

Unpacking Data: Successes from School District-Wide Reform Efforts

Remarks as Prepared for Delivery by
Dan Katzir, Managing Director, The Broad Foundation

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Thank you, Scott. It is my pleasure to be with you here today.

When we began The Broad Foundation in 1999, Eli Broad, the founder and CEO of two Fortune 500 companies, knew the power of data to make dramatic gains across industries.

Then, and now, he believed that the most pressing challenge our country faces is to restore America's public schools to the best in the world. After World War II, the United States had the #1 high school graduation rate in the world. Today, we've dropped to #21 among industrialized nations. Even America's *top-performing* math students rank 25th out of 30 when compared with the best students across the globe.

Since 1999, The Broad Foundation has provided more than \$400 million to support efforts to significantly improve student achievement in urban areas.

We've focused on developing leaders to take on the challenge of transforming urban education, including working with governors, commissioners of education, local school boards, mayors, superintendents, unions, district executive staff and principals.

We've also helped large urban districts improve central office operations, institute financial controls, and empower staff with information on what works for students, and what doesn't.

While most of our attention has focused on improving traditional public schools, we've also supported high-quality public charter schools. In addition, we've worked to identify and share best practices across public school systems.

Throughout our partnerships with dozens of big city school systems, we've operated with the belief that the more decisions at every level are based on what students know, what they need to know, and how to get there, the more students - and the surrounding community - will benefit.

In other words: we love data. We are thrilled that Education Week has made Making Data Matter the theme of today's national conference.

Imagine what it would look like if teachers and parents, at the click of a mouse, could access a data system that told them what they needed to know to help a student succeed.

For one thing, that system would show them not only how well their child was doing in certain subjects, but also how well they were doing relative to students in other classrooms, schools, districts, states – and yes, even other countries.

It would reveal the specific skills and areas of knowledge in which students needed to get better. But it wouldn't stop there. It would go on to provide access to proven lessons, instructional methods and educational resources to get that child up to speed.

The power of the web has transformed how we transact business and conduct our lives. We connect and we communicate, we buy and use content in completely new ways. In that instant after you click the mouse, consider how personalized the target response is to your purchase on Amazon, your music selection on iTunes, your restaurant inquiry on Yelp, your flight selection on Expedia, your search on Google.

This is made possible through the rich, intelligent, rapid and sophisticated technologies that energize these leading web sites and their related services. Almost none of this same transformative horsepower has been applied to the education of students. This is an exciting new frontier, and I look forward to hearing Tom VanderArk's remarks later today on the power of technology to transform student learning.

Earlier in my career, I helped Sylvan Learning Systems manage its Southern California region. At the time, the Los Angeles Unified School District turned to Sylvan and other tutoring companies to help increase the reading levels of students who were furthest behind – those in the lowest 100 performing schools in the district.

Sylvan succeeded in large part because it gathered assessment data on students *every single hour of every single day*, and used it to tailor the next hour's and next day's lessons to meet that individual student's evolving needs.

Today, in the New York City Department of Education, a pilot initiative called “the School of One” is trying the very same approach – using teacher-driven assessment combined with adaptive learning technology to customize daily lesson plans for each student based on their individual learning style and the prior day's learning results.

Whether data is used at the individual student level, the classroom level, the school or district level, or at the state-wide level, the goal is the same: to continuously improve.

Whenever The Broad Foundation provides a grant, we closely track and measure its results. The bottom line: unless data shows a reform is working to improve student achievement and reduce achievement gaps, then we are not getting the “return on investment” we seek.

If we don't see results, we work closely with our grantees to make changes under the grant and, if necessary, discontinue funding. If we do see results, we consider how to scale up the effort or replicate it elsewhere.

Several times a year, our research and evaluation department captures outcomes and crunches the numbers, looking for proof points. It is a learning process for us as much as our grantee partners.

With our grantees, we design performance scorecards that enable us to compare a grant's annual progress against history, against best practices in the field, against other similar grants and against annual and long-term targets.

Schools, districts and states can do the same.

For example, districts could track the effectiveness of ELL intervention programs according to how fast each program transitions students to English Only instruction, how well each program is performing relative to its per-student cost, and versus comparable programs in other schools and other districts.

However, we've found that this degree of measurement – while necessary to truly understand which programs are working and which provide a good return on taxpayer dollars – is very rare in school systems.

At Broad, we analyze student achievement data by looking at five major elements:

- (1) Improvement in the percentage of students meeting or exceeding proficiency on state exams.
- (2) The distribution and growth of students across all performance levels, from Advanced to Below Basic.
- (3) How well a district performs in comparison to the “expected” performance for similar districts based on poverty.
- (4) Achievement gap closures among low-income, African-American and Hispanic students and their more advantaged peers, and
- (5) Graduation rates.

