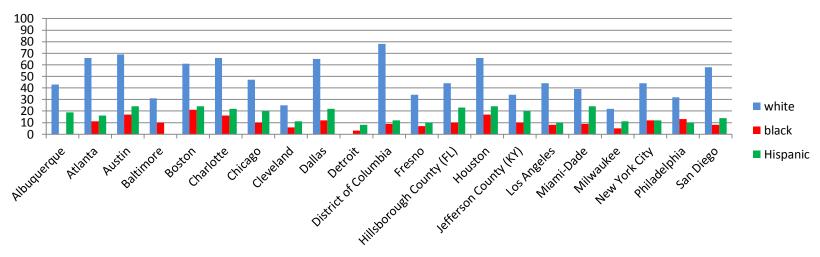
No More Excuses

Roland G. Fryer, Jr. Robert M. Beren Professor of Economics Harvard University EdLabs NBER



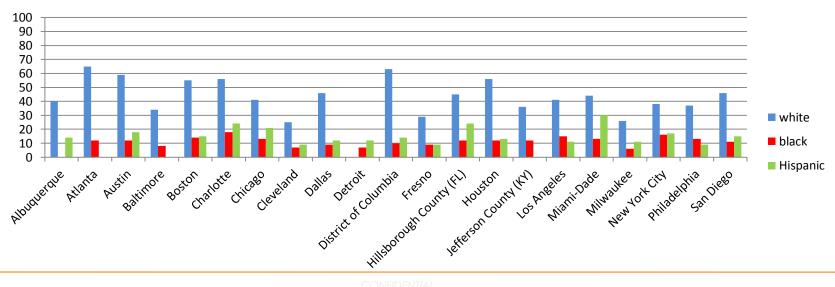


Among cities that participate in NAEP, the magnitude of racial differences in educational achievement is startling.



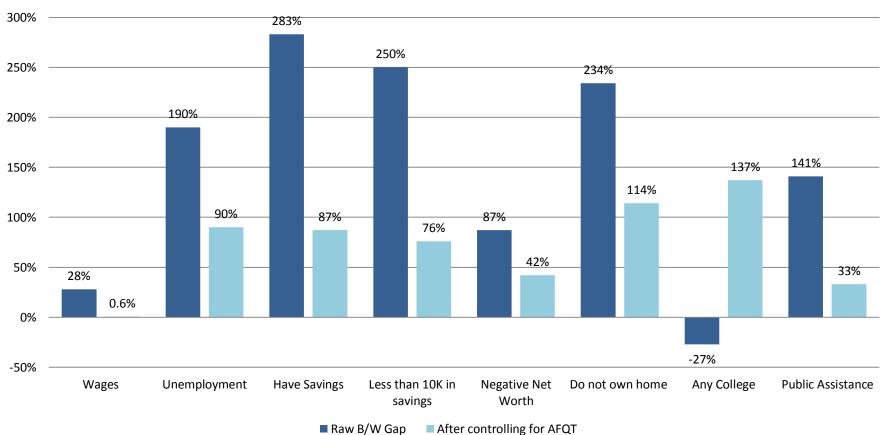
Percent Proficient, 8th Grade Math, NAEP 2011

Percent Proficient, 8th Grade Reading, NAEP 2011





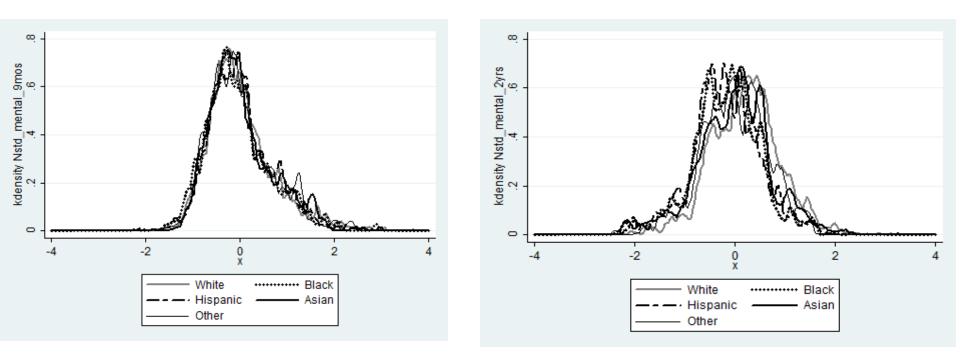
Accounting for **educational achievement** drastically reduces racial and socioeconomic inequality across a wide range of important life outcomes.



