What Happens Next? How Post-Pre-K Pipelines Support or Suppress Early Benefits

Achievement, Poverty Isolation, & Funding

*Early Childhood Initiative Lecture*
*Duke University*
*September 26, 2018*
Walker Swain

Preliminary results; please contact author before citation: walker.swain@uga.edu
Agenda

1. Motivation/Context
   - Expanded public pre-K
   - “Fade out” Concerns

2. Prior Research on Post Pre-K Interactions
   - TN-VPK * Early Grade Teacher Quality
   - Head Start * School Finance Reforms

3. Data & Strategy (Pre-K, Poverty Isolation, Funding)

4. Results
   - Pre-K Access & Achievement Gaps
   - Post Pre-K Pipelines

5. Policy Implications
Early Childhood Education as Intergenerational Anti-Poverty Policy

Mom in Head Start (first center in DC)

Nephew in Office (reading Methods Matter)

See research by Chloe Gibbs (2017)
Pre-K Receiving Bi-Partisan Support

• “Before we can have a conversation around expanding this program, I believe we owe it to taxpayers and parents to focus first on how we can improve quality to ensure that any gains are sustainable.” Lee (TN-Republican)

• “We can’t just fund more access to pre-K; we have to focus on improving the quality of the programs statewide while also expanding access.” Dean (TN- Democrat)
Pre-K Receiving Bi-Partisan Support

• “Pre-K Works, So Why Not PA?... Candidates seeking public office must commit to getting Pennsylvania out of the bottom half of states and make it a top state for pre-k investments.”
  Gov. Rendell (PA- Democrat)

• “High-quality pre-kindergarten is not a luxury. It is an investment in Pennsylvania's economy,” said Schweiker. “An educated workforce is essential if Pennsylvania hopes to compete in the regional and global marketplace, and high-quality pre-K helps prepare our future workforce for success.”
  Gov. Schweiker (PA- Republican)
Some states nearing ‘universal coverage’
Pre-K expanding broadly in many states

Expanding Early Opportunity

2002 - 2017 % CHANGE IN STATE PRE-K ENROLLMENT OF 4-YEAR-OLDS

US Avg: 32.7%

- 51% - 80%
- 31% - 50%
- 21% - 30%
- 11% - 20%
- 1% - 10%
- Drop -1% - -5%
- No Program

NIEER State of Preschool 2017 - nieer.org
Funding varies substantially

Funding Early Opportunity

2016 - 2017 STATE PRESCHOOL SPENDING PER CHILD

US Avg: $5,008

- $10,000 & Up
- $7,000-9,999
- $6,000-6,999
- $4,000-5,999
- $3,000-3,999
- $2,999 & Below
- No Program

NIEER State of Preschool 2017
nieer.org
Fade-Out Concerns?


Recent work on state ECE investments has shown lasting benefits

• Through Middle School in Oklahoma for Tulsa Pre-K
  (Gormley et al, 2017)

• Through end of elementary in North Carolina!
  (Dodge, Bai, Ladd, Muschkin, 2017)

Much of the long term evidence from 2 model pre-K programs
Carolina Abecedarian’s Cognitive Effects Persist

(Duncan, SREE 2015)

Source: Campbell et al. (2001) and Campbell et al. (2002)
Perry’s Achievement Effects inconsistently significant

(Duncan, SREE 2015)

Source: Schweinhart et al., 2005; Effect sizes p<.05 are shaded
Tennessee Voluntary Pre-K: “Fades Fast”

- Experimental evaluation of TN program finds early benefits (Lipsey, Farran, & Durkin, 2017)
- Rapid decline in measured effects draws substantial attention.
TN-VPK & Early Grade Teacher Quality

• Swain, Springer, & Hofer 2015 found significant positive interaction between Pre-K participation and 1st Grade Teacher Quality
• Suggests effective teachers build on early benefits.
Follow-up shows little evidence of Sustaining environment and no significant interactions in subsequent years.

