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NEWSCHOOLS VENTURE FUND SUMMIT 2003

May 2003

2003 SUMMIT

On May 1, 2003, the invite-only NewSchools Venture Fund Summit 2003 brought together more than 300 leaders from across the public, private and nonprofit sectors.

The day's sessions included:

- Plenary Session: Towards Performance-Based Urban Districts
- Challenges and Opportunities in the Evolving Charter School Movement
- Opportunities for Education Entrepreneurs Created by *No Child Left Behind*
- New School Creation as a Driver of District Reform
- Getting Beyond Compliance: Using Accountability and Performance Tools to Improve Instruction
- Finding and Keeping Quality Teachers and Leaders
- The Nexus of Research and Innovation

OPENING REMARKS

Kim Smith, CEO, NewSchools Venture Fund

It is remarkable to see the momentum that the movement of education entrepreneurship has built over the last few years. NewSchools has three key focus areas in its mission to improve public education through hybrid ideas and entrepreneurship:

- Create an environment that is supportive of performance-based school systems by building a network of people who think about change in an entrepreneurial way
- Build capacity by investing in people, tools, and practices
- Build alternative, effective systems of schools

These three streams of work have led to the creation of the Charter Accelerator Fund last year and the Performance Accelerator Fund this year. Both funds are wrapped in a network of bipartisan leaders from the public, business, and nonprofit sectors. Smith maintains that such a network is deeply significant, for “in addition to needing entrepreneurs as change agents, we need solutions to represent broad thinking across the parties and across the sectors.”

The new Performance Accelerator Fund is designed to invest in entrepreneurs who will take advantage of the pressures created by the No Child Left Behind legislation. Districts and states are trying to respond to the new demands, but they are simply not finding the resources they need. NewSchools interviewed district leaders around the country and certain issues kept coming up: alignment, governance, human capital, performance tools, assessment tools, research-based curriculum, and choice. The new fund will address many of these issues and will operate in parallel with the already-established Charter Accelerator Fund.

PLENARY SESSION: TOWARDS PERFORMANCE-BASED URBAN DISTRICTS

This conversation with innovative leaders in school districts across the country highlighted approaches to turning urban school systems into performance-driven organizations working to increase student achievement. Policy and operating issues brought to the forefront by the No Child Left Behind (NCLB) legislation were discussed, including assessment and accountability, human capital, choice and competition and supplemental services, as well as the challenges of addressing alignment and governance.

Moderator: Kim Smith, CEO, NewSchools Venture Fund

- Patricia Harvey, Superintendent, Saint Paul Public Schools
- Manuel Rivera, Superintendent, Rochester City School District
- Tony Shorris, Deputy Chancellor for Operations and Planning, New York City Schools

Roundtable Discussion

KS: When one considers performance-based systems, they center upon the over-arching themes of alignment, culture, and practices. Alignment starts with all members of the community, from the board to the school leaders to the students themselves, sharing the same beliefs and aspirations. That alignment is then measured by specified outcomes, which, in turn, determine the strategy for how to organize the resources and practices.

Smith suggests that this will “require an incredible culture shift for people who have been operating in a system that for a long time has really been characterized more by compliance than by a focus on results.” That culture shift is being driven by people on the inside of the system, as well as by the No Child Left Behind legislation. The goal, then, is a system characterized by high expectations for all students, clear ownership and responsibility for outcomes, respectful relationships across the different roles within the system, and meaningful two-way communication.

Such a cultural shift ultimately must be translated into practices, which are the final measurement of real change. Instruction, standards, and assessment all must be aligned with one another. Decision-making needs to be driven by meaningful data. People must be managed in a way that is consistent with the goals of the system. And finally, resources need to be allocated according to the established priorities.

PH: At the time of Harvey’s arrival in St. Paul, the city had really come together to focus on the needs of the educational system. Alignment, then, started with the first fix that an urban city needs: a reconnection of the entire city in order to make sure that everyone is moving together with the same agenda. “You have to get buy-in in order for people to change.”

Year one, therefore, was about the raising of expectations. In year two, they began to focus on the school work, re-defining standards-based education in St. Paul. Year three was centered on getting *all* people involved in decision making and on ensuring that *all* learners were being served.

The change in St. Paul is heavily focused upon the development of human capital. There is a Principal Leadership Institute that is a requirement for any aspiring principal in the system. They identify the city’s best

and brightest and invest in them heavily over a rigorous year-long training process. At the teacher level, St. Paul is clear about the high level of effort required and the depth of involvement expected. Again, the city invests heavily in their development.

In terms of alignment, in a city that is very engaged in school choice, it is important to maintain some consistent key strategies. That allows everyone to be working together and enables them to better figure out how the school system can support the learning. St. Paul also developed a cohesive district program, partially based on what was working in the successful schools. Then, they attained school level buy-in to the program by getting a few schools to get on board and succeed. The success of those schools led to the rest of the schools wanting to take on the program.

MR: At the start of his latest time as superintendent in Rochester (his 2nd), there was a sense that the community and the district were failing. Serious change was needed. In partnership with the unions, the decision was made to eliminate the district's particularly ineffective middle schools and transform them all into smaller grade 7-12 schools with only 250-300 students each.

Accountability is a cornerstone of Rochester's change. Statistics are now monitored on a school-by-school basis, so they can keep much closer track of how each school is performing. The 20 schools that are struggling the most will be expected to implement changes and will be held to even greater accountability standards. They will be offered a choice of two different comprehensive programs that have been effective in other Rochester schools and they will be supported with the kind of professional development and training that is needed. Schools that still do not demonstrate progress will close.

Notably, the union is willing to support a system of accountability whereby the teachers and leaders from the closing schools will not have automatic rights to be placed back in the system immediately. That is an example of the positive results that are emerging from a close working relationship with the union. Together, they have created a concept called a Living Contract, which means that issues are discussed and resolved as they come up, rather than being saved for the traditional method of collective bargaining.

Market accountability is generated in Rochester through a system of school choice. The city has been divided into three zones and students can choose to attend any school within their zone. The school system's leadership believes that greater choice will stimulate both greater program development and greater accountability. They are working to encourage the creation of new, smaller schools, while also tailoring the services that the district can provide to such startups. School success will be tracked; schools that maintain strong populations will continue on and those that continue to be ineffective and continue to lose students will be closed down.

TS: A phenomenon common to the public sector is the weighing of various objectives that leads to trade-offs in decision-making. Shorris suggests that, "in the case of New York City schools, it was clear that those trade-offs had become intolerable." That recognition built the momentum for change to a system that is more focused on coherence, alignment, and student performance. The first step was the alignment of the governance structure so that together, they could work to align allocations, testing, curriculum, labor contracts, and accountability systems.