Black-White Differences in Economic Outcomes (NLSY79) Before and After Controlling for 8th Grade Test Scores

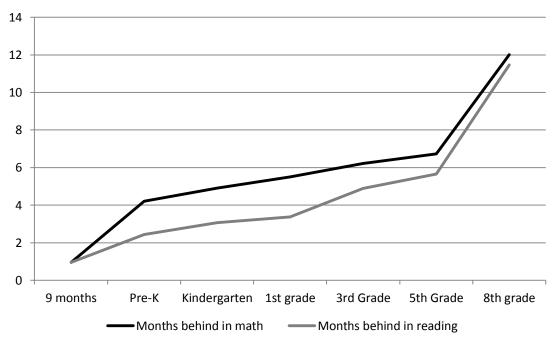


- Test Score Gap Does Not Exist at 9 months old
- The correlation between 9 month old scores and 12 year old scores is 0.3
- Black kids lose ground starting at age 2





- Black kids enter kindergarten 0.64 SD (or 8 months) behind their white peers
- The gap can be accounted for by 13 simple variables that proxy for Pre-K home environment
- The gap grows 0.1 SD per year from Kindergarten through eighth grade
- We don't really know why

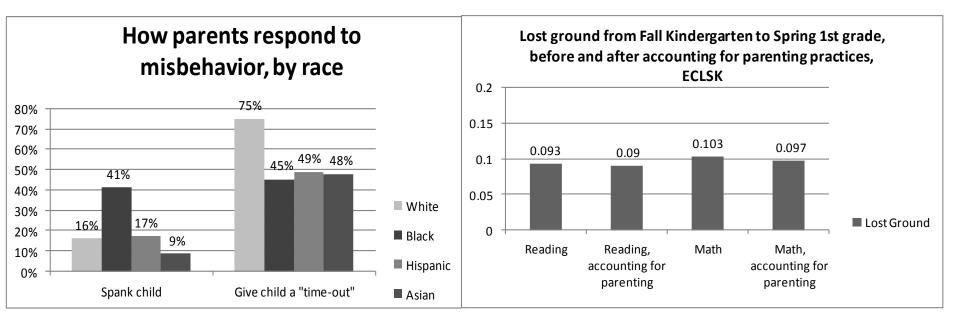


The Evolution of the Racial Achievement Gap through 8th grade

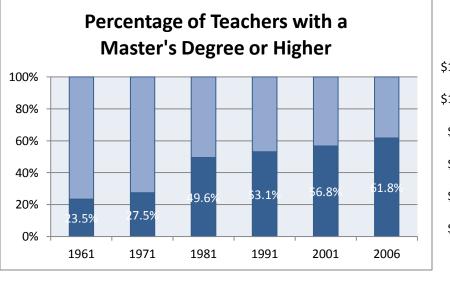


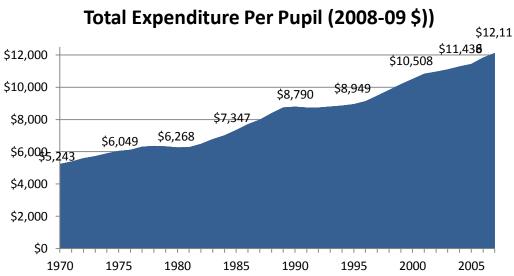
We tested dozens of hypotheses, including:

- Poor parenting
- Racist Teachers
- Summer Setback
- Flawed Standardized Tests
- School Quality