Recently, we also began analyzing additional college readiness data, including scores and participation rates – disaggregated by subgroups – on college preparation tests like the ACT, SAT, and Advanced Placement exams.

Last week, we announced this year's Broad Prize finalists – those five districts competing for the title of most improved large urban school district in America and a share of \$2 million in college scholarships for seniors.

The Broad Prize Review Board looks at all the student achievement data I've already mentioned, and quite a bit more. Core to the Prize is whether a district outperformed and

out-improved on these academic performance measures compared with other school systems in their own state and vs. the 99 other eligible large urban districts from across the country.

I'd like to take a moment to recognize this year's finalists.

- Charlotte-Mecklenburg Schools, N.C.,
- Gwinnett County Public Schools outside Atlanta,
- Montgomery County Public Schools, Md. , and
- two bordering school districts in the same city: Socorro Independent School District and Ysleta Independent School District, both in El Paso, Texas.

These are five beacon districts, where the use of data is embraced by stakeholders and embedded culturally and systemically throughout the district. I encourage you to visit them to see their best practices in action.

If you are interested in seeing comparative data on the largest 100 urban districts in the country, visit The Broad Prize website at www.broadprize.org. Or, talk to Karen Levesque, who is here today. She is the education director of MPR Associates, our data partner for The Broad Prize.

And stay tuned this fall for qualitative information on how these five finalists are making their gains, and of course, to see who wins.

I would like to share with you some of the best and most inspiring examples we've seen of the nation's most academically improved urban districts using data to drive improvements in hundreds of schools – and the lessons we can draw from them.

Let's start with an extremely worthwhile use of data in this reduced funding climate: using data to improve operational efficiencies.

The stories I am about to share came to us from “Broad Residents,” who are private sector managers with M.B.A.s that we've helped recruit, train and place into school districts and charter organizations to help manage operations more efficiently and effectively. More than 100 Broad Residents today are working in nearly 60 education systems... 21 are here in Chicago and another one works in the nearby Elgin district.

Let's start with Denver Public Schools (anyone here from Denver?).

Several years ago, one of Denver's notorious trouble spots was a severe lag in textbook orders. Textbooks often arrived significantly after the September start date for school, which made it difficult for teachers to develop lesson plans. Really? Who woulda thought? Bonkers, right?

When textbooks finally did arrive, there was no system for tracking their receipt or location. The district discovered it was spending \$465,000 every year just to replace lost books. That's like losing state funding for 50 students every year.

The main issue holding up textbook purchases? A lack of *accurate data* on incoming students. By developing a student enrollment forecasting tool and inserting barcodes into the books, the district was able to order textbooks earlier and track them electronically.

This simple use of data helped speed up textbook purchasing in Denver by 3 months. Now 98 percent of textbooks are received before the start of school, and the district saves \$280,000 yearly in textbook purchases. Students and teachers get the instructional materials they need – on time – *and* the district saves money. A win-win, all because of the right data.

Last year, leaders in former Broad Prize finalist Miami-Dade agreed to be transparent with their financial data. They brought in highly respected chief financial officers from other districts as well as a group of private sector business leaders who uncovered numerous central office redundancies. They benchmarked themselves against other large districts and saved millions on transportation, food service and school administration. They drastically cut overtime and non-essential spending on supplies.

The result: Miami-Dade was able to shrink its central office by more than 25 percent. And, by shifting positions from the central office to the classroom, they saved jobs, bolstered direct support for students and reduced class size. Although the state of Florida cut Miami-Dade's budget by \$50 million that year, the district was able to increase classroom resources without spending additional money, and increase its contingency reserve more than ten-fold during the worst economic conditions in decades.

So, *transparent, consistent* data can drive common sense operational improvements.

Data also play a critical role when districts develop instructional strategies and measure student academic progress

In 2002, we created The Broad Superintendents Academy, a superintendent preparation program that seeks, trains and places leaders from all sectors, including education, into executive posts in large urban school systems. To date, our graduates have filled over 150 district leadership positions nationwide, including 69 superintendent positions across 23 states.

These leaders are using data to improve everything under the sun. And the good news is that their results are paying off: 71 percent of Broad Academy superintendents who have been in place for 3 or more years are consistently improving achievement in reading and math faster than their peers. And even more – 80 percent – are making better comparative gains after they've been in place for 4 or more years.

In 2002, one of our graduates, Paula Dawning, became superintendent in Benton Harbor, Michigan, where over 90% of families live below the poverty line. The district, which had the highest dropout rate and some of the lowest test scores in the state, had not been collecting student data.

