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## Measuring Success in Public Education: Whether Wanted or Not

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## Measuring Success in Public Education: Whether Wanted or Not

### Acknowledgements

We would like to thank the members of the Center for Social Measurement and Evaluation at CHILDREN AT RISK for their hard work to further improve the measurement of success in public education on a daily basis.

In the first two years of the *Journal of Applied Research on Children*, we have focused on publishing original research on some of the most pressing issues impacting children in America: food insecurity, teenage pregnancy, child trafficking, and the booming Latino population. For our fifth edition, we are thrilled to present research focused on an issue that is close to our hearts and sure to affect the prosperity of generations to come: public education.

We know that historically in America, the very best way to move children from one economic class to another is to provide them with a quality public education. No other program holds such hope and promise and has such a proven track record of doing so much good for so many children. This timely special edition brings together the work of researchers around the country who represent a variety of perspectives. Their contributions to this issue center on the pivotal question, “How can—and how *should*—we measure success in public education?”

Fortunately, the past decade has seen a surge in the amount of data available around public education. In a recent report, McKinsey & Company’s McKinsey Global Institute described the benefits the education sector could reap from taking advantage of this shift toward so-called “big data”:

*...Making data available on educational outcomes at primary and secondary schools can allow parents to make more informed decisions about where to live or in which schools to place their children. In addition to arming consumers of such public services with the information they need to make effective choices, making these types of data openly available is likely to incentivize providers of such services to improve their performance.<sup>1</sup>*

Today’s data systems allow us to track the performance of students, educators, and schools across time, giving us valuable insight into trends in the state of our nation’s education. We are also able to compare our students to their peers in other districts, states, and nations. This wealth of available data presents us with limitless possibilities for measurement and comparison.

A number of converging movements are bringing performance measurement in public education to the forefront of the national conversation. Efforts ranging from the implementation of the Common Core Standards to the heated debate over measuring teacher effectiveness using student testing data make it clear that the increasing focus on data and measurement is not greeted with universal rejoicing. Proponents of increased performance measurement in education believe that data gives us important insights into performance and progress. Yet opponents worry that many of the things that matter most in education – parental support, teacher quality, student engagement - cannot be easily measured. It is true that numbers cannot tell us everything that makes education tick. But, given the wealth of data available, it is worth giving serious consideration to how it can best be used.

This begs the question: what should we be using all this data to measure? Data ranging from test scores to attendance records allow us to answer this question in a multitude of ways, and the contributors to this issue present a number of intriguing possibilities.

One of the primary things education data allows us to do is gauge how well our schools are doing. There is a wealth of data we can consider that lends insight into school performance. One key measure of school success is the dropout rate. Unfortunately, the desire to showcase positive statistics can lead to fuzzy math when it comes to graduation rates. It is important that consumers of this data examine the methodology used to calculate dropout rates to ensure that it is transparent and accurate. Testing is another avenue through which student performance data is collected. By tracking how well students do on tests of different subjects, educators can discern where students struggle and which students are having a hard time.

Another way to measure success in public education is an examination of how many students successfully move from public high schools into higher education. College access and completion are lingering problems. The national high school graduation rate hovers around 75%.<sup>2</sup> Approximately 68% of graduates go on to enroll in colleges or universities,<sup>3</sup> and of those that enter a four-year university, only about 56% actually graduate within six years.<sup>4</sup> High rates of enrollment in remediation classes indicate that many who do enter higher education institutions are not adequately prepared for success in that level of coursework.

When all these indicators are taken together, they can be used to draw widespread attention to the overarching state of public education. This is a strategy we at CHILDREN AT RISK began experimenting with seven years ago, when we held a conference on the high school dropout crisis. The data was clear and alarming, and the conference was co-sponsored by prominent academics at Harvard and Rice Universities, yet the findings failed to capture the attention of lawmakers or the public at large. In the face of this ambivalence, we determined to use education data to create a report on school performance that would be consumable and interesting for the general public. The result was a data rich school ranking that allows the media, parents and policy makers to see a ranking of every public school in the state of Texas. The rankings include indicators ranging from dropout rates to advanced coursework, and they cover every elementary, middle, and high school in the state, ranking them from best to worst.

