useful information about high-quality education organizations. "If you really want to tap individual donors, you can't give them yet another place to go you have to figure out how to cut through the noise and help them better integrate their philanthropic and investment decisions into what they are already doing," says Katherina Rosqueta, the executive director of the Center for High Impact Philanthropy.

Individual Investors

As noted above, for-profit companies—including those in education—tend to raise their early dollars from individual angel investors and seed-stage venture capital firms, and larger amounts for growth from institutional investors (including venture capital and other private equity firms that organize by industry and stage). The availability of investment capital for education companies has had several major pendulum swings over the last few decades, and is, after a long dry spell, experiencing a resurgence of late, with 50 venture firms and individuals putting \$225 million into 19 education deals between April and December 2010.²⁰ (Of course, that's still a pittance compared with overall venture deals in the second half of 2010: nearly \$11 billion in 1,700 companies, according to the MoneyTree Report compiled by PricewaterhouseCoopers and the National Venture Capital Association.²¹)

To be sure, many investors seem to be newly interested in the potential of cutting-edge education technologies, just as a significant number of technology entrepreneurs appear

The most acute issue in the education investing space is not the volume of funds, it is a lack of alignment of funds with public goals like closing the achievement gap, college and career readiness, and school effectiveness in lowincome communities.

to be keen on applying their ingenuity to helping students learn. While there does seem to remain a significant "capital gap" between very early-stage angel investments and the significantly larger rounds of growth capital provided by most institutional investors, the most acute issue in this space is not the volume of funds, it is a lack of alignment of funds with public goals like closing the achievement gap, college and career readiness, and school effectiveness in low-income communities. In general, education investment capital is hardest to raise in the startup and early-scale stages, whereas once a company demonstrates traction in the market, it is easier to raise funding from a wide range of later-stage investors (unlike in the nonprofit sector where growth-stage

donors are rare). As such, we will focus here mainly on the potential for tapping into resources from angel investors and new "impact" investors with an interest in education companies, and for steering those investors toward early-stage companies that are aligned with public sector goals to serve high-need students and accomplish dramatically better educational outcomes.

How significant are these angel investors? It's impossible to say for education specifically just like we noted above within philanthropy and nonprofits, nobody seems to track the giving of individuals within the education sector specifically—and in fact the main sources of information about venture investing (the National Venture Capital Association for institutional numbers and the Center for Venture Research for angel investments) don't break out education as a category at all. However, angels seem to be a robust source of capital generally: several hundred thousand active angel investors provide roughly the same amount of capital—around \$20 billion in 2010—as do venture firms, and to about 20 times as many companies (61,900 companies funded by angels in 2010, versus 3,327 deals funded by venture firms).²² In Silicon Valley, a significant number of technology entrepreneurs who became wealthy during the dot-com boom have joined the angel investor community and are becoming a growing force for supporting education technology, including the former Google and Yahoo! executives that launched education technology incubator Imagine K12. Because angel investors sow seed-stage capital and help determine which early ventures will gain traction, aligning them in favor of educational outcomes can have a dramatic impact on the shape of the entrepreneurial field.

Another promising segment of individuals is the growing number of high net-worth individuals interested in "impact investing," in which financial and social return are combined. The Money for Good report referenced above examined these individuals' interest in impact investing in general, though not in education specifically. Its survey found that these potential investors need both some assurance that the impact investing market is maturing and relatively affordable entry points (at least initially less than \$25,000, even for the very wealthy respondents). Both of these needs are conducive to technological solutions: online platforms can highlight impact investment success stories that returned financial capital and made a social impact, and feed impact investment opportunities directly into the investment databases used by existing financial advisers to enhance their legitimacy; while small initial investments are well-suited to online transactions (witness the popular appeal of Kiva, where most microloans are around \$25). In addition, it's worth noting that such investors are just as riskaverse as many individual donors are, and often more fearful of the downside risk than they are attracted to the potential upside. Therefore, these technology-based approaches should be coupled with tactics that at least guarantee these impact investors their principal back, such as providing loan guarantees through foundations.

Though we are interested in motivating and steering both philanthropic and investment capital, it is important to remember that what motivates investors is different from what motivates donors, and thus the process of aligning investors around the most-effective education companies may be quite different from the work of surfacing and making more consumable and trusted information about high-impact nonprofits for donors. For example, "investments rely to some extent on information asymmetry, on an investor's ability to find value others can't or won't see," points out Adam Newman of Education Growth Advisors. As such, we will also recommend nesting efforts to steer and incentivize investors within the context of face-to-face angel and impact investor networks, and suggest that foundations and venture capital firms take action to invite individual donors and angel investors to co-invest and learn along with them.