The management team included two educators, two people from city government, two business leaders, and one education policy leader. The idea was to end the isolation of the education department from other city

agencies and from the private sector. In fact, it is the type of partnership that NewSchools talks about. Together, this team met to determine the drivers for system-wide change:

- A profound sense of urgency.
- The school sites themselves would be the unit of change.
- The principals would be the levers of school-site change, and therefore a large investment in a leadership academy is needed to grow and train new leaders.
- Reform is about teaching and learning, not about governance and power.
- Systemic change requires coherence of curriculum and of efforts to support its implementation.
- No new funding – all investments have to be supported by moving funds and eliminating positions.
- Differentiated management approaches so that performance earns flexibility.
- The desired behaviors and cultural changes must be modeled from the top down.
- Belief that it can work.

The plan, called Children First, emerged from those driving principles. The first part was a three-month period of intense public engagement, attempting to hear as many diverse voices and constituencies as possible. Simultaneously, an internal process involved national experts who were brought in to help think through the transformation. Those processes came together on January 15, 2003, when the mayor announced the largest restructuring of the city school system in at least 30 years. It included a coherent city-wide curriculum, organizational redesign, the end of district bureaucracies, sizeable investment in leadership development, new interim assessments, as well as many other elements.

In terms of the coherent, city-wide curriculum strategy, it is important to note that schools that improve their performance will be given greater flexibility in how they allocate resources, how they choose their curriculum, and how they support their teachers with professional development. Nonetheless, a single program is valuable in a system where both teachers and students have a high level of mobility and where a greatly limited budget demands scaled economies.

KS: What do you think are the biggest hurdles to achieving alignment?

MR: 1) Diminishing resources, as there is only so much you can cut, 2) Getting commitment and buy-in at the classroom and school levels, and 3) Support for kids from their families.

PH: Federal and state legislation should be added to that list. Also, tenure needs to be revisited to make sure that the incentives are right.

Q & A

Q: As you redesign your system, it is likely that it will support alignment and coherence, especially with a mandated curriculum and a mandated professional development strategy. At the same time, though, won't such a system be less capable of supporting effective innovation, autonomy, and entrepreneurship?

MR: Even with curricular coherence, principals can be given greater autonomy. They can be given choices in resource allocation that enable them to experiment. In Rochester, the leadership academy strategy is designed to develop leaders that can take advantage of fiscal flexibility in order to lead their schools in some new directions. Rochester is also creating a mechanism for entrepreneurs within the system to be able to move and open new schools that will have a good potential for results.

Q: What is the definition of success? How will the average taxpayer know that you are being effective as educational systems?

PH: In St. Paul, they have been able to show an increase in achievement and in graduation rates over each of the last four years. They hold themselves accountable through every means they can, they share what they are doing with the public, and they develop partnerships to take it to the next level.

MR: There need to be critical junctures along the way where young people are able to meet key performance standards. The district must continue to demonstrate progress with the given resources, and, in difficult situations, must demonstrate that action is being taken to stimulate change in the right direction.

TS: Quantifiable things like graduation rates and college admissions are important. Change can also be measured through the restoration of public confidence and the impact that it has on the economic development of the city. Finally, success can be measured by looking into a classroom and seeing kids that are engaged in the learning.

Q: What sort of interim academic success reports are you implementing to tell you whether the various interventions are working?

MR: In Rochester, they employ quarterly reporting, not for the board or the community, but so that the schools themselves can self-evaluate and improve instruction midstream.

TS: Another virtue of programmatic coherence is that it makes interim testing much more plausible. New York schools uses interim reports to target professional development activities rather than as a high-stakes tool.

Q: Throughout this discussion, there seems to be a willingness to differentiate the treatment of adults in schools based on their performance, which is a fairly dramatic change in public education. It seems that a key lever for change revolves around staffing at the school level – the hiring, transferring, and removal of staff. What are your visions on this front for your own systems?

PH: In St. Paul, there now exists staffing flexibility whereby schools always get a chance to interview and select teachers for their own sites.

TS: “This is probably the single largest problem we have in New York...The interlocking effect of seniority, transfer rights, and student class size ratios condemns (low socio-economic status) children to always having the least experienced teachers.” As it is very difficult to make an impact on the teachers’ contract during the current financial circumstances, the most important strategy for innovation becomes the creation of new schools. In such schools, differential human capital management strategies can help to avoid some of the problems.

CHALLENGES AND OPPORTUNITIES IN THE EVOLVING CHARTER SCHOOL MOVEMENT

For the last decade, public charter schools have been one of the most innovative approaches to K-12 public education reform. Thirty-six states have enacted charter school legislation, and there are currently 2700 charter schools nationwide. However, growth in new school openings has slowed, many states have experienced a backlash against charter schools, and observers disagree on the academic achievement results yielded within charter schools. Can the movement maintain its early momentum and meet the growing demand for new, high-quality public schools? What are the biggest challenges to the movement's success? What role can policymakers, entrepreneurs, districts and authorizers play in sustaining the momentum and ensuring quality at scale? National, state and local leaders shared their insights.

Moderator: James Willcox, Associate Partner, NewSchools Venture Fund

- Bryan Hassel, Co-Director, Public Impact
- Reed Hastings, President, California State Board of Education
- Greg Richmond, Director, Charter Schools Office, Chicago Public Schools
- Don Shalvey, CEO, Aspire Public Schools

Roundtable Discussion

JW: There are more than 2,700 charter schools today and charter legislation exists in most states, with varying degrees of effectiveness. Challenges have arisen such as political backlash and an economic downturn that makes funding and revenue as scarce as it has ever been. There have been some high-profile charter school closures, for various reasons, that have further left the movement with a black eye. This panel will address these challenges and focus on how charter schools can regain momentum in providing quality new schools.

BH: The first area of challenge centers on state policies:

- Too many states continue to put caps on the number of charter schools.
- Many states limit the power to authorize charter schools to local school boards or just a few other entities.
- Too many states restrict funding to charters so that it is not adequate, especially with regards to facilities.
- Too many states restrict charter school autonomy in ways that renege on that basic bargain in chartering between autonomy and accountability.

Another area of challenge is quality:

- **Authorizing.** There are too many authorizers who do not have the necessary commitment, capabilities, or resources to do a good job of choosing who gets a charter and then overseeing those schools as they move forward.

- **Supply.** There is a limit to the pipeline of individuals and organizations that are willing or capable of starting new schools into the future.
- **Leadership.** There is a shortage of people who can or will make a good case for chartering with policy makers and the public. Charter school opponents are well-organized, so the people involved in charter schools need to answer the challenges.

There is good news as well. Nationwide, there is a huge demand for charter schools. Parents want choices and the No Child Left Behind legislation gives policy support to school choice. Also, investment of money and human capital is high in the charter movement from foundations, communities, and education entrepreneurs.