While a ranking might seem a bit anti-intellectual, the results have been more than pleasantly surprising. As data around schools became more easily understandable and accessible, parents became increasingly engaged as education advocates. Major media outlets have partnered with CHILDREN AT RISK to highlight top schools and have played a major part in the wide usage of the rankings. Other education-focused

non-profits use the rankings in a variety of useful ways, and school districts themselves, after initial mixed feelings about their work being so open to public and parental scrutiny, have not only embraced our rankings, but have worked to help improve the rankings methodology and encourage the involvement of parents.

Collecting education data at the campus level, as we do in our rankings, allows us to compare schools and lends insight into the performance of different types of schools, including charter, magnet, and traditional schools. The data show that charter schools tend to be either outstanding or laggards; traditional schools run the performance gamut; and, magnet schools are generally excellent. Parents are eager for this kind of information, and they use it to make informed choices about where to send their children to school.

Just as we can use data to examine different subsets of schools, we can also use it to examine different subsets of students. Even data skeptics admit that one of the advantages of performance measurement is the way it can be used to track the progress of subgroups of students. We know that Hispanic and Black youths face a substantial achievement gap in test scores and graduation rates when compared to their White and Asian peers.<sup>5</sup> Education data highlights subgroups whose struggles had previously been masked.

Data reveals clusters of students who are struggle, and data can also be used to evaluate the efficacy of interventions aimed at boosting these students' outcomes. The advent of "big data" offers benefits for educators and researchers, giving them the means to consistently analyze student performance. Accessible data allows teachers to track individualized learning outcomes for each student, and the more consistent use of high-quality student performance data allows at-risk students to be identified more quickly. Research shows that students who do not read proficiently by third grade are four times more likely to drop out than those who do read on grade level.<sup>6</sup> So, finding and focusing on students who don't read at grade level in third and fourth grade helps pinpoint struggling students before they drop out.<sup>7</sup> The earlier an intervention begins, the greater its chance of taking hold and decreasing the risk of a student dropping out.

However, the quality of these intervention programs vary greatly and data allows stakeholders to assess the impact of each strategy. For instance, there are an astounding number of programs touting themselves as the solution to the dropout problem. However, very few of these programs, if any, are based on solid research. Instead, they rely on anecdote and storytelling to capture the imagination of superintendents. If and when these programs are put to the test and asked to demonstrate their success, some do show some promise, while others are unable to produce convincing evidence.

Other programs have very clear evidence pointing to their value. For example, research consistently shows that a high-quality early

education provides an outstanding return on investment. Studies demonstrate that children who participated in a high quality early childhood education program had higher cognitive test scores, achieved more years of education, had a higher likelihood of attending college, and continued to have higher academic achievement in math and reading into early adulthood.<sup>8</sup> The positive effects of early education are even more pronounced in high poverty children.

Another promising practice for increasing student performance and closing the achievement gap is extending learning time. With a conventional school calendar of 180 6-1/2-hour days, American students spend less time in school than many countries that outrank us in educational proficiency. The solution may be adding more time to the school day and year, but this time must be used effectively. Evidence-based extended learning time programs ensure that students are spending more time on task, actively engaged and acquiring new knowledge. Several states have demonstrated marked increases in performance after implementing successful extended learning time programs.

Measurement can also be applied to areas of education that go beyond academic performance. One area of increasing focus and measurement is school discipline. The last few decades have seen increasing numbers of schools adopt “zero tolerance” discipline policies that prescribe strict punishments for student misbehavior. Nationally, the number of student suspensions has jumped from 1.7 million in 1974 to more than 3.3 million in 2006.<sup>9</sup> Measurement of this trend has revealed disproportionate discipline rates for male students of color—precisely those students who are most at risk for dropping out of school.