By building a data system that allowed staff to track student progress, uncover trends and concerns, and establish detailed improvement plans, the district was able to improve fourth grade reading scores more than 100 percent in just two years, and lower the dropout rate by 20 percent. Superintendent Dawning was subsequently named state superintendent of the year by the Michigan Association of School Administrators.

If you head down south to visit the Aldine Independent School District outside Houston – last year’s Broad Prize winner – you’ll find Superintendent Wanda Bamberg leading her cabinet through a rapid-fire discussion about whether the district is making progress toward its strategic goals.

Aldine keeps everyone focused on raising student achievement through “balanced scorecards”, which are living data documents for planning, operating and monitoring school, central office department and district-wide progress toward common goals.

Every quarter, Aldine principals and teachers set school scorecard goals for attendance, student performance on benchmark exams, staff development and parent involvement. The scorecard then enables them to monitor progress and guides their day-to-day decisions.

Aldine’s data management system allows principals and teachers to receive benchmark assessment results on a Wednesday, for example, showing 60 percent of third graders across the entire district incorrectly answered questions on decimal subtraction, and by Thursday, have new lesson plans posted online, professional development sessions for elementary school teachers customized to help teachers re-teach this specific math skill, and a bank of follow-up questions on decimal subtraction incorporated into the very next benchmark exam.

Now, all this may sound great, and it is, but as you well know, unless staff is comfortable with *using* data to drive *action*, it’s not going to be useful. The question is this: is your staff empowered to use data to drive improvements? And how can we help staff become comfortable using data?

Several years ago, Charlotte-Mecklenberg asked school staff to track their progress toward student achievement goals, use data to reflect, inquire, and continuously improve and report the results to the surrounding community.

But it wasn’t until the district collected *interview* data from principals that it realized why this new model wasn’t catching on. The interview data showed that school staff needed more notice and preparation to do school reviews, and more information about what might happen as a result of the school review process. By listening to the concerns of its stakeholders and by collecting qualitative data, Charlotte-Mecklenberg was able to develop buy-in that made their district-wide continuous improvement model work.

Of all the ways in which data is unlocking dramatic improvements in public education, perhaps none is as exciting as the role data is playing in recruiting, selecting and empowering teachers.

I once had the privilege of working for the national office of Teach for America. They have developed what I consider to be one of the most sophisticated uses of data in K-12: an algorithm that drives teacher selection.

Here is how it works.

Teach for America measures each of its teachers' impact on student achievement in the classroom. Then, they go back and look at how each teacher ranked during the admissions process across different criteria. This allows them to know which admissions criteria are most predictive of classroom success, and which criteria don't matter at all.

Over time, this has allowed the organization to improve the rubric it uses to select its teachers. The result is that, every year, Teach for America has gotten a few percentage points better, both in retaining teachers and in producing student results. This complex admissions *algorithm* – a word that makes many cringe – recently pushed Teach for America's two-year retention rate over 90 percent for the first time, which is well above national average.

Former Broad Prize-winner Long Beach Unified in California also uses data to fill between 400 and 500 new teaching posts a year. The district feeds real-time data on the learning needs of its students to local teachers colleges, who in turn prepare future Long Beach teachers with teaching skills that correspond with current students needs.

When teachers have access to data on their students, including assessment scores, attendance, grades, discipline and program interventions, and easy-to-read charts and graphs depicting important trends and changes, they are empowered to set classroom and student goals that push those students further.

And when teachers receive data online, minutes after assessments are given, enabling them to track their progress compared to other teachers, develop plans to differentiate instruction, focus on areas of greatest need, collaborate with their peers to share proven strategies, and generate their own assessments from online banks of questions aligned with state standards, they are using data on par with data use by the very best organizations and industries in the world.

Finally, when teachers can trust that their required professional development is based on proven data and instructional strategies that are truly useful in the classroom, they will feel supported.

No one does this better than Long Beach, where professional development is strategic, standards-based and driven by student results. In Long Beach, district staff observe classrooms to evaluate whether the PD is truly helping teachers deliver instruction more effectively.

But they don't stop there. The district's research office then marries this analysis with student achievement data from interim assessments. And that's where they finally confirm

whether instructional strategies delivered through professional development are indeed having an impact on student academic performance.

Data matters, and its only getting better as technology helps us get the right data to the right people at the right time.

Remember the image of parents and teachers accessing pivotal student data at the touch of a button? Well, thanks to the common standards movement, we may soon be able to pull up data showing how a student is faring relative to the state and the *nation*. Race to the Top winners and other reform-minded states will be working to build these statewide data systems, and I look forward to hearing Aimee Guidera remarks on this topic later today.

By harnessing the power of data to discover fresh ways of looking at common problems, we think our country stands a better chance at once again making our public schools the very best in the world.

Thanks so much for your attention. If there is time, I look forward to your questions.

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