What are some things that can be done to address the challenges?

- Attention can be focused on making a public case for chartering. Let people know what they do and why they are a good alternative.
- The support base can be greatly expanded by tapping into the many organizations and individuals in this country that are dissatisfied with the current state of the public schools. Those people need to be shown that chartering can be an effective tool for improving the greater system.
- State leadership can be built wherein chartering becomes a core strategy for politicians and other leaders trying to improve public education.
- Other organizations that specialize in replication can assist charter schools in taking their good ideas and strong programs and turning them into a network of schools.

RH: Hastings suggests that a particular vulnerability of the charter school movement lies in the fact that “we have no message, no effective message for why more charter schools. When we talk with legislators, when we talk with the press, we are unable to effectively articulate the public interest rationale in a way that voters and legislators agree.” Charter schools have been associated with several banner ideas – innovation, parental involvement, variety, accountability, superior performance, competition drives performance – but none of them is absolute and none of them has been a message that voters can unanimously relate to.

Hastings goes on to say, “the message has to be clear, compelling, credible, and concise. So, a solution I propose today is charter schools become the small school movement. Small schools are fundamentally understood by voters, by legislators, by everybody to be a good thing.” It is important to understand that, yes, charters are still about independence, superior results, accountability, and flexibility. But, those inherent values to charter schools are not translating into broad public support, so the charter school movement now needs to get together and agree on a single, marketable message in order to build momentum even in these tight times.

GR: Experience both overseeing all the charter schools in the Chicago Public School System and working with the National Association of Charter School Authorizers leads to the conclusion that the charter school community needs to do a much better job of engaging school districts in their work. The problem starts with passive or negative attitudes towards charters in the state laws and that leads to passive or negative attitudes

in the school districts. The reality, though, is that the great majority of charter schools are approved and monitored by local school districts.

Changing district-level attitudes towards charter schools starts by making clear to the district leaders what the benefits are. They need to be clear that charters can help meet growing enrollment issues and can be a low-cost way for districts to acquire school site facilities. They can address varying student needs and can help districts meet the demands of No Child Left Behind. School district officials need to hear these messages and need to be challenged to get involved in supporting charter schools.

Once engagement with school districts is created, several positive moves follow:

- School districts should develop a proactive, professional application process for charter schools.
- After schools are started, they should have clear contracts with the districts.
- The districts and charter schools should establish clear performance requirements that are focused on measurable student outcomes.
- Authorizers should provide adequate, reliable funding.
- The districts should provide support services to the schools that desire them.

DS: The way for the charter school movement to go from breakdown to breakthrough is to focus on the idea that small schools make a big difference. In the meantime, there are several walls, or challenges to charter schools, that must be overcome:

- Mixed academic success across all charter schools
- A status quo mindset from the educational establishment
- Declining enrollment in schools
- The current fiscal crisis
- Limited leadership capacity for starting new schools
- There are also some windows, or points of opportunity:
- Legislation that supports facilities and flexibility
- Growing grass roots support
- Building advocacy organizations defining common strategies
- Growing enrollment in charter schools

Shalvey suggests five unconventional strategies that are now perhaps the best place for leveraging success in the charter school movement:

1. **Underground railroads.** Superintendents are becoming charter school starters and charter school people are getting on school boards and becoming superintendents. That leads to the engagement of school boards as they begin to communicate and understand what charter schools are all about.

2. **The developer factor.** There are real opportunities, especially in California, for charter developers to work with new housing developments to form partnerships and build schools.
3. **Collective theory of action/ Lighthouse cooperatives.** Charter school developers can come together to put a variety of schools with different focuses in a district so that the district doesn't have to meet all of the demand for choice and specialization on its own.
4. **Good and bad economy.** In tough financial times, such as the current situation, teachers who get laid off or marginalized gather together to start the charter school of their dreams.
5. **Blurring of lines.** Traditionally isolated units in the world of education (K-12, colleges, foundations, etc.) start to partner in new and interesting ways.

Q & A

Q: While the small schools idea that Reed Hastings presented sounds good, there might be a few problems with it. What about big charter schools and what about the research that shows public support for small classes, rather than small schools?

RH: With larger charter schools, the idea is that the small school message needs to apply to the bulk of the movement, which it does. In terms of public support for small schools, that is an idea that is currently building, driven by what the Gates Foundation and others are doing right now. The message would take advantage of what promises to be resonating with the public in the next five years.

Q: One way to promote charter schools as small schools is to simply create small schools out of existing large ones. A number of schools have done that and are now functioning as small, autonomous units under a shared roof. That means that the schools get the benefits of smallness without the district having to spend tremendous amounts of money.

RH: That is absolutely right. In fact, one key message of the charter school movement is that they can drive change in non-charter public schools, so if districts start to imitate charters, all the better.

Q: Many charter school developers seem to have lost focus on carrying the message of reform and trying to do innovative things in their schools. Should we be pushing not only small schools, but also innovation as the message?

BH: Every charter school shouldn't be held to being on the cutting edge. There is a huge demand for tried and true approaches applied in a small school format. Of course some space should be reserved for those schools that want to innovate. That should still be encouraged as one possible avenue.

Q: To what degree will charters be able to separate themselves from foundation, corporation, and individual philanthropy in the future?

GR: The involvement of private philanthropy has been very positive, bringing money into the public schools that otherwise wouldn't be going there. In supportive environments for charter schools, such as Chicago, there are some schools that are running purely on the public dollars they receive, but they receive district help for facilities and get their funding on a timely basis. That gets back to the point of engaging districts to be supportive of these schools.

Q: The opposition to charter schools is very well organized, so how can that be fought?

RH: Charter schools need to move into the political side and unify under one message to become stronger. Unfortunately, many funders are reluctant to back political work and it is a very expensive undertaking.

Q: In a positive charter school environment such as Chicago, what impact are charter schools having on the larger system?

GR: The biggest effect has been in the area of accountability. Chicago designed a diverse set of performance measures and applied them to the charter schools. The district even closed two charter schools based on low performance. The school system, in turn, developed a similar accountability system and closed some regular schools for low performance as well.

OPPORTUNITIES FOR EDUCATION ENTREPRENEURS CREATED BY *NO CHILD LEFT BEHIND*

No Child Left Behind is the most ambitious education legislation in decades. With it, new funds are flowing into public education and, in these days of state budget crises, perhaps the only “new money” there is. Where new rules are created, typically new entrepreneurial opportunities arise. Yet in times of crisis and fast-paced change, it can be just as easy to adopt poor solutions as outstanding ones. Education entrepreneurs have an important opportunity to ensure that our public funds are used well, by ensuring that school systems have high-quality solutions to adopt -- solutions that meet the needs of students, teachers, parents, and administrators and improve results. Before we can rise to this challenge, however, we must understand what the needs are, where the funds will be directed and which of these needs are most amenable to entrepreneurial intervention. In this session, top officials working at federal, state and district levels shared the challenges, the risks, and their visions of the opportunities.