Exposure to Highly Effective Teachers (TE >= 4) Through Grade 3

Number of HE Teachers

- VPK
- No VPK
Dynamic Complementarities

- Head Start * School Finance
- Important work by Jackson & Johnson (2017) shows long term benefits of expanded Head Start & School Finance
- As well as an additive effect of the combination of the 2
Research Questions

1. Does school-based expanded pre-k enrollment improve performance on standardized tests in subsequent years?
   - Overall
   - Black
   - Hispanic

2. Do ECE effects differ based on systems-level post-pre-K policies of student sorting and school finance?
   - Poverty Isolation negative effects
   - Funding effects
Primary Hypotheses

• Expanded Pre-K access should improve early test scores, especially for Black and Hispanic students, who are more likely to have previously lacked access.

• Pre-K benefits strongest in high spending, integrated schools, where teacher expectations and resources are tied to the presence of “well prepared” higher income students, and build on early learning of Pre-K participants.

• Socioeconomic integration should reduce the likelihood of “fade out”/convergence.

• Role of overall spending should be conditional on level of integration.
Data

- I use data from the Stanford Education Data Archive (SEDA) measures of grade level (3-8) achievements (nationally-normed against the NAEP exam) in every district in the United States, from 2009-2015
- Merged with files with district CCD pre-K (and K) enrollment files from 2000-2011 to capture the levels of pre-k exposure for each of the 5 cohorts. 6-years*5-cohorts*14,372 districts (3,125 counties)
- Rich covariate data compiled by SEDA from census, finance archives, and district level data systems
Independent Variable: Pre-K Enrollment

State Pre-K Year Enrollment 2005 / 3rd grade Membership 2009

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Independent Variable: Pre-K Enrollment

State Pre-K Year Enrollment 2009 / 3rd grade Membership 2015

CCD Universe Enrollment Files
Outcome: Nationally-Normed Test Scores

3rd Grade Standardized Achievement (2009)

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Outcome: Nationally-Normed Test Scores

3rd Grade Standardized Achievement (2015)

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Post Pre-K: Poverty Exposure in School

Poverty Exposure (% FRL in Avg FRL Student's School) 2015

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Post Pre-K: Per Pupil Funding $

Avg. District Per Pupil Expend 2009

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Outcome: Nationally Normed Test Scores

3rd Grade Standardized Achievement (2009)

SEDA measure (Reardon, Kalogrides and Ho, 2017)
Post Pre-K: Poverty Exposure in School

NC Poverty Exposure (% FRL in Avg FRL Student's School) 2015

How about this County?

Guess this County!

SEDA measures (Reardon, Kalogrides and Ho, 2017)
## Sample- First Year of Outcome data (2009)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio Pre-k Enroll/grade enrolled</td>
<td>139,945</td>
<td>0.294</td>
<td>4.704</td>
</tr>
<tr>
<td>urban</td>
<td>139,939</td>
<td>0.060</td>
<td>0.237</td>
</tr>
<tr>
<td>suburb</td>
<td>139,939</td>
<td>0.214</td>
<td>0.410</td>
</tr>
<tr>
<td>rural</td>
<td>139,939</td>
<td>0.533</td>
<td>0.499</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>139,945</td>
<td>0.112</td>
<td>0.194</td>
</tr>
<tr>
<td>% Black</td>
<td>139,945</td>
<td>0.082</td>
<td>0.171</td>
</tr>
<tr>
<td>% FRL</td>
<td>139,945</td>
<td>0.343</td>
<td>0.204</td>
</tr>
<tr>
<td>% ELL</td>
<td>139,854</td>
<td>0.041</td>
<td>0.088</td>
</tr>
<tr>
<td>% Sped</td>
<td>138,778</td>
<td>0.134</td>
<td>0.080</td>
</tr>
<tr>
<td>member</td>
<td>139,945</td>
<td>2820.618</td>
<td>11136.610</td>
</tr>
<tr>
<td>Grade</td>
<td>139,945</td>
<td>299.742</td>
<td>1131.391</td>
</tr>
<tr>
<td>Pov exp. frl_frl</td>
<td>139,945</td>
<td>0.449</td>
<td>0.225</td>
</tr>
<tr>
<td>Exp Black_White</td>
<td>138,580</td>
<td>0.074</td>
<td>0.151</td>
</tr>
<tr>
<td>% in Charters</td>
<td>139,754</td>
<td>0.009</td>
<td>0.049</td>
</tr>
<tr>
<td>Student teacher Ratio</td>
<td>139,706</td>
<td>14.533</td>
<td>5.961</td>
</tr>
<tr>
<td># Schools</td>
<td>139,945</td>
<td>7.646</td>
<td>23.411</td>
</tr>
</tbody>
</table>
Analytic Strategy: (RQ1) Pre-K Effect