TECHNOLOGY TOOLS AND PLATFORMS: OPPORTUNITIES AND CHALLENGES

When considering our goal to mobilize capital toward improving social outcomes, the biggest challenge in the education investment landscape is the difficulty of steering capital toward those organizations most likely to have the greatest impact on student achievement and school productivity. We know that redirecting the way the bulk of public funding flows in education would be the best way to align private capital with public goals—so that large-scale public funds would go to the organizations and interventions that demonstrate the greatest effectiveness, thus providing an incentive to donors and investors to support organizations most likely to earn that revenue. But this shift toward allocating operating funds based on outcomes would require enormous political will and extensive and complicated turf battles at the federal, state, and local levels, not to mention ways to inform and activate a more informed customer base. ("You'd like to believe that the most successful companies are those that have the best outcomes, but that's not always the case," observes Adam Newman of Education Growth Advisors, because state, district, and school customers don't always make purchasing decisions based on academic effectiveness.²³)

Therefore, at least in the near term, we must find ways to better align private and philanthropic investment capital in support of greater public outcomes. Though there is significant entrepreneurial and funding activity in education today, there is little coherence or alignment to our ambitious public goals for increased outcomes and productivity in our underserved communities. Most of the millions of dollars being pumped into hundreds of for-profit education technology companies are geared toward interesting consumer technologies or easier business models, such as test preparation, rather than addressing systemic issues or targeting underperforming students. Meanwhile, although the philanthropic community often explicitly intends to direct funds toward nonprofits seeking to close achievement gaps and improve college readiness, the various individual donors and institutional foundations each bring to the table their own ideological beliefs about how best to do that, as well as idiosyncratic goals and processes around how to identify promising efforts for early-stage support. Moreover,

There is an alarming dearth of easily consumable information about the use of different education products and interventions—and less still about the academic outcomes being achieved by students using them.

as noted earlier, it is rare for philanthropists to provide the follow-on growth funding necessary to take the most worthy organizations to significant scale.

Compounding this lack of clarity about common goals and the misalignment between investment activity and our desired outcomes, there is an alarming dearth of easily consumable information about the use of different education products and interventions—and less still about the academic outcomes being achieved by students using them. "I can learn more about local restaurants than I can about a text being used in thousands of schools across the country," explained

one entrepreneur. The annual testing cycle yields data points that are: too slow to inform the investment cycle; incomparable across state lines (though the forthcoming adoption of Common Core standards and assessments should help here); difficult to extract from state or district databases; and too crude to link back to the value-add of any one product or service.

In recognition of these challenges and the potential for technology to address them, many entrepreneurs have stepped forward to develop technology-enabled investment and donation platforms. The last few years have seen a veritable explosion in crowd-sourced fundraising tools, as well as a significant increase in the number of more elaborate platforms for use by private investors. Although most of this activity has taken place outside of education, particularly in the for-profit investment space, there are myriad starting points for education donors and investors. For example, there are robust investment databases like Capital IQ and CB Insights that serve up detailed data about investors and companies, but little in the way of education content. Likewise, thousands of angel investors use Gust (formerly AngelSoft), an investment platform that is increasingly matching up investors' "dealflow" with companies' fundraising efforts as well as allowing investors to form co-investment

syndicates, but there are few education deals to be found there. Meanwhile, sites that endeavor to share information, ratings, and expert judgment about high-impact nonprofits, such as Philanthropedia and GreatNonprofits, contain relatively little education content and don't appear to have yet figured out how to mobilize actual giving based on their findings. And of the sparse offerings for donor and investor collaboration, transactions, and portfolio monitoring, education barely registers on their radar screens, and none appear to offer the kind of practical information necessary to increase the cross-sector sequencing and layering of capital in education. As such, our analysis of these platforms (detailed further in the sections that follow) found that they—and the donors and investors who want to use them—are hamstrung by poor information availability about education ventures to populate these platforms, a dearth of education expertise and judgment, fragmented definitions of educational usage and outcomes data across these platforms, and a lack of interoperability between platforms.

While the high level of fragmented activity keeps us from recommending a near-term investment in one specific platform or the creation of a new one, we do believe there is a significant opportunity to increase their collective potential for impact by strengthening and connecting the most promising platforms while also embedding them more deeply in the existing networks and trusted channels that already serve these donors and investors. Therefore, we recommend an immediate focus not on new platforms or tools, but rather on building upon existing efforts in three primary ways:

- Strengthening content: Enhance content to help investors gain knowledge about the field, especially in ways that will incent them to align around common outcome goals and to target specific ventures and deals most likely to achieve those goals. This means clarifying and communicating the metrics and data that correspond with these goals, making that data available and actionable, and complementing that data with expert judgment about who is best positioned to achieve that impact.
- Connecting technology efforts with existing face-to-face networks: Support initiatives that seek to build and strengthen trusted networks of investors or donors, who can combine efforts, leverage one another's due diligence, and co-invest in promising ventures and deals. Both education giving and investing are social endeavors in which individuals rely heavily on information and insight from their peers, and technological solutions need to tap into that behavioral tendency.
- Streamlining transactions: Streamline the process of receiving and vetting business plans and grant proposals, and find ways to support better monitoring of portfolio performance. While most of our recommendations relate to using technology to align and distribute data, information, and expertise to steer investment decisions and monitoring, rather than

to directly enable transactions, technology can help facilitate more-complex transactions, such as informing and creating connections among investors and donors interested in sequencing and layering capital for socially minded for-profits and capital-intensive nonprofit efforts.