Moderator: Andy Rotherham, Director of Education Policy, Progressive Policy Institute

- Christopher Mazzeo, Senior Policy Analyst, National Governors Association
- Nina Rees, Deputy Under Secretary for Innovation and Improvement, US Department of Education
- Steve Seleznow, CEO, Humanitas Consulting, and former Chief of Staff, Washington DC Public Schools

Roundtable Discussion

AR: Today’s discussion is on entrepreneurial opportunities, but it is important to keep in mind that there are clear rules of scientific and research methodologies that govern what types of programs will be acceptable. Some of the broader categories of opportunity are as follows:

- **Accountability and assessment information systems.** School districts are being asked to use and report a tremendous amount of data, and it is key that such data is well communicated in an understandable format that encourages broad usage.
- **Human capital.** Creative solutions to the need for high quality teachers
- **School choice.** The supply of charter schools and other choices needs to increase and those schools need to be more consistently effective.
- **Supplemental services.** Offering tutoring and outside support to schools that are failing.
- **Research-based curriculum and programs.** Substantial opportunity for those who can demonstrate that they have programs and products that work.

What do each of you (the panel members) see as the role of your level of government in terms of driving some of the opportunities for entrepreneurs to get involved?

NR: The Office of Innovation and Improvement is meant to be a permanent home for innovation – by both highlighting some of the innovative things that have happened at the state and local levels and by

identifying the emerging opportunities that could be boosted by some federal funding. Currently, the bulk of our funding goes to grants related to either school choice or to alternative routes of teacher certification. A chief priority now is to communicate what needs exist so that social entrepreneurs can take advantage of the pressure that No Child Left Behind is creating to speed the pace of change.

CM: At the state level, most governors have committed to visions of educational reform that bring together disparate groups of people and a broad spectrum of ideas. The challenge, then, is to link those visions effectively with what No Child Left Behind is requiring. That linkage will look different for each state and each set of unique circumstances, but it is important to not lose focus of the larger visions that the states have been trying to address.

There is a need at the state level for ideas on how to organize both the systems of support and the systems of capacity building. Social entrepreneurs can help provide new ways of thinking about educator capacity, accountability, and the improvement of schools that have struggled historically.

SS: From the perspective of the Chief of Staff of D.C. Schools, No Child Left Behind created many opportunities and leverage points for change, but it also brought tremendous challenge. There are issues of great complexity that the law now requires school systems to fix. In fact, there is a great opportunity and need for entrepreneurial solutions that help address those very problems.

AR: What do the other levels of government need to do to make this work?

NR: Really, the burden is on the people at the federal level to provide good information about what is working and to provide technical assistance in the building of capacity. Rees asserts that, "The thing we need to see more of at the state and local level, in my view, is honest communication." If the requirements and best practices are not being translated down to the local level, then there will be no actual difference in children's lives. This legislation is designed not as a punishment but as a boost to the quality of education for all kids, so local districts should seize the opportunity to create a sense of urgency and implement real change.

SS: It is important to not simply focus on what is wrong with the systems in an environment of compliance. Seleznow suggests that people at all levels "have to combine compliance with the ability to create capacity and create time for change and to create opportunities for broken systems to exploit those opportunities."

CM: The first challenge is how sensitive the federal government can be to specific contexts wherein states are trying to fit their current accountability systems around the new requirements. It is important that they be allowed both to do what fits their context and to build upon existing successes. The second key challenge lies within the fact that accountability inevitably creates a political bind. The federal government will need to be sensitive to that fact.

AR: What is the most significant risk associated with No Child Left Behind?

SS: Every time change is implemented, it takes time to identify all of the unintended consequences and unforeseen ramifications in order to work out the kinks.

NR: Three things: 1) The misconceptions that surround the definition of a highly qualified teacher are a serious problem. Information needs to be conveyed to the states so that they understand what is meant by

“highly qualified” and so that they don’t get locked into the traditional ways of defining how to qualify a teacher, 2) The possibility that districts will put in place requirements that take away from the innovative nature of charter schools, and 3) The danger that districts will put in place reforms that garner attention but that do not really raise student achievement.

CM: The greatest risk is that everyone will assume that accountability is enough. There are many more deficiencies and imbalances that must be addressed, beyond the scope of what accountability can do.

AR: What advice do you have for social entrepreneurs?

SS: Seleznow offers that, “What I like are those programs that offer me what I need at a cost that is equal to or even less than what it would cost me to do it myself, and that I can ramp up immediately.” Teach for America or New Leaders for New Schools are examples of such programs. At the same time, entrepreneurs should be prepared for a serious challenge in passing through the procurement and implementation processes.

Q & A

Q: Why isn’t new research, namely interactive technology, being implemented in the development of curricular materials?

SS: There is a large need for such materials, especially with the new emphasis on assessment. There will likely need to be some change in the way that schools and school systems are organized for that technology to be fully realized, however.

NR: Anyone designing a new program, service, or product needs to build in a strong evaluation component so that it can be determined what exactly about the intervention is making an impact. That is the key to being able to take an entrepreneurial idea to scale.

CM: As ideas are brought to scale, people also need to be sensitive to the fact that things that are proven to work in one setting can bring other repercussions when expanded out. An example of that would be smaller class sizes.

SS: From an operational perspective, things that work are research-based and easy-to-implement without having to engage in protracted discussion in the community.

Q: What are the few products or services that you wish you could find but do not yet exist in the marketplace?

NR: A few ideas: 1) Supplemental service providers who are able to demonstrate to the districts that they are aligned with the schools in a way that they are worth keeping around after those schools have met the requirements, 2) Public-private partnerships in creating afterschool programs that are offering good content and driving change at the local level, and 3) Ways of translating the requirements down to the classroom and teacher level.

SS: There is a long list:

- User-friendly data assessment systems
- Parent assistance information centers and customer service systems

- Training programs for instructional assistance and para-professionals
- Community technology centers
- Charter schools that work
- Special education solutions

CM: Four things to add to what everyone else has said: 1) Data systems that not only are usable, but that actually get used by teachers and administrators in ways that really impact student learning, 2) Powerful, quick systems for preparing teachers and leaders, 3) Systems of schools, like charters, that provide support to the schools within a network in a way that is fundamentally different from the traditional model, and 4) Ways to deal with schools within the same system that are at very different points of restructuring or of corrective action.

NEW SCHOOL CREATION AS A DRIVER OF DISTRICT REFORM

Communities and school systems throughout the country are struggling with the lack of supply of high quality schools. Increasing parent demand as a result of NCLB legislation regarding failing schools has exacerbated this challenge. Therefore, many school systems, funders, and entrepreneurs have launched innovative efforts designed to dramatically increase the supply of new, quality schools and to replace closed, failing schools. This session explored the many opportunities and challenges these efforts present districts, funders and education entrepreneurs.