\[ Y_{dgy} = \beta_1 \text{PreKcoverage}_{dgy-(g+1)} + D_{dgy}\beta_2 + \omega_d + \tau_y + \gamma_g + \epsilon_{dgy} \]

- \( Y_{dgy} \): average subgroup standardized test score in the district \( d \) for grade \( g \) in year \( y \).
- \( \text{PreKcoverage}_{dgy-(g+1)} \): ratio of the pre-K enrollment total for the district \( d \) for the grade cohort \( g \) the year they would have been in eligible for pre-K
- \( D_{dgy} \): % Hispanic % Black % Free or reduced price lunch, % English Language Learner, % Special Education, Total Membership, Number of Schools, SES Integration Index, Racial Exposure Index, % Charter Schools, Student Teacher Ratio, Per Pupil Expenditures, % K enrollment
- \( \omega_d \): a district fixed effect
- \( \tau_y \): a year fixed effect
- \( \gamma_g \): a grade fixed effect
- \( \epsilon_{dgy} \): the idiosyncratic error term
Analytic Strategy: (RQ2) Funding Interaction

\[ Y_{dgy} = \beta_1 PreK \times PPE_d + \beta_2 PreK \]
\[ + D_{dgy} \beta_2 + \omega_d + \tau_y + \gamma_g + \epsilon_{dgy} \]

\( Y_{dgy} \): average subgroup standardized test score in the district \( d \) for grade \( g \) in year \( y \).

\( PreK \): ratio of the pre-K enrollment total for the district \( d \) for the grade cohort \( g \) the year they would have been in eligible for pre-K

\( PPE_d \): Mean Per Pupil Expenditures by LEA

\( D_{dgy} \): % Hispanic % Black % Free or reduced price lunch, % English Language Learner, % Special Education, Total Membership, Number of Schools, Poverty Exposure Index, Racial Exposure Index, % Charter Schools, Student Teacher Ratio, % K enrollment

\( \omega_d \) is a district fixed effect

\( \tau_y \) is a year fixed effect

\( \gamma_g \) is a grade fixed effect
Analytic Strategy: (RQ2): Poverty Exposure

\[ Y_{dgy} = \beta_1 PreK_{dgy} \times PovExposure_d + \beta_2 PreK + D_{dgy} \beta_2 + \omega_d + \tau_y + \gamma_g + \epsilon_{dgy} \]

- \( Y_{dgy} \): average subgroup standardized test score in the district \( d \) for grade \( g \) in year \( y \).
- \( PreK_{dgy} \): ratio of the pre-K enrollment total for the district \( d \) for the grade cohort \( g \) the year they would have been in eligible for pre-K.
- \( PovExposure_d \): Mean % FRL in average FRL student’s school by LEA
- \( PPE_d \): Mean Per Pupil Expenditures by LEA
- \( D_{dgy} \): % K enrollment % Hispanic % Black % Free or reduced price lunch, % English Language Learner, % Special Education, Total Membership, Number of Schools, Racial Exposure Index, % Charter Schools, Student Teacher Ratio, % K enrollment
- \( \omega_d \) is a district fixed effect
- \( \tau_y \) is a year fixed effect
- \( \gamma_g \) is a grade fixed effect
Analytic Strategy: (RQ2) 3-Way Interaction

\[ Y_{dgy} = \beta_1 PreK_{dgy} \times PP_{d} \times PovExpo_{d} + \beta_2 PreK \]
\[ + D_{dgy} \beta_2 + \omega_d + \tau_y + \gamma_g + \epsilon_{dgy} \]

\( Y_{dgy} \): average subgroup standardized test score in the district \( d \) for grade \( g \) in year \( y \).