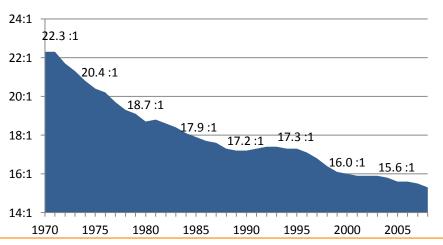


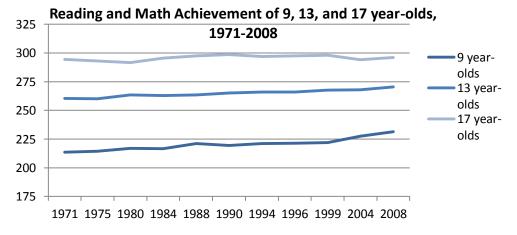






Student to Teacher Ratio





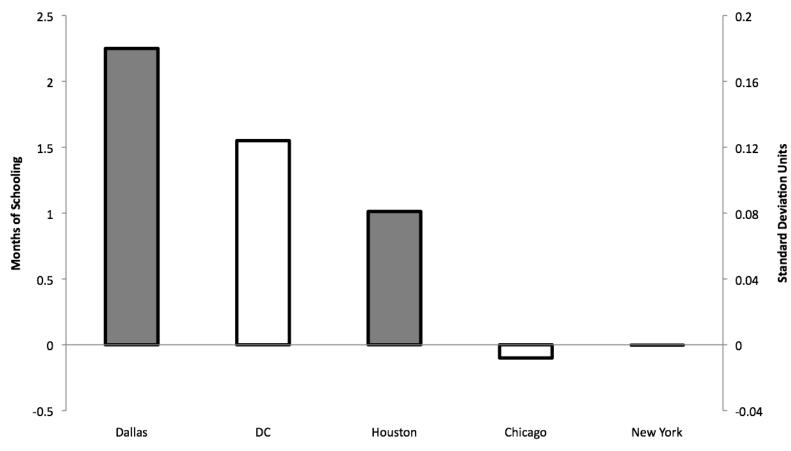
CONFIDENTIAL



Distributed a total of \$10 million to kids in 5 cities.

- A. Input Experiments
 - Dallas
 - Houston
 - Washington DC
- B. Output Experiments
 - New York City
 - Chicago
 - Teacher Incentives

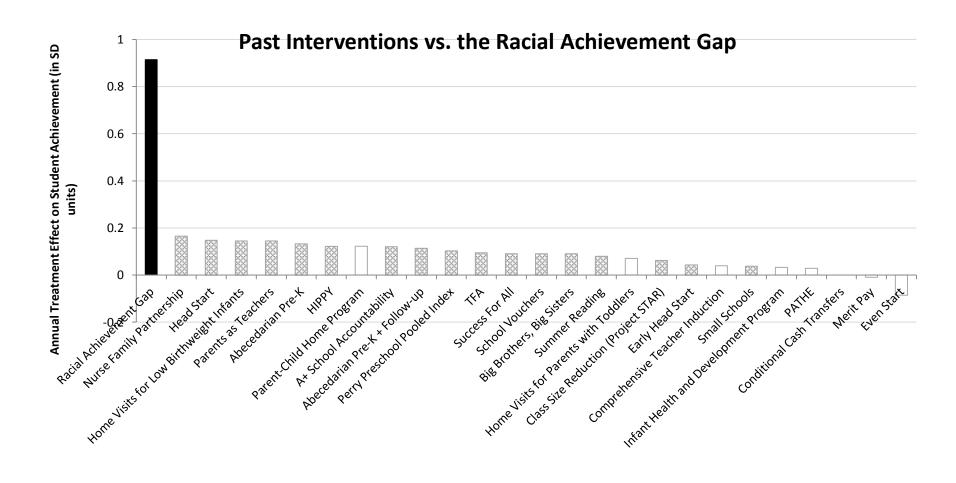




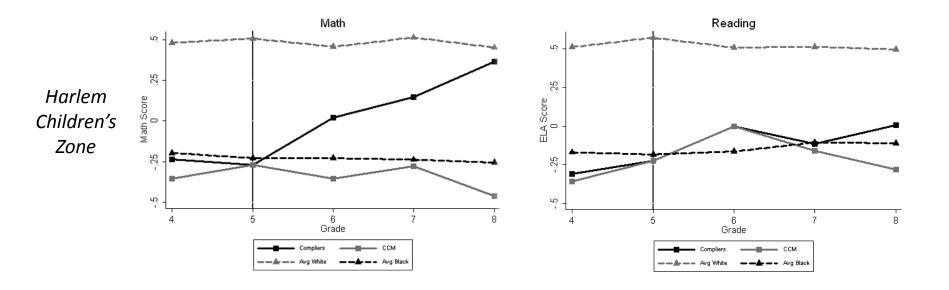
The Effect of Incentives on Student Achievement

Shaded boxes represent statisically significant results at p<0.05.