FOCUS AREA #1: STRENGTHENING CONTENT



A key component of making education giving and investing attractive to individuals—and steering them toward the most effective organizations—is simply to improve the quality and accessibility of information that is available to them. The best way to do so is not by proliferating new streams of content, but by strengthening existing resources and combining them in smart ways. These resources range from general market and trend information, to specific details about organizations and deals, to outcomes data, to expert and crowdsourced judgments, and finally to recommendation engines that serve up specific deals (or, for entrepreneurs, likely funders).

Market Information

For example, information about education giving and investing is scattered across education's various trade news publications—ranging from the mainstream Education Week to the wonky Education Next and Phi Delta Kappan to specialty journals and sites like THE Journal, Scholastic Administrator, and American School Board Journal to structured tools like NewSchools Venture Fund's interactive market map of education technology ventures. Some education grants are highlighted in the Chronicle of Philanthropy and Philanthropy News Digest and some education investments covered in Venture Capital Journal, VentureBeat, and Tech Crunch, but it is nearly impossible to track just education deals or grants, save for the weekly EdSurge newsletter, which focuses almost exclusively on education technology.

Even this information tends not to be structured into databases, save for the Startl Dealbook, which only includes for-profit education technology companies and investors. Moreover, there is little education content to speak of in the larger venture databases like CB Insights and Capital IQ, which are subscription-only (presumably to cover the high human cost of maintaining useful and up-to-date information on thousands of investors, companies, and deals). On the nonprofit side, the Foundation Center attempts to track grants and to standardize and speed up this reporting through its Grantsfire RSS feed and a new data format for grants information dubbed "hgrant." Notably, these resources and databases—like the capital sources themselves—are siloed into philanthropic and for-profit categories, with no news source or database compiling information about current activity or potential for new activity in the sequencing of high-risk and low-risk capital or the layering of different types of capital sources.

What's needed to inform and influence donors and investors alike is clear, coherent, and accessible information about education investors and donors—both who's out there and their basic characteristics, including areas of education interest, desired outcomes, risk profile, deal size, and current portfolio—as well as detailed information about the nonprofit and for-profit organizations in the field. As our interviewees reminded us repeatedly, there is an overwhelming amount of information available online about many of these topics, but it is incoherent and scattered across a wide variety of free and subscription-based sites, and rarely available as precise information presented in a way that makes the universe of available investment (or investor/grantmaker) options clear and actionable. The Monitor Institute has piloted a strategy landscape tool designed to make these interrelationships between foundations and strategies easily understandable in the realm of climate change, and is reportedly assembling something similar for education, though it is unclear whether the tool

will be available publicly or only to paying clients. (The climate change strategy landscape made available online is illustrative only, populated with fictitious data.)25

Outcomes Data

Information about education investments and grants may be limited and fragmented, but it's better than the sparse information available about the efficacy of those resulting products and services. Here again, the private sector has a wealth of technology tools for reporting well-understood financial metrics, but in the social sector it is difficult to come by useful metrics or tools. One of the most sophisticated efforts, the Impact Reporting and Investment Standards (IRIS) being developed and promoted by the Global Impact Investing Network, has very limited education metrics, and most of those are suitable for educational institutions like schools themselves but of limited value for a company that creates materials or technology or that trains teachers.²⁶ Meanwhile, federal and state reporting sites (and some related efforts like the What Works Clearinghouse and Best Evidence Encyclopedia) capture a range of information about outcomes and spending, but not in a way that allows donors or investors to conduct timely, meaningful analysis of how student achievement and school effectiveness have been affected by any effort or product. Even in the case of charter schools, which are subject to direct accountability requirements, there is no accessible central source of data on the value-add of individual schools or of school networks on student learning. Though the overall flow of achievement information in education is likely to increase and standardize with the adoption of Common Core standards and assessments, there is still no clear channel to relate this information to the level of the entrepreneurial product or service. One promising effort in the works is ClassroomWindow, a data system that will combine expert analysis with crowdsourced reviews in order to report which innovations are being used in a given context, how they are being used, and how that relates to both teacher and principal satisfaction as well as to student achievement. Other decision-makers, such as district purchasers and state agencies, want and need these kinds of data as well, so as they create internal data warehouses and other decision-making tools, it should be possible to connect these research databases with the information found in these investment and giving tools.

In fact, most of the current efforts to improve gathering and sharing of outcomes information are focused on these decision-makers, though nearly always on distilling information for them about late-stage organizations and interventions with longitudinal, randomized controlled research studies behind them. These efforts include the RAND Corporation's Promising Practices Network, the federal What Works Clearinghouse, the Best Evidence Encyclopedia,

and the Coalition for Evidence-Based Policy's Top Tier Evidence Initiative. These sites tend to be aimed at policymaker and purchaser audiences, though a few try to make formal evaluation data useful and understandable by corporations and donors, such as StrategicEdSolutions.org, a site operated by the Business-Higher Education Forum that profiles preschool, K-12, and higher education programs that work or that are worth watching because they are "relevant, replicable and effective." The other efforts are rarely useful to donors and investors, in part

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because of the limited field of interventions they can cover and the many years required to conduct such rigorous research—but also because they each bring their own methodological bent to their assessment of evaluations, making it impossible to streamline this information into a common format that answers the question of what works for which kids, to what extent, and at what cost. Fewer still examine the last piece of this—cost-effectiveness—though the Washington State Institute for Public Policy has attempted to do so for different policy options in that state, such as the cost/benefit of expanding learning time or reducing class sizes. Even in this example, though, donors and investors need more actionable data, such as a comparative analysis of the costs and impacts of different providers rather than general policy trade-offs. Any effort to increase or rationalize education

investments will be confounded or delayed without greater attention to making outcomes data more transparent and useful. Potential directions include determining ways to gather and use data that are useful to entrepreneurs and their funders, not just data that are useful for public accountability, with a special emphasis on productivity metrics like value-add to student achievement and cost-effectiveness.