\( PreK_{dgy} \): ratio of the pre-K enrollment total for the district \( d \) for the grade cohort \( g \) the year they would have been in eligible for pre-K

\( PovExpo_{dgy} \): % FRL in average FRL student’s school

\( D_{dgy} \): % K enrollment % Hispanic % Black % Free or reduced price lunch, % English Language Learner, % Special Education, Total Membership, Number of Schools, Racial Exposure Index, % Charter Schools, Student Teacher Ratio, % K enrollment

\( \omega_d \) is a district fixed effect

\( \tau_y \) is a year fixed effect

\( \gamma_g \) is a grade fixed effect
## Results: RQ 1 Pre-K Effects Math by Grade

### Math Test Score (All Students)

<table>
<thead>
<tr>
<th></th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
<th>grade 7</th>
<th>grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-K Expand</strong></td>
<td>0.096**</td>
<td>0.081**</td>
<td>0.074**</td>
<td>0.019</td>
<td>0.035*</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.015)</td>
<td>(0.016)</td>
<td>(0.012)</td>
<td>(0.015)</td>
<td>(0.016)</td>
</tr>
<tr>
<td><strong>R2</strong></td>
<td>0.81</td>
<td>0.82</td>
<td>0.83</td>
<td>0.84</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>59,246</td>
<td>59,307</td>
<td>59,487</td>
<td>59,021</td>
<td>52,266</td>
<td>51,992</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
<th>grade 7</th>
<th>grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-K Expand</strong></td>
<td>0.214**</td>
<td>0.039</td>
<td>0.046</td>
<td>0.033</td>
<td>0.066</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.041)</td>
<td>(0.045)</td>
<td>(0.027)</td>
<td>(0.045)</td>
<td>(0.047)</td>
</tr>
<tr>
<td><strong>R2</strong></td>
<td>0.72</td>
<td>0.73</td>
<td>0.74</td>
<td>0.76</td>
<td>0.76</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>13,449</td>
<td>13,529</td>
<td>13,641</td>
<td>13,619</td>
<td>11,725</td>
<td>11,718</td>
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</table>

### Math Test Score (Black Students)

### Math Test Score (Hispanic Students)
### Results: RQ 1 Pre-K Effects ELA by Grade

#### English Language Arts Test Score (All Students)

<table>
<thead>
<tr>
<th>Grade</th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
<th>grade 7</th>
<th>grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K Expand</td>
<td>0.059**</td>
<td>0.051**</td>
<td>0.038**</td>
<td>0.024*</td>
<td>0.006</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.013)</td>
<td>(0.013)</td>
<td>(0.011)</td>
<td>(0.013)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>R2</td>
<td>0.82</td>
<td>0.84</td>
<td>0.84</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>N</td>
<td>59,476</td>
<td>59,676</td>
<td>59,898</td>
<td>59,369</td>
<td>58,327</td>
<td>58,363</td>
</tr>
</tbody>
</table>

#### English Language Arts Test Score (Black Students)

<table>
<thead>
<tr>
<th>Grade</th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
<th>grade 7</th>
<th>grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K Expand</td>
<td>0.127**</td>
<td>0.038</td>
<td>0.067+</td>
<td>0.005</td>
<td>-0.000</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.037)</td>
<td>(0.040)</td>
<td>(0.025)</td>
<td>(0.039)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>R2</td>
<td>0.74</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.76</td>
<td>0.76</td>
</tr>
<tr>
<td>N</td>
<td>13,573</td>
<td>13,668</td>
<td>13,784</td>
<td>13,743</td>
<td>13,775</td>
<td>13,756</td>
</tr>
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#### English Language Arts Test Score (Hispanic Students)