Moderator: Shivam Mallick Shah, Associate Partner, NewSchools Venture Fund

- Michele Cahill, Senior Counselor for Education Policy, New York City Department of Education
- Mary Anne Schmitt, President and CEO, New American Schools
- Tom Vander Ark, Executive Director for Education, Bill & Melinda Gates Foundation

Roundtable Discussion

MC: New schools are absolutely essential to system reform efforts. The primary goal of Children First in NYC is to create a system of effective or even outstanding schools. Those schools may be different from one another, but they all will share a core of critical elements such as a mission, a course of study, rigor, and strong leadership. New schools are key to such a system for several reasons:

- “New school creation at the beginning of a reform effort sets the bar for imagination.” They provide opportunities for excellence through innovation, best practices, and new leadership. They offer the notion of change that is not incremental and that adds urgency to the broader reform efforts.
- They can promote system reform when the system supports strategic practices. Greater equity can be reached by placing new schools in areas of high need and using them as a draw for strong leaders and teachers who wouldn’t normally be attracted to those areas.
- New schools can expand the forms of governance through innovations like autonomy linked to performance and restructured union relationships.
- They provide the opportunity to innovate and then study various models in action.

TVA: Vander Ark maintains that, “it is essential when working with a struggling urban district to combine the difficult long-term work of trying to reinvent existing high schools with new school creation.” Those new schools build a sense of vision and hope while providing a new set of opportunities. The Bill & Melinda Gates Foundation, in fact, will not create a state or district partnership now without a new school component. Although starting new schools is extraordinarily challenging, it is still easier than fixing large, struggling urban schools.

MS: When you look at starting a new school, there is a clean slate, whereas existing schools often come with entrenched systems and veteran staffs. It is much more difficult to get a common, shared, unified vision across in such a situation. At the same time, starting a new school comes with its own challenges like finding a building, financing the facilities, and recruiting an entire staff.

It is interesting to note that many new school startups get past the infrastructure issues but then run into roadblocks on the teaching and learning component. Innovation in educational program is often met with resistance in those schools. Part of our work, then, is centering on bringing together the autonomy that the charter school movement provides with the teams from the comprehensive school reform movement to create something truly powerful.

MC: In NYC, new school creation is coming through a number of different strategies:

- A strong leadership message of possibility and urgency, connected with clear goals and deadlines
- A supportive organizational structure such as an Office of New School Development
- Champions, partners, and intermediaries with real capacity
- A range of mechanisms for accountability

TVA: It is important to note that new schools need a tremendous amount of support. For that reason, our foundation mainly funds schools that are part of a network. A network can provide a good design that adds coherence to the goals, curriculum, and organization so that everything works together. It can also provide the support of a strong back office and help to build a positive, unified school culture.

Part of the challenge in new schools is finding good people who can provide technical assistance to these startups. There is a need to start another 10,000 new high schools in this decade, so the need for quality people is going to be enormous.

MS: Unfortunately, even among those people who have successfully created a school, very few of them are capable of developing the organizational capacity needed to provide a set of services that can really support the development of a larger program. Good educators and leaders are not always good consultants in trying to explain and support implementation of the concepts.

MC: In NYC, we are going to open 30 new New Century high schools, while supporting the founding of 17 charter schools this fall. The strategy has been to have smaller Offices of Small Schools in each area, staffed with a broad assortment of consultants and Education Department staff members. Those offices help guide the new schools through the development of school leadership, instruction, operations, and community engagement.

SS: How does new school creation fit into the notion of creating a portfolio of schools to serve the diverse needs of a community?

TVA: Every community should have a variety of options for all kids, particularly at the secondary level. Students learn in different ways and are motivated by different environments. There are academic schools that really focus on discipline-based content and college preparation. Another category is applied schools that have a core vision that could be pedagogical, occupational, or centered on a theme like art. The last category is alternative schools, which are highly personalized and highly supportive. City leaders, civic leaders, business leaders, and superintendents all need to become intentional about creating a variety of options as a way of addressing access and equity.

MS: Five or ten years from now, the concept of a district managing a portfolio of schools will just be an accepted part of effective school systems.

TVA: It takes extraordinary courage for a superintendent to propose a portfolio of new schools. It can anger the teachers, alienate the parents, and upset the unions. They will need a great deal of support and cover from their respective mayors and community business leaders.

SS: What do you see as the balance in new school creation strategies between being strategic and being opportunistic?

MS: Being strategic is about the district leadership identifying a set of needs based on analysis and addressing those needs through specific program development. Being opportunistic is about enabling good ideas to come into the system and then being responsive to them.

TVA: Cities starting new schools should be equally opportunistic and strategic. To be opportunistic is to be responsive, creating incentive sets for teachers, parents, and community groups that want to start new schools. Being strategic is about taking proven models and linking them to identified community needs.

Q & A

Q: As the number of new small schools soars, what will be the effect on the supply of quality leadership?

MC: As new school networks scale up, they need to find easier and faster ways of building capacity because there is a relatively small group of school starters being spread very thin. At the same time, there needs to be a strategic approach that leads to the development of more school site leaders. In NYC's Leadership Academy, there is a whole strand on leading new schools and a subset of that on leading new small high schools.

MS: The role of authorizers is going to be critical as schools and school networks move to scale. Many of the current authorizers need help in building their capacity to perform their roles effectively. Also, a consultancy capacity needs to be built to provide the professional services and hands-on support that networks and individual new schools will need.

TVA: It gets more challenging to attain quality as the new school movement keeps going. Many of the easy deals have already been done. So, that puts the burden on funders to do due diligence in creating the

investments, in orienting new grantees, and in supporting them into the future. Again, networks of schools will become even more essential as the need for quality guidance and support increases.

Q: There are three things that will need to change with the state policy framework for new schools:

1. Sponsors. It isn't just about getting the current sponsors to operate better, but also getting new sponsors and new kinds of sponsors.
2. States may have to send these new sponsors into major cities to work in parallel with the school districts if the districts are resisting the change.
3. The leadership at the state level needs to understand the new school movement and how to help it succeed.

MC: It is important to focus on state policy, but that is one of four legs of a strategy that will make this movement be successful over the long-term. The second is a research component that allows for analysis of what is working. The third is a high quality supply of people and organizations that can support the launch of new schools. And finally, there is the demand for new schools that must be built and sustained.