Insights from Experts, Crowds, and Recommendation Engines

Structured outcomes data, though, is just one way to signal worthy donation and investment opportunities—another is to gather ratings by users, supporters, volunteers, or even experts, which should at least in theory help the most effective (or at least the most popular) organizations rise to the top of the heap. As philanthropy adviser Sean Stannard-Stockton of Tactical Philanthropy Advisors put it, "Too often, when we talk about information we think about discrete bits of data. People who are experts ... are able to provide rich, contextual information that is often far more valuable than the collection of data points you might gather

on your own."27 For many years, GuideStar with its collection of nonprofit tax filings has been a central source of unbiased (but very basic) information about nonprofit organizations, while Charity Navigator added the spin of rating those nonprofits—mostly based on their financial health (defined as low overhead spending on administration and fundraising) and transparency practices. GreatNonprofits also profiles a significant number of nonprofits, but few are specific to education and fewer still include expert ratings: of the more than 1.8 million nonprofits listed by GreatNonprofits, about 300,000 are education organizations, but only 447 of those have any ratings by a professional with field expertise or a domain expert.

Meanwhile, the more focused Philanthropedia effort (recently acquired by GuideStar) focuses exclusively on the nonprofits its 2,000 experts deem most worthy of support; of the 338 "top" nonprofits rated by those experts, just 13 are education nonprofits, with ratings from 103 experts (though several dozen others received a handful of reviews by those same experts). GuideStar is now focused on providing Philanthropedia's expert information through other distribution channels, rather than as a destination Web site, and likewise providing GuideStar data to intermediaries such as donor-advised fund holders at the Fidelity Charitable Gift Fund and the Schwab Charitable Gift Fund. The Center for High Impact Philanthropy provides independent analysis, education, and other decision-making tools for donors concerned with maximizing the social impact of their funds, and its domestic coverage areas include teaching quality and "pathways to student success." Similarly, Root Cause's Social Impact Research (SIR) is modeled on equity research firms, aggregating and synthesizing research conducted by others for use by donors and their advisers, but the only education areas they cover are school readiness and college access and success, with profiled organizations concentrated in a mere handful of cities. It would be useful to further develop this expertise, including insights from beneficiaries and users as well as from researchers and other experts, and embed it into existing networks and platforms.

Finally, the most useful tool of all for individual donors and investors may be sophisticated recommendation engines, of the sort popularized by Netflix and Amazon, that make matching suggestions between capital providers and organizations or between capital providers who might partner through sequencing or layering to accomplish their individual goals better truly minimizing the research work any donor or investor would need to do. There doesn't appear to be any platform of the sort for nonprofits, but the CB Insights venture database provider operates Chubby Brain, which offers a Funding Recommendation Engine whose algorithm recommends investors and banks that might be a good fit for a company's funding needs, as well as Funding Discovery Engine, which can serve up potential deals to investors.

Conclusion: Strengthening Content

Overall, existing tools and platforms should be enhanced in order to bring more attention to quality education ventures and minimize the fundraising burden on the most promising organizations so they can focus their energy on the work. A greater amount and precision of information about these ventures, combined with deeper and richer expert judgment and wider crowd ratings, could significantly improve the landscape. Moreover, it is important to develop common reporting schemes (or at least interoperability) across these platforms, so that different rating systems used on different sites for different audiences (say, apples on a teacher rating site and dollar signs on an investor site) could be shared across those sites, fed into investment databases like those used by donor-advised funds, and connected together in meaningful ways.

FOCUS AREA #2: CONNECTING TECHNOLOGY EFFORTS WITH EXISTING **FACE-TO-FACE NETWORKS**



As noted earlier, investing and giving are complicated activities, often including a social aspect that is informed by the advice and trusted counsel of colleagues, friends, and family. Therefore, any attempt to use technology to mobilize education investments and donations toward the most-effective organizations should leverage offline social networks, relationships, and trust, as well as the online social media that have amplified those connections. Though we stand behind these general recommendations, we also believe it is important to invest some funding in conducting real market research into the pyschographics and behavioral preferences of the two key segments we are concerned with here—individual donors and angel investors.

