New Research and the Pay-Off to Quality Early Care and Education

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Big Picture Research

• Early childhood experience becomes part of the child’s biology
  – Impacts school success
  – Impacts adult health and mental health
  – Impacts adult productivity

• Quality matters most at the “high end”

• The United States has relatively little good ECE

• Nevertheless there is growing evidence of large scale long-term impacts and economic returns
Quality and long-term test score gains (123 studies since 1960)
Overall Access is not increasing at Ages 3 & 4
Some Regions have much better Pre-K

- Northeast: 70.0%
- Midwest: 50.0%
- South: 60.0%
- West: 50.0%

**In Any Prek**

**In Quality Prek as % of Total**
National Head Start Impact Study to 3rd Grade

- One year of Head Start has modest positive impacts
- Lasting effects of Head Start are small
  - Some indications of effects at 3rd grade
  - Crossovers lead study to underestimate effects by about 50 percent
  - Control group attends other preschools adding to underestimation
  - Public schools help kids behind catch up, it’s not “fade out”

- Head Start needs to improve & has improved
  - Since National Study Head Start has raised quality and child gains
  - Most ambitious Head Start reforms in 50 years now underway
  - Sequestration is hurting Head Start improvement
  - Head Start teachers still paid about the same as dog walkers
New State Pre-K Studies

- 11 state study (CA, GA, IL, KY, MA, NJ, NY, OH, TX, WI, WA) moderate gains
- Tennessee RDD and RCT: substantial initial effects, subsample no effects at K/1 except reduced grade repetition—waiting on 3rd grade results
- Boston RDD: Gains in cognitive abilities, executive function and social skills
- Rhode Island Randomized Trial: Modest gains, larger for low income children
- Chicago: Half-day v. full-day, well implemented full-day has larger impacts
- Oklahoma: Initial gains in cognitive abilities, executive function, and social skills, few gains at grade 3 (1 of 2 waves on math) but problems with follow-up
- Long-term AR, GA, MI, NC, NJ, NY, and TX all have some positive gains
  - gains can be quite small, but even small gains have substantial economic value
- Michigan: less repetition, increased on time graduation at 12th grade
- New Jersey: less repetition and special education, higher test scores at 5th grade
NJ Example: Universal High Quality
In 31 High Poverty Districts

- High standards for learning and teaching
- Good teachers and small classes
- Continuous improvement system with coaching
- Adequate funding with public school salaries
- 6 hour educational day, 180-day program, plus extended day/full year wrap around
- Part of systemic reform P-3
- All 3 and 4 yr. olds in 31 school systems
- Public-private system with 60% private providers
NJ Raised Quality in Public and Private

ECERS-R Score (1=minimal, 3=poor 5= good 7=excellent)

- 00 Total (N = 232)
- 08 Total (N = 407)
Long-term Test Scores Increased Across the Board

- LAL 4th: .12
- LAL 5th: .18
- Math 4th: .17
- Math 5th: .14
- Science 4th: .17
- 1 year Abbott pre-k
- 2 year Abbott pre-k
Much Less Grade Repetition and Special Education

- Retention: 12% (Abbott pre-K), 19% (no Abbott pre-K)
- Special Education: 12% (Abbott pre-K), 17% (no Abbott pre-K)
Takeaway Lessons

1. Even small long-term gains have high value, but they require large initial impacts
2. Quality is the key to big, meaningful effects
3. We need to build the will for quality Birth to 8
Resources

• Early childhood programs and health: a review

• NJ 5th grade follow-up of universal pre-K
  http://nieer.org/publications/latest-research/abbott-preschool-program-longitudinal-effects-study-fifth-grade-follow

• State pre-K trends over the past decade

• Michigan pre-K evaluation through grade 12

• Tennessee randomized trial of pre-K
  http://peabody.vanderbilt.edu/research/pri/TN_VPK_Study_v.2_summary_and_context_August_2013.pdf
  http://peabody.vanderbilt.edu/research/pri/TN_VPK_Evaluation_Executive_Summary_August_2013.pdf