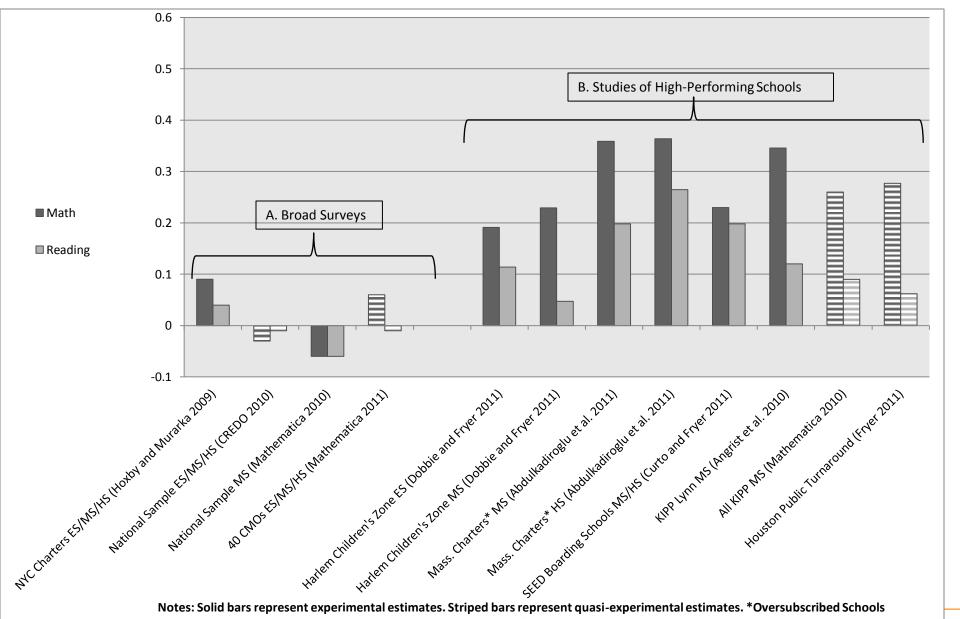






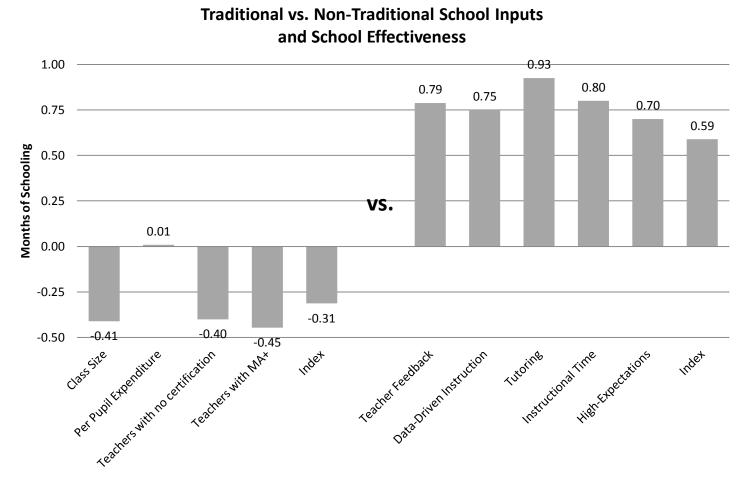






only.





Average Correlation with Reading and Math Effectiveness (in months of schooling)



The key goal is to translate charter schools' successful policies into common principles and then transplant them into traditional public schools. To this end, EdLabs initiated a multi-year study of NYC charters that determined that the following five policies and practices have the greatest correlation with student achievement:



More Time in School

• Extended day, week, and school years are all integral components of successful school models. In the case of Harlem Children's Zone's Promise Academy, students have nearly doubled the amount of time on task compared to students in NYC public schools.



Small Group Tutoring

• In top performing schools, classroom instruction is supplemented by individualized tutoring, both after school and during the regular school day.