Offline Networks and Online Platforms

As noted earlier, one of the key relationships worth tapping is that of a donor or investor with his or her financial adviser and institution, including charitable fund offices as well as investment brokers. Some of the content providers noted above, including Philanthropedia and GuideStar, are already looking for ways to embed their market intelligence and expertise into the daily work of these advisers and the proprietary online platforms that serve their clients, and education-specific platforms would be wise to pursue the same strategy. Likewise, the Growth Philanthropy Network—which has established an annual conference to bring together scale-ready nonprofits and interested donors, as well as other members-only resources as part of its Social Impact Exchange—has developed an online "Investors Clearinghouse" featuring detailed information about several dozen prescreened ventures deemed ready for scale based on impact data, demonstrated capacity for scale, a solid growth plan, and the existence of committed anchor funders. The clearinghouse's content will also be syndicated through a handful of institutions, such as the private charitable giving sites for clients of JPMorgan Chase and Schwab. Backing from an industry association or a domain expert can give donors and investors great comfort: in the technology industry, the successful Y Combinator incubator generates enormous investor demand for the startups it admits under its wing, and nearly every startup it spotlights at its annual conferences (all with a product that has launched and some revenue or other market traction generated) finds their next venture capital round oversubscribed.

More common are offline networks that often convene events and meetings to bring investors together in person with one another and with entrepreneurs (like Y Combinator does). These network events range from general to targeted in their approach to connecting capital providers with innovations. General events include: philanthropy-focused conferences and education seminars held by Philanthropy Roundtable and Grantmakers for Education that emphasize donor connections but occasionally feature promising organizations; and entrepreneurship-specific discussions at the NewSchools Venture Fund Summit. More specific to creating connections between investors/donors and entrepreneurs are venture fairs like those held by Investors' Circle, Arizona State University SkySong at its Education Innovation Summit and at the Venture Capital in Education events, and business plan and "pitch" competitions designed specifically to award grants or investments to the top performers. These events often lead to actual deals—the Venture Capital in Education conference convened by Education Growth Advisors and Startl has created several connections between entrepreneurs and investors who would not otherwise have met—but just as often serve as a place for investors and donors to get educated about potential opportunities and to connect with peers

who can inform their thinking (and eventually co-invest). There is a great deal of room to embed the intelligence of online platforms into these offline networks and events, to use these convenings as a way to strengthen content by gathering the information and expertise of

There is a great deal of room to embed the intelligence of online platforms into offline networks and events, and to use these convenings as a way to strengthen online content.

those in the room, and to supplement the content with intentional policy advice regarding incentives that would help steer capital toward the organizations and approaches that have the greatest impact.

There are few purely online social networks aimed at creating connections between donors or investors. There is certainly nothing in education circles as active as AngelList, an online hotbed for angel investors to find upand-coming technology startups (and vice versa), or as well-developed as Gust (formerly AngelSoft), a platform

that allows entrepreneurs to reach individual investors and angel investing groups and for those investors to share deals with one another. Neither platform, though, has much in the way of education content to offer, especially deals of the sort that advance public school productivity or improve the academic outcomes of low-income students. The closest education equivalent is DonorsChoose, which aims mostly at small, tangible, short-term donations between individuals and teachers; it is similar to Kiva in the small average size of donations and immediately tangible nature of the investment and therefore quite popular. Jumo and Facebook Causes have tried to boost donors' connections to social impact organizations, but neither has become a go-to source for serious donors or investors. However, ensuring that these angel platforms and nonprofit social networks are populated with useful education content—by encouraging the use of Gust and AngelList by education investors and by incentivizing experts in the education field to "like" and share relevant evidence about the highest impact organizations on Jumo and Facebook Causes—might help direct additional attention and resources toward the most effective organizations.

Conclusion: Connecting Technology Efforts with Existing Face-to-Face Networks

The power lies with the people—and technology platforms to advance education giving and investing will go far further by easing and enhancing offline connections, such as by strengthening the connections built between entrepreneurs and funders at in-person events and allowing funders to coordinate their efforts following such events, as Investors' Circle does. As noted above in the Strengthening Content section, it is also important to ensure that most promising education ventures and the impact they are having on students and schools, as Growth Philanthropy Network has begun to develop with its Social Impact Exchange clearinghouse. Finally, all of this activity should be anchored in more detailed segmentation research about the needs and behaviors of different individual donors and investors, the better to anchor any attempts to use technology to reach, mobilize, and steer them toward highimpact education innovations.

FOCUS AREA #3: STREAMLINING TRANSACTIONS



The ways in which investors and donors perform due diligence and complete transactions are both largely manual, not to mention idiosyncratic. There is no equivalent of the Common Application, the standardized college admissions application now in use by nearly 500 colleges, which has made it simpler for high school students to apply across a number of institutions and still allowed those institutions to select from among the criteria most important to them by combining the standardized application with a limited amount of customized information.

Funder Collaboration

Some sites offer ways for investors to collaborate and share information to make due diligence more expedient, such as Gust (mentioned above) in the for-profit sector. Applying this platform to impact investing, Investors' Circle uses Gust to manage collaborative due diligence in companies that present at its Venture Fairs, allowing investors to share with one another their knowledge and opinions about the companies and investment opportunities. The philanthropic sector has Foundation Source Access, which is aimed primarily at the 1,000 small foundations that are members of Foundation Source. The site offers nonprofits the chance to share information with prospective donors and pulls from social media feeds, but also has a private discussion area where members can trade insights. The tool's impact is unclear: while Foundation Source makes public the total number and amount of grants provided by its members to nonprofits, it does not disclose how many of them are motivated or informed by the information on the Foundation Source Access site.

