



Lessons from NJ's Abbott Preschool

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What is NJ Abbott Preschool?

- Court-mandated in 31 high poverty districts
- Universal for 3- & 4-year-olds in those districts
- Part of systemic reform P-3
- High standards for learning, teaching, curriculum
- Fully qualified teachers (BA and ECE certification), public school salaries
- Maximum of 15 children per classroom; 2 staff
- Continuous improvement system & coaching
- 6-hour educational day, 180-days per year, with wraparound child care
- Adequate funding (~\$13,000/child)
- Mixed delivery system (> 50% in private providers)



Transformation of Quality in NJ File



■2000 **■**2005 **■**2008



Research Questions

What are the impacts of New Jersey's Abbott Preschool Program on literacy, math, and science test scores through 10th grade?

Do impacts differ for children who attended Abbott preschool for 1 vs. 2 years?



Who did we study?

- Kindergarten classrooms randomly selected from the 15 largest Abbott districts in 2005
- ~ Four children were randomly selected from each classroom
- Children/Classrooms were sampled in proportion to district size
- Initial n = 1038 at K-entry
 - 74% found at 6^{th} grade
 - 62% found at 10th grade



What did we find?

- Effect size declines after kindergarten but stabilizes after 3rd grade
- Average effects on language arts and literacy, math and science
 - .15 SD for 1 year
 - .30 SD for 2 years
- Two-year effects on achievement are the same size as for the Perry Preschool from ages 9 to 14
- Grade retention reduced by 15 percentage points, Special ed. perhaps 7 percentage points lower
- No difference in retention or special ed for 1 v. 2 years



Impacts on Language & Literacy





Impacts on Math



■ 1 year vs. 0 year ■ 2 years vs. 1 year



Impacts on Science





Impacts on Grade Retention and Special Education





Can we trust the results?

- Alternative methods and other checks on our methods indicate a lack of upward bias
- Rigorous statistical methods like ours are shown to produce similar results to randomized trials
- Our results replicate findings of other studies with similar programs and populations—Perry Preschool and Chicago CPC
- Independent analyses of public school pre-K effects found increased 4th grade NAEP scores for NJ



What lessons can we offer other programs

Public programs should more closely resemble model programs that produced persistent achievement gain

- Design programs to have the quality and duration needed
 - Strong teachers and leaders, small classes, strong curriculum
 - At least 2 years starting at age 3
- Set funding per child based on cost of the design

Invest in infrastructure

- A stable funding mechanism such as the school funding formula
- Continuous improvement systems and rigorous evaluation
- Integration with K-12
- Adequate state capacity to support programs and systemic change