GETTING BEYOND COMPLIANCE: USING ACCOUNTABILITY AND PERFORMANCE TOOLS TO IMPROVE INSTRUCTION

We have the opportunity now, as never before, to build performance-based education systems in our schools and districts. The federal and state policies are in place, the will exists, and the technology infrastructure is mature. However, the specific applications – the right solutions – are only beginning to emerge. To build such systems requires more than just policies set at the top; it requires creating the right tools, training, and support, and putting them in the hands of those on the front lines, teachers and principals. Instructional staff must be able to make decisions based on current and actionable data –that is accurate, relevant, and timely. If we provide teachers with ways to capture the right data, appropriately analyze and visualize it, and make good instructional decisions based on the findings, student learning will improve. This session explored the challenges, benefits, risks and requirements inherent in getting schools and classrooms to use data-based decision-making.

Moderator: Linda Roberts, National Consultant and Former Director, Office of Education Technology, US Department of Education

- John Bailey, Director, Office of Educational Technology, US Department of Education
- Larry Berger, CEO, Wireless Generation
- Anthony Bryk, Director of the Center for School Improvement, University of Chicago
- David Coleman, CEO, Grow Network

Roundtable Discussion

AB: The focus here is trying to promote more ambitious instruction for all students using an information infrastructure system. Such a system is a combination of technology-based tools and social practices aimed at catalyzing efforts to transform the work in classrooms and in schools.

In the current system, there is a disconnect between the instruction and its effects on student learning. Teachers make judgments about what ideas to take into their classroom without being informed by any evidence of what impacts student learning. Teachers choose what professional development they take on and whether or not they actually use it in their classrooms. The professional community of teachers is weak and if there ever is any interaction, it rarely includes any real social learning. Finally, Bryk maintains that, “accountability tends to be organized around minimizing problems rather than improving student learning.”

That picture can be contrasted with the ideas of ambitious instruction:

- Daily reflective practice where decisions are based on detailed observations about students’ work
- Public teaching practice organized around a common instructional framework to enable real deep discourse about what works and why
- Continuous adult learning to improve teaching practice as a core of professional responsibility
- Continuous internal accountability, rooted in student learning

Technology enters the picture in two key ways:

1. It has taken simple, routine procedural tasks and introduced efficiencies, so that teachers can focus on their reflective practice and their professional community.
2. It brings key information more rapidly and organizes that information as to help educators make good conclusions about next steps.

An information infrastructure system that supports student learning would involve much more frequent development-level data delivered at a time when teachers could use it to inform their practice. As records of student performance and classroom practice are put together, there is the potential to aggregate information and develop an evidence-based way of identifying distinctive problems of practice and thinking about more effective ways to engage instruction for those students. Furthermore, assembling information from all of the professionals who touch students' lives will help to inform their practices while also building in internal accountability.

LB: Wireless Generation was founded with a limited focus on accountability and how it meets the demands on teacher time. The goal was to find places where paperwork was bogging teachers down the most and then develop tools for streamlining those processes.

An example of that approach came into play with the manual assessment of early reading. Teachers had to watch students read and mark down accuracies and errors as they occurred. So, Wireless Generation developed the same protocols and put them on a mobile device. Teachers could then just tap the words on a hand-held device and that data would be captured and immediately processed. Immediate representations of the data allowed the teacher to make changes in instruction right in that moment. Then, when the teacher synched their hand-held it sent the data also to a central website where it pointed to specific reports for teachers, allowed administrators to see overall patterns of progress, and enabled parents to be brought into an understanding of what they could be doing at home to help their individual student.

Berger maintains that “the thing that we’re most excited to hear is not just that there’s time being given back, because that was our goal and it’s how we measure almost everything we do, but that the time is being spent talking about issues of reading performance and what to do about it.” That, then, is the challenge – to make the tools of accountability connect in interesting ways to conversations about performance and learning.

DC: There are several key concerns when considering the force of tools to change teacher action:

- It is important to recognize the enormous gap between the amount of professed data use and the reality.
- Having made no use of the standardized tests to date, it is dangerous to hurry to create more assessment in the hopes that it will somehow transform practice.
- The federal law aims at increasing parental understanding of their student’s growth, but the current reports do very little towards that end.
- Teachers are not receiving data on their students from the previous year and a teacher report, directed specifically at their needs, does not even exist.

Coleman maintains a bottom-line that, “There is a large gap between assessment and instruction today and the practices that we have endorsed.”

Nonetheless, the moment of reporting results is one of high tension and also commonality. It is therefore a tremendous opportunity for making the standards relevant and vivid. In order to make that leap, it is crucial that reporting be done in print to introduce and motivate people to begin to work with the data. Then, they can transition into using the web resources, but the use of print will get them there. As for the web tools, it is key that they be reliable and easily understandable.

JB: There is a significant amount of frustration in this field seeing the tremendous potential of current data and assessment systems versus how they are being implemented to date. One major issue is making the data timely so that it is relevant in real-time. Bailey suggests that it is key to continue asking, “How do we make sure it’s leading up to a point of really informing instruction, informing decision making, and targeting resources where they’re needed the most?”

With the No Child Left Behind legislation, each state must develop an implement a statewide accountability system that will be effective in ensuring that all local schools make adequate yearly progress. Those systems will include high standards, yearly assessments, achievement for all students, and both sanctions and rewards. Right away, one enormous problem is that the current administrative systems in the schools are quite poor.

The first step is to take the current student information systems, the assessment systems, the finance systems, and the instructional systems and pull them all together into one large data warehouse. That provides the ability to look at relationships and to do different types of analytical reports based on comparing various pieces of information. Then, there need to be new reporting services and tools that can take all of the interconnected data and turn it into a format that can guide decisions, budgets, and instruction. Schools and school systems need to be thinking on that higher level of abstraction to insure that they get an appropriate comprehensive system.

Bailey concludes by saying that “data, when it’s properly converted into useful information, is a call to action. Fundamentally, that is what No Child Left Behind is all about with all of its data requirements. It’s about getting the data out there so it is a call to action so that people can’t ignore these problems any more.”

Q & A

Q: What would have to happen, in terms of professional development, to develop teachers in a way that they take the data you’re providing them with and actually use it to inform their instruction?

DC: There has been a supposition that teachers don’t want to be told by a computer how to teach. Nonetheless, the data is sometimes a call to action and the teachers start to call for instructional strategies to be built into the product.

AB: The structures and cultures of schooling will have to change in order for evidence to inform practice. Part of that is creating structures wherein people can actually meet to talk about the evidence. Part of it has to do with reframing the roles of administrators and staff developers. Upstream, the schools of education need to have data and evidence in the programs from day 1.

Q: How do the textbook publishers fit into this picture, as they tend to drive much of today's instruction?

JB: The publishers are trying to make sense of the technology. Their challenge will be to get these new data services to mesh together in such a way that the assessment data can recommend specific chunks in a textbook that could be used to help reinforce or re-teach a specific area that the student is struggling with.