We faced a similar challenge earlier this year trying to trace the impact of the Foundation i3 Registry (and, in fact, the matching-funds requirement overall) for our "Supporting and Scaling Change" analysis of the Investing in Innovation program. While the Registry helpfully allowed i3 applicants to upload a single proposal for viewing by multiple funders and made it easy for prospective donors to filter and sort potential opportunities and share due diligence, we were unable to determine how much of the final match activity was attributable to the Registry rather than to existing relationships. Still, many donors told us it was a helpful way for them to sift through the hundreds of i3 applications to narrow down to those that fit their criteria, and that it helped facilitate diligence conversations with other funders.²⁸

Completing Transactions

When it comes to technologies to support the actual transaction of a donation or an investment, there is little for individual donors and investors to use in supporting socially motivated education ventures. Though there are plenty of platforms like Network for Good, PayPal and Blackbaud's eTapestry that make it easy for nonprofits to accept online donations, and crowdfunding sites like Kickstarter and Start Some Good that enable instant transactions, these tend to draw in small amounts of money from individuals, rather than appealing to high net-worth investors or donors. The Social Impact Exchange enables direct donations to some of its profiled organizations (channeling them through Network for Good), but its usage is relatively limited to date, while 33needs and Kickstarter enable transactions to be completed only when a certain set of conditions are met, such as a predetermined number of donors or funding amount committed. (It's also worth noting that the most popular among these, Kickstarter, favors creative projects rather than charities or small businesses, and doesn't allow equity investments.)

Moreover, there are few tools available to facilitate complex transactions—indeed almost nothing at all to enable the kind of layered deals that bring together investors and donors with different risk profiles or different types of capital to invest. Mission Markets offers accredited

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investors and "issuers that meet minimum listing criteria" (such as articles of incorporation, term sheet, business plan, financial disclosures, and quantitative indicators of social impact) the ability to make private equity, debt, and other investments on its Impact Investment Platform, but education is not listed as one of its supported sectors. Few transactions have closed there to date, but it is a promising example of presenting a number of financial and social indicators and allowing a range of investment types. We found few tools that entice angel investors or individual donors to co-invest with others—and none that allow them to do so alongside institutions, reducing their personal risk. Addressing the

former need, MicroVentures links startups and angel investors who want to commit less than \$10,000, but doesn't include social impact as part of its mandatory screening process, while ProFounder (created by Kiva co-founder Jessica Jackley) enables only private transactions with friends, family members, customers, and others the entrepreneur already knows rather than with new sources of capital.

Finally, we found no resources at all that document and share the ways that more complicated sequencing and layering financing packages have been developed. Detailed case studies of the limited number of examples to date, along with tools and templates that make such investments easier for new investors to execute, would be valuable in encouraging more such cross-sector investing in socially motivated for-profits and capital-intensive nonprofits.

Monitoring Portfolios

Once transactions have been completed, there are also few tools available for education donors and investors to use to monitor their portfolios. It is perhaps no surprise that the most sophisticated tools exist for private investors, including Gust and VisualFund, which focus primarily on operational and financial metrics. However, Acumen Fund, the W.K. Kellogg Foundation, and others are using Pulse, a new impact investing tool built on Salesforce's Force.com platform, that captures financial and social impact metrics. But the depth of analysis available for education tracking is not robust—the metrics are pulled from the Impact Reporting and Investment Standards, which as mentioned earlier are narrow and light on education outcomes—and needs additional development in order to be useful for optimizing and aligning education giving and investing. Improving the uptake of such platforms for collaborative diligence and portfolio management among education donors and investors would be a valuable step toward increased clarity and coherence in the field, minimizing the burden on entrepreneurs.

Conclusion: Streamlining Transactions

Today, the way entrepreneurs connect with potential donors and investors largely happens offline, uninformed by rigorous data and unaided by technology—as is the way donors and investors connect with one another to co-invest or otherwise collaborate in their support of education innovations. This diverts untold hours of nonprofits' time and effort that could have been spent focused on students and schools rather than on fundraising, and decreases investors' own efficiency and productivity. Using technology to streamline transactions—including helping funders work together, particularly on cross-sector funding, and making the process of due diligence and portfolio monitoring more sophisticated—would make education giving and investing less daunting and its impact more tangible.

RECOMMENDATIONS

As we have emphasized in papers throughout this *Innovation for the Public Good* series, the responsibility for improving the innovation ecosystem in education is a shared one, with different sectors and players bringing different skills and resources to bear on the challenge of improving student achievement and school productivity. As such, our recommendations for action below are directed not only at those developing investment and donation platforms, but also at public policymakers, who can set conditions that enable the education capital markets to either flourish or falter, and foundations, whose flexible funds should be used to mobilize resources in support of the mission of advancing educational outcomes.

What Government Can Do

- Use the power of the bully pulpit to convene developers of capital platforms across the philanthropic and private sectors, as well as across industries, in order to learn from what other fields have pioneered, such as the use of social network maps in public health to illustrate the most efficient ways to distribute information through a community.
- Facilitate greater coherence in education investing and giving by convening organizers of investment networks together with social network operators and content providers to discuss ways to harness social media to attract and steer individual donors/investors toward donations/investments aligned with public goals.