Human Capital Management

• Successful charters reward teachers for performance and hold them accountable if they are not adding value.



Data Driven Instruction and Student Performance Management

• In the top charter schools, students are assessed frequently, and then, in small groups, re-taught the skills they have not yet mastered.



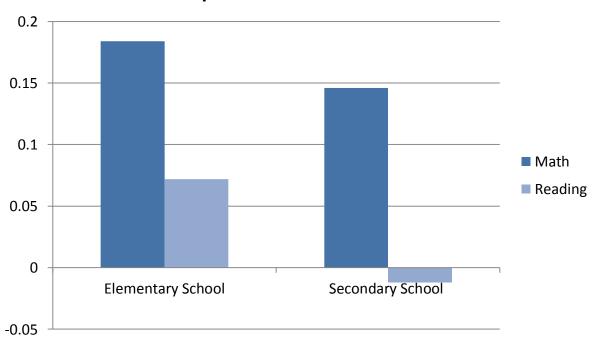
Culture and Expectations

• In successful schools, students buy into the school's mission and into the importance of their education in improving their lives.



In Math, we see positive and statistically significant results in elementary and secondary schools. The gains in grades that received high-dosage tutoring were dramatic.

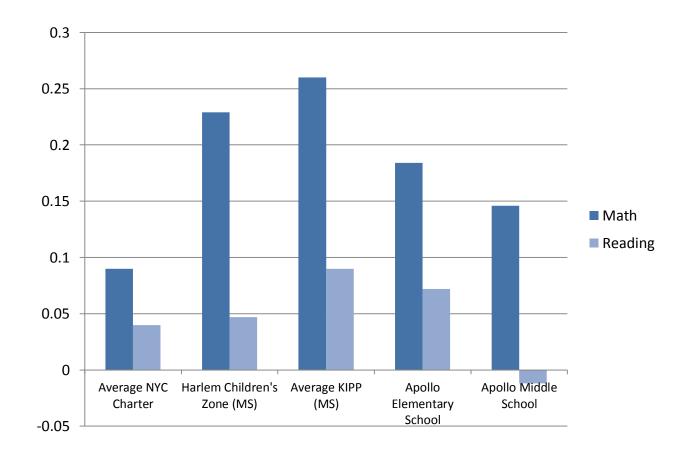
The reading results are mixed. Elementary schools have small positive and statistically significant results. Secondary school results are insignificant.



Apollo Treatment Effects



Pooling all grades together, the results are similar to those achieved by the Harlem Children's Zone Promise Academy Middle Skill and KIPP – two of the country's most recognized charter operators.

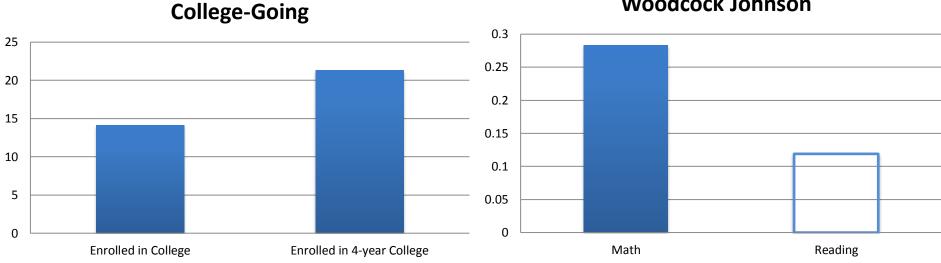




Using an estimate of the correlation between test scores and future earnings, we can calculate a rough rate of return for the first year of the Apollo experiment and compare it to other popular education interventions.

Initiative	Cost/Student	IRR
Apollo 20 Elementary	\$355	26.70%
Apollo 20 Secondary	\$1,837	13.42 %
"No Excuses" Charter School	\$2,496	18.50 %
Early Childhood Education	\$8,879	7.60 %
Reduced Class Size	\$3,501	6.20 %





Woodcock Johnson

Social Outcomes (Odds Ratios)

Health Outcomes

0.12 6 0.1 5 0.08 4 0.06 0.04 3 0.02 2 0 Mental Health Physical Health Index Nutrition Index 1 -0.02 -0.04 0 Pregnancy (Girls) Incarceration (Boys) -0.06