Q: How difficult is it to design user-friendly materials that work?

AB: There has been a recent focus on the science of usability research. Software is just put in front of a sample of teachers again and again until it works for them. Constant revision until the preponderance of teachers can use it.

FINDING AND KEEPING QUALITY TEACHERS AND LEADERS

There is broad consensus today that great schools require great leaders, and that the strongest direct determinant of student learning is teacher quality. More specifically, most believe that schools must have competent teachers who know their subjects deeply, understand how to impart knowledge to a diverse population of children, and are able to use data to drive instructional decision-making. Furthermore, most also believe that schools must have competent principals who can create cultures of performance for their schools, who serve as strong instructional leaders, and who are able to integrate best practices from academic, financial, and organizational sources.

Moderator: Matt Miller, syndicated columnist, consultant, and author of "The Two Percent Solution: Fixing America's Problems In Ways Liberals and Conservatives Can Love"

- Tom Carroll, Executive Director, National Commission on Teaching and America's Future
- Rick Hess, Resident Scholar, American Enterprise Institute and Executive Editor, *Education Next*
- Gaynor McCown, Executive Director, Teaching Commission
- Jon Schnur, CEO and Co-Founder, New Leaders for New Schools

Roundtable Discussion

RH: The two distinct challenges here are: 1) Who do you get into the education profession? and 2) How do you design effective induction and support mechanisms so that you can keep people in the profession and help them to be effective?

Entrance barriers in fields like engineering or medicine are there because there is a body of knowledge that one must absolutely have in order to be competent. At the same time, just because someone has that knowledge does not mean that he or she is good at their job. In professions without clear bodies of essential knowledge, there are often many sources of knowledge or personal skills that must be considered. Either way, it is important that an employer chooses carefully and then develops the person they hire in tune with the demands of the specific job and work environment.

The best model is a shift of the resources to a district or school-centered model where they are free to use their resources as they see fit in order to train and support personnel. The problems arise when policy makers try to come up with universal rules and standards for what makes an effective educator and an effective induction process. Hess maintains that, "When you don't know exactly what makes somebody effective--and we don't have a concrete basis as far as what teachers need to know outside of content knowledge and some pedagogy--the thing that makes the most sense is a system that's flexible enough and open enough to bring in talent and motivate it."

JS: The mission of New Leaders for New Schools (NLNS) is to foster high levels of academic achievement for every child by attracting and preparing the next generation of really outstanding principals for our nation's public schools. Great schools typically have great leaders who do a number of things:

- Unite teachers, parents, kids, and community leaders under a very clear mission

- Provide (or delegate and oversee) effective instructional leadership to really improve the quality of teaching and learning in the classroom
- Recruit, select, develop, evaluate, and overall manage people
- Establish a culture of performance
- Engage the parents and the outside community

NLNS looks for people who have a demonstrated record of leadership of adults and then provide them with a three-year training program. That includes a six-week summer academy, a yearlong residency where they help to lead instructional change in a school, and then two years of coaching and feedback from a community of peers while they take on the job.

Schnur asserts that, “There are very, very few school systems, whether in districts or charter schools, that focus on human resources--the attraction, development, and retention of talent--as a key to change.” Given that lack of focus and the presence of policies and barriers to effective HR systems, it is going to be essential that new HR systems for urban schools are created.

GM: The new Teaching Commission is a three-year effort focused intensively on improving student achievement through recruitment and retention of high quality teachers. The Commission will use a twofold strategy of first creating a sense of urgency surrounding the issue and then developing the political support and will to make something happen. There are solutions out there already in the research and in practice, but they are not yet at a level of scale that enables a broad number of children to benefit.

The Commission has identified three critical areas of teacher quality:

- **Skills and preparation.** Teachers need an excellent grasp of their content and they need to understand some pedagogy—how children learn.
- **Compensation and performance.** Money is not *the* issue for teachers, but it does matter. There needs to be a new system that recognizes excellence without rigid salary schedules. Such a system would change the paradigm in terms of both who enters the teaching profession and who stays.
- **Working environment.** Teachers should be able to expect participation in key decisions, there should be a clearly outlined career ladder, and there must be opportunities for collaboration and support within the context of the school.

Finally, McCown agrees with Schnur that there must be “flexibility in staffing schools to the extent that a principal can actually develop a community in his or her school that’s about academic achievement.”

TC: The National Commission on Teaching and America’s Future issued a report in 1996 that said that teaching is the most important factor in the quality of a child’s education. The Commission challenged the nation to provide every child with a highly qualified teacher by 2006, and at the halfway point it is simply not happening. While the conventional wisdom states that there aren’t enough good people who want to join the profession, Carroll maintains that, “the truth is we can’t keep enough good teachers in our schools.” The basic reasons behind the lack of teacher retention are pay and conditions.

The enormous rate of teacher turnover and attrition are staggering, particularly in low-income schools. Turnover and attrition have high costs: the investment in hiring, preparing, and replacing teachers; the cost of undermining morale, community, and continuity; and the investments in school reform.

MM: In Miller's book, *The 2% Solution*, he suggests that there must be a fundamental change in the way that college students view a career in education. He proposes a sort of Title I for teachers whereby every teacher of poor children in America will receive a 50% raise, conditioned on two fundamental reforms: that teachers' unions allow another 50% raise to go to the top half of performers and that they reform the dismissal process to something that is fair and efficient. There would be much more money for teachers in exchange for giving up the lock-step pay scale and for making it much easier to dismiss poor performers. The cost of such a program would be approximately \$30 billion a year, or a 7% increase in national K-12 spending. Miller suggests that "it would create a thousand percent change in the way the teaching career is viewed by young people deciding whether or not to enter the profession."

JS: Schnur reiterates his comment from an earlier session that "the differentiation of treatment of teachers and principals based on performance is one of the most important reforms in education." He sees two major challenges to such a move:

1. People will not be happy if they are rated in arbitrary ways by people who are not good at it. They will maintain that such rating will lead to favoritism and incentives that aren't necessarily about results.
2. The systems for assessing performance in a fair and effective way are not where they need to be.

Neither is an unsolvable problem, but they both point to the need for the education field to actually develop much more sophisticated instruments of performance measurement.

RH: The idea that there can be a precise measure of value added by any given teacher is out of touch with reality. Rather, Hess suggests, "What we should all want is to empower responsible administrators to have a lot of discretion in how they reward and compensate teachers."

Q & A

Q: What about the problem that a career in teaching does not provide a sense of long-term variety and mobility?

TC: In teaching and education, we do not create rewarding career paths Carroll offers that "there are professions in which we value continuity and development of expertise over time, and teaching should be one of those professions, but the only way we're going to get that is if we make it a profession in which you can grow and develop through your career."