Another education-related area under the scrutiny of performance measurement is food in schools. We know that 16.7 million American children live in food insecurity, and children who come to school hungry are less likely to succeed.<sup>10</sup> Data on the number of school meals served and the number of children who are eligible to receive these meals and yet fail to participate have prompted many school districts to increase their free meal offerings.

From measuring school performance to keeping track of individual student outcomes, data and measurement plays an increasingly integral role in public education. As researchers, parents, and educators come to rely more heavily on research, it is important to maintain a critical eye. There are many purported experts who make competing claims about student success or the efficacy of various intervention programs. All consumers of performance measurements need to do their due diligence to ensure that the data they are looking at is accurate and its source is transparent.

It is also important to keep in mind that there are limits to what data can tell us. As useful as it is, data can't yet tell us much about some of education's most essential components, including parental support,

student engagement, and teacher-student connections. As much as performance measurement tells us, it does not tell us everything.

That said, we know that a focus on measurement in education is essential to making large-scale improvements to the education system. Data can help identify efficiencies and point us toward more effective practices, and it has already revealed important trends around racial achievement gaps and dismal graduation rates. But all too often, community dialogues on education reform get hung up on debates about the correct way to measure success. Yet ultimately, we know that if we fail to act quickly to address the shortcomings of our current educational system—particularly when it comes to low-income and minority students—we will miss out on the contributions these students would otherwise bring to our communities. As we work to ensure that every child receives a high quality education, data and measurement and some of the most important tools in our toolkit.

## References

1. Manyika, J., Chui, M., Brown, B., Bughin, J., Dobbs, R., Roxburgh, C., et al. (2011). *Big data: The next frontier for innovation, competition, and productivity*. McKinsey & Company.
2. Chapman, C. et al., "Trends in High School Dropout and Completion Rates in the United States: 1972–2009 (NCES 2012-006)," US Department of Education. Washington, DC: National Center for Education Statistics, 2011, 1 Oct 2012. <http://nces.ed.gov/pubsearch>.
3. U.S. Bureau of Labor Statistics, "College Enrollment and Work Activity of 2011 High School Graduates," 19 Apr. 2012, 1 Oct. 2012. <http://www.bls.gov/news.release/hsgec.nr0.htm>
4. Alliance for Excellent Education, "Accelerating the College and Career Readiness of the Nation's Students," no date, 1 Oct. 2012 [http://www.all4ed.org/files/Nation\\_cs.pdf](http://www.all4ed.org/files/Nation_cs.pdf).
5. "The Facts on the Gap," The Achievement Gap Initiative at Harvard University, 2011 < <http://www.agi.harvard.edu/projects/thegap.php>>
6. Hernandez, Donald J., "Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation," The Annie E. Casey Foundation, Apr. 2011, 1 Oct. 2012. <http://www.aecf.org/~media/Pubs/Topics/Education/Other/DoubleJeopardyHowThirdGradeReadingSkillsandPoverty/DoubleJeopardyReport040511FINAL.pdf>.
7. Institute for Education Sciences, "Improving Adolescent Literacy: Effective Classroom and Intervention Practices (Washington, DC: Institute for Education Sciences, 2008). Accessed September 24, 2012, [http://ies.ed.gov/ncee/wwc/pdf/practice\\_guides/adlit\\_pg\\_082608.pdf](http://ies.ed.gov/ncee/wwc/pdf/practice_guides/adlit_pg_082608.pdf)
8. "Major Findings," UNC FPG Child Development Institute, September 2012, [http://projects.fpg.unc.edu/~abc/#major\\_findings](http://projects.fpg.unc.edu/~abc/#major_findings).
9. "Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement," July 2011, Justice Center, The Council of State Governments and the Public Policy Research Institute. <http://justicecenter.csg.org/resources/juveniles>
10. Jyoti DF; Frongillo EA; Jones SJ. "Food insecurity affects school children's academic performance, weight gain, and social skills." Dec. 2005. *The Journal of Nutrition*, 135 (12).