- Continue to refine outcomes metrics and data, especially about student and school achievement and cost-effectiveness, and encourage their consistent adoption across platforms. Also, collaborate with foundations to strengthen the K-12 education metrics in systems like the Impact Reporting and Investment Standards, and to make this and other outcomes data more accessible, consumable, and standard across platforms.
- Provide incentives for donors and investors to support organizations that advance public goals, such as through social impact bonds or other outcomes-rewarding investment incentives.
- Differentiate between innovation funding and scale funding, and anchor large-scale public spending for adoption of products and services in demonstrably improved student achievement and/or increased school productivity. Consistent with the model set by i3 at the federal level, allow greater spending flexibility in small-scale or explicitly experimental contexts, while requiring greater attention to evidence and effectiveness for largescale spending, to increase the likelihood that the most financially successful education companies and organizations will be those that improve outcomes.

What Foundations Can Do

- Conduct or commission market research on the individual donor and angel investor markets in education, to surface more comprehensive information about their characteristics, their psychographics, and their needs, in order to determine how best to leverage them in support of your own funding strategy—and in support of your most effective grantees.
- Underwrite efforts to strengthen education metrics and data to increase the focus on student achievement outcomes and school productivity, such as enhancing the K-12 education metrics in the Impact Reporting and Investment Standards and coordinating education metrics with other emerging approaches in the social sector, including the way B Lab certifies B corporations and the Global Impact Investing Rating System handles impact investments.²⁹ Also, translate this and other information into compelling visual and human-driven stories, acknowledging that many individual donors will respond better to emotional appeals than to data-driven arguments.
- Fund the development of interoperability standards. Convene providers of high-quality content and developers of online platforms to identify opportunities for common formatting of key information. Invest in the development and dissemination of these technical standards—akin to the Ed-Fi data standard for student data systems being developed by the Michael & Susan Dell Foundation—and encourage adoption by funding a critical mass of existing content providers and platforms to use the standards.
- Encourage the development of quality content for education investment and philanthropy by funding ongoing information-gathering to strengthen the quality and quantity of

- education content within investment and giving tools, and also by establishing incentives for grantees to use and populate these platforms themselves.
- Foster greater sequencing and layering of for-profit and nonprofit capital by developing resources that support this emerging approach, including case studies that illustrate the benefits and concerns for investors/donors and entrepreneurs, templates and tools that make it easier for others to leverage those early experiences, and a database of investors and donors willing to consider such financing options.
- Provide incentives for experts to further develop and share their hard-won expertise about the most effective organizations and the metrics that best capture that effectiveness, and for users and beneficiaries to contribute to crowd-sourced ratings, and feed this information to platform developers in common data formats.
- Build upon and enhance the Foundation i3 Registry. Continue to streamline the application process for entrepreneurs, ensure that the Registry platform helps funders monitor the performance of their grants in ways that are robust but minimize requirements on nonprofits by combining requirements from many funders, extend the platform's reach to other individual donors through financial advisory firms, and make it available for other short-term funder collaborations.
- Use your funds to help steer additional resources toward impact. Motivate individual donors and align angel investors in support of outcomes by offering performance guarantees to enable promising nonprofit and for-profit providers to grow through public contracts for outcomes-based services. Through these efforts and others, create targeted pathways for individual donors to learn from and support your own funding activity. "The single most effective tool to get people involved, to raise their level of support, or to extend their time horizon, is to have someone respectable lead the charge," says Charles Harris, who raised growth funding for high-impact nonprofits at SeaChange Capital Partners. "People were happy when we [at SeaChange] did the diligence work and happy that the 40-page memo existed, but few people seemed to read it." Examples of such collaborative learning mechanisms include the Growth Capital Aggregation Pilot at the Edna McConnell Clark Foundation (where Harris now works)³⁰ and the new co-investment fund created by NewSchools Venture Fund to encourage angel investors to support education technologies that it believes will advance student and school improvement.

What Platform Developers (and Their Supporters) Can Do

Work with developers of other platforms to ensure your data is interoperable with one another, including common definitions for operational and outcomes metrics and common data formats.

- Strengthen your existing offering by bolstering the availability of expert judgment and partnering with other content providers wherever feasible to increase the volume and quality of education information your tool offers.
- Distribute your offering through investment/charitable advisers or through tools offered by adjacent sectors—such as impact investing or venture capital—in order to tap into a wider and more diverse audience of potential donors and investors.

Together, we believe these efforts will go a long way toward not only mobilizing new capital into education, but in steering those dollars toward the innovations most likely to make a meaningful difference in the lives of our nation's students, rewarding the courageous entrepreneurs who take on this enormous challenge, and propelling forward the cycle of innovation and its surrounding ecosystem.