Q: Why isn't there a bigger emphasis on freeing up a principal to build a team and then letting that freedom trickle down so that teachers have a voice?

TC: Our commission has three strategies:

1. Teachers need to have a voice in decisions, working with the principal as a leadership group.
2. There must be a well-designed induction process and mentoring program to bring teachers into the community.
3. Teachers must be able to continue to learn so that they are prepared into the future.

THE NEXUS OF RESEARCH AND INNOVATION

This provocative debate delved into the overlap between forward-looking innovation and truth-testing research. Are innovation and research necessary enemies or crucial partners in education reform? The U.S. Department of Education and others are pushing for “scientifically-based” research in education, requiring educational models and techniques to prove their mettle in exchange for funding and widespread adoption. At the same time, major shifts in education reform have given rise to demand for innovation that creates dramatic, positive change. How will policymakers, education leaders and entrepreneurs reconcile this creative tension?

Moderator: Andy Rotherham, Director of Education Policy, Progressive Policy Institute

- Gina Burkhardt, CEO and Executive Director, North Central Regional Educational Laboratory
- Dave Myers, Vice President, Washington Human Services Research, Research Division, Mathematica Research
- Kim Smith, CEO, NewSchools Venture Fund

Roundtable Discussion

AR: In the world of education, there is research to understand social and educational phenomena, research driven by advocacy, and research driven by profit. That variation has led to a landscape that is extremely contentious and political. The most recent manifestation of the education research debate has been the heavy focus on scientifically based research in the No Child Left Behind Act.

Several problems characterize the field of educational research:

- There has historically been a lot of research grounded in case studies and anecdotal evidence that has then served as the basis for a great deal of educational policy.
- Education is an extraordinarily value-laden field, so objective or empirical methods are often suspect
- Teachers have been brought into a field where being professional means doing one’s own thing in the classroom, based on the judgment of the individual, which has led to an even more research-averse culture.

It’s really only in the last 20 years that there has been a push to create performance-based education systems

KS: Innovation is meant to improve what one is trying to accomplish in the world. In the field of education, there are many types of innovation: content/instruction, pedagogy, assessment, data analysis, organization/structure, and governance/finance. NewSchools first considers the type of innovation and the looks to see where it is in its life cycle. The first stage is the period of proving the concept, stage two is the time for testing the hypothesis, and the last stage is time for the idea to be scaled up.

AR: What is effective research?

DM: Good research is a counter-factual. That means that one is not only looking at how well a child has done in a certain program, but also considering how they would have done in the absence of the program or

in another program entirely. In impact studies, the whole point is to measure the difference that has been made on somebody's life.

There are many research techniques, but the randomized experiment that is called for by the No Child Left Behind legislation is the simplest and fairest. With that, a researcher takes a pool of children, starting at the same place, and then randomly assigns them either to continue with no change or to experience an intervention or curriculum of some sort. The Department of Education is raising the bar with this requirement for randomized experiment research, but the bar should be set even higher.

GB: To conduct the in-depth studies that David is talking about is going to take a huge commitment and a great deal of time. Unfortunately, in the education community, there is a sense that decisions need to be made right away, so any kind of reform that's being introduced into a state or school system starts by being based in the best evidence that is readily available. The best approach, then, is to conduct incredibly rigorous evaluations and continuous review through the implementation process, so that the reform or intervention can be stopped at any point where it is found to not be working. That is the notion of applied research.

Burkhardt suggests that ideally, "innovation and research connect because research allows innovation, good innovation to happen. Because if you're starting from a solid base of research, what you're doing is building opportunities for newness and efficiency to evolve from a solid foundation. And tie that with strong evaluation and continuous review, so that you're always making the system better."

AR: What are the differences and similarities between research in education and research in other fields?

DM: There's a scientific paradigm that has been shown to work in the physical sciences and medicine that education now needs to operate in. I think what Gina mentioned is interesting as it seems to mirror the FDA model of pilot studies that are rigorously examined.

KS: There are significant differences between the medical field that the FDA regulates and the world of education. They have different approaches for public health issues that for specific patient interventions. There are different levels of tightly controlled licensure. If education wants to consider that model, they need to first look at their own infrastructure for comparison, because it's not exactly the same context.

GB: It's not so much about adopting the FDA method as it is allowing for tinkering and new approaches to be brought into the system of educational research. It might be valuable to think about doing things like clinical trials that have the kind of rigor that the FDA proposes around medicine.

Q: In doing educational research, it seems that initial conditions often have an even greater impact than the intervention itself. Also, it is extraordinarily difficult to separate the countless other variables from the impact that the intervention is having. How do you sort out the variables?

DM: The ideal way is through design of the research. One must rigorously sort out all the distracting variables that affect what's going on. It also helps to have large-scale studies with many participants.

KS: It is important to take into account the cost implications of taking on large-scale, long-term studies.

GB: Yes, to fund the studies that test the hypothesis and the extensive follow-up evaluation is very expensive.

AR: What are the different challenges and standards associated with research on structural innovations?

GB: One of the dilemmas is that when you look at structural changes, you are looking at innovations on top of something that is very broken.

KS: There are so many political compromises associated with that type of innovation that in just trying to get the change made, you have added countless more layers of variables. It becomes enormously difficult to then peel those layers away to actually research the impact of the change. Smith suggests that, “you only have so much control when you’re simultaneously trying to increase the rigor of your research and actually get things done in the real world.”

DM: The standard of evidence is the same regardless of what you are researching. Also, on the political issue, that is exactly how we continue to get in trouble in the field of education. We keep saying that it is too difficult to do because of the political compromises, so rigorous evaluations never get done.

KS: There is a cost-benefit analysis worth doing for how much return you are going to get for that rigor. There isn’t enough money in the field to support all of that research, so there needs to be a discussion of where to spend in order to leverage the greatest amount of impact on improving outcomes for the kids.

GB: Right now, the federal government spends less than 1% of their budget on educational research and development, so it is difficult to expect rigorous or scientifically based research across the board.

AR: This is a politically contentious issue, so when can methodology become a political weapon?

DM: I agree with the scientifically based research approach, but am afraid that most people will be disappointed with the results. People are expecting definitive answers and they just don’t come out of most studies of this sort. Therefore, there is always going to be a political debate surrounding it.

GB: That is right. There will not be a definitive answer. Researchers simply put the best research on the table and help people to make the best decisions for their situation. Unfortunately, there is a very real possibility that the political arena influences the research that gets funded.

Q: How then do we cut through all of the political noise to get good data that can be understood by people in a useful way?

DM: It is important to make educators and consumers think as researchers. Otherwise, there will never be enough demand for quality research.

KS: It is important as we raise the standards on educational research that we don’t lock in the players who are currently ready to perform clinical trials. That would greatly limit the number of research outfits supplying information, therefore cutting off valuable diversity of thought.