ENDNOTES

- Bellwether Education Partners, Innovation for the Public Good: A Case Study of US Education, 2011. http:// bellwethereducation.org/innovation-for-the-public-good/.
- Julie Petersen and Kim Smith, Supporting and Scaling Change: Lessons from the First Round of the Investing in Innovation Program, Bellwether Education Partners, July 2011. http://bellwethereducation.org/i3/.
- Julie Petersen and Kim Smith, Pull and Push: Strengthening Demand for Innovation in Education, Bellwether Education Partners, September 2011. http://bellwethereducation.org/pull-and-push/.
- Julie Petersen and Kim Smith, Steering Capital: Optimizing Financial Support for Innovation in Public Education, Bellwether Education Partners, April 2011. http://bellwethereducation.org/steering-capital.
- "IRS Form 990 Isn't the Whole Story," GuideStar.org, January 1999. http://www2.guidestar.org/rxa/news/articles/2001-older/ irs-form-990-isnt-the-whole-story.aspx.
- Diana Scearce, Gabriel Kasper, and Heather McLeod Grant, "Working Wikily 2.0: Social Change with a Network Mindset," Monitor Institute, March 2008. http://www.monitorinstitute.com/documents/WorkingWikily2.0hires.pdf.
- Author interview, April 2011.
- Giving USA 2011: The Annual Report on Philanthropy for the Year 2010 (Chicago: Giving USA Foundation, June 2011).
- Center on Philanthropy at Indiana University for Bank of America Merrill Lynch, "The 2010 Study of High Net Worth Philanthropy: Issues Driving Charitable Activities among Affluent Households," November 2010. http://www.philanthropy.iupui. edu/Research/docs/2010BAML_HighNetWorthPhilanthropy.pdf.
- Lucy Bernholz, with Edward Skloot and Barry Varela, "Disrupting Philanthropy: Technology and the Future of the Social Sector" (Durham, NC: Center for Strategic Philanthropy and Civil Society, Sanford School of Public Policy, Duke University, May 2010). http://cspcs.sanford.duke.edu/publications/disrupting_philanthropy.
- Hope Consulting, "Money for Good: The US Market for Impact Investments and Charitable Gifts from Individual Donors and Investors," May 2010. http://www.hopeconsulting.us/money-for-good/.
- "The 2010 Study of High Net Worth Philanthropy."
- Kathleen Noonan and Katherina Rosqueta, The Center for High Impact Philanthropy, "I'm Not Rockefeller: 33 High Net Worth Philanthropists Discuss Their Approach to Giving," University of Pennsylvania, 2008. http://www.impact.upenn.edu/ about/view-imnotrockefeller/
- "Money for Good."
- ePhilanthropy Foundation, cited in Network for Good 2007 report, "The Young and the Generous: A Study of \$100 Million in Online Giving to 23,000 Charities": http://www.fundraising123.org/article/young-and-generous-study-100-milliononlinegiving.
- "2010 Online Giving Report," Blackbaud, February 2011. http://www.blackbaud.com/files/resources/downloads/WhitePaper _2010OnlineGivingReport.pdf.
- CheckFree Corporation, 2008 Consumer Banking and Billpay Survey.
- U.S. Census Bureau 2006 Service Annual Survey.
- "2010 Online Giving Report."
- NeXt Advisors neXtup newsletter, December 4, 2010. http://www.scribd.com/doc/47330519/neXtup-12-5-10.
- 21 "Historical Trend Data," Money Tree Report, Pricewaterhouse Coopers and National Venture Capital Association. Accessed November 7, 2011. https://www.pwcmoneytree.com/MTPublic/ns/nav.jsp?page=historical.
- Jeffrey Sohl, "The Angel Investor Market in 2010: A Market on the Rebound," Center for Venture Research, April 12, 2011. http://wsbe.unh.edu/sites/default/files/2010_analysis_report.pdf; "Historical Trend Data," MoneyTree Report, PricewaterhouseCoopers and National Venture Capital Association. Accessed November 7, 2011. https://www.pwcmoneytree. com/MTPublic/ns/nav.jsp?page=historical.
- Author interview, October 2011. For much more on this issue, see Pull and Push: Strengthening Demand for Innovation in Education. http://bellwethereducation.org/pull-and-push/.
- For more on the Foundation Center's electronic grants reporting efforts, see http://foundationcenter.org/grantmakers/hgrant. html.
- See http://www.monitorinstitute.com/strategylandscape/index.html.
- The Impact Reporting and Investment Standards (IRIS) framework is broken into five categories: organization description, product description, financial performance, operational impact, and product impact. For indicators related to educational quality,

see the Quality & Performance standards marked with a graduation cap in the Product Impact category at http://iris.thegiin.org/ iris-standards#m=qualityperformance.

- Sean Stannard-Stockton, "Philanthropedia Launches Expertise on Demand," Stanford Social Innovation Review, October 19, 2010. http://www.ssireview.org/opinion/entry/philanthropedia_launches_expertise_on_demand.
- Julie Petersen and Kim Smith, Supporting and Scaling Change: Lessons from the First Round of the Investing in Innovation Program, Bellwether Education Partners, July 2011. http://bellwethereducation.org/i3/.
- Research into these approaches is underway at the Center for the Advancement of Social Entrepreneurship (CASE) at Duke University's Fuqua School of Business; for more, see http://www.caseatduke.org/documents/Articles-Research/CASE_BLAB_&_ GIIRS.pdf.
- For more on the Edna McConnell Clark Foundation's Growth Capital Aggregation Pilot, see http://www.emcf.org/?id=57.