<table>
<thead>
<tr>
<th>Grade</th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
<th>grade 7</th>
<th>grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K Expand</td>
<td>0.051</td>
<td>0.085+</td>
<td>-0.019</td>
<td>0.033</td>
<td>0.136**</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.045)</td>
<td>(0.043)</td>
<td>(0.029)</td>
<td>(0.047)</td>
<td>(0.050)</td>
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<tr>
<td>R2</td>
<td>0.78</td>
<td>0.79</td>
<td>0.79</td>
<td>0.78</td>
<td>0.78</td>
<td>0.77</td>
</tr>
<tr>
<td>N</td>
<td>16,736</td>
<td>16,554</td>
<td>16,392</td>
<td>15,998</td>
<td>15,585</td>
<td>15,311</td>
</tr>
</tbody>
</table>

+ p<0.1; * p<0.05; ** p<0.01
## Results (RQ 2) All Students, All Grades

<table>
<thead>
<tr>
<th></th>
<th>ELA</th>
<th>Math</th>
<th>ELA</th>
<th>Math</th>
<th>ELA</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-K</strong></td>
<td>0.038**</td>
<td>0.066**</td>
<td>0.010**</td>
<td>0.005</td>
<td>0.038**</td>
<td>0.062**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td><strong>Pre-K</strong>*PPE</td>
<td>-0.066**</td>
<td>-0.071**</td>
<td></td>
<td></td>
<td>-0.064**</td>
<td>-0.064**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
<td></td>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td><strong>Pre-K</strong>*Pov_Isolation</td>
<td></td>
<td></td>
<td>0.013**</td>
<td>0.006</td>
<td>0.021**</td>
<td>0.042**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td><strong>Pre-K</strong> * PPE*Pov_Isolation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.013*</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.101**</td>
<td>0.135**</td>
<td>0.106**</td>
<td>0.137**</td>
<td>0.101**</td>
<td>0.134**</td>
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<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>R2</strong></td>
<td>0.76</td>
<td>0.72</td>
<td>0.77</td>
<td>0.72</td>
<td>0.76</td>
<td>0.72</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>403,630</td>
<td>386,575</td>
<td>405,725</td>
<td>388,283</td>
<td>403,630</td>
<td>386,575</td>
</tr>
</tbody>
</table>

*Very Preliminary*
# Results (RQ 2) PPE Interaction & Fade Out

<table>
<thead>
<tr>
<th></th>
<th>All Students</th>
<th></th>
<th>Black Students</th>
<th></th>
<th>Hispanic Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ELA</td>
<td>Math</td>
<td>ELA</td>
<td>Math</td>
<td>ELA</td>
<td>Math</td>
</tr>
<tr>
<td>Pre-K</td>
<td>0.120**</td>
<td>0.170**</td>
<td>0.133**</td>
<td>0.086**</td>
<td>0.107**</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.011)</td>
<td>(0.023)</td>
<td>(0.027)</td>
<td>(0.023)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>Pre-K*PPE</td>
<td>-0.089**</td>
<td>-0.114**</td>
<td>-0.028</td>
<td>-0.057*</td>
<td>-0.100**</td>
<td>-0.049+</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.012)</td>
<td>(0.023)</td>
<td>(0.027)</td>
<td>(0.022)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Pre-K*Grade</td>
<td>-0.016**</td>
<td>-0.020**</td>
<td>-0.016**</td>
<td>0.006</td>
<td>-0.016**</td>
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<tr>
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<td>(0.002)</td>
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<tr>
<td>PPE*Grade</td>
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<td>0.006**</td>
<td>-0.000</td>
<td>-0.000</td>
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<tr>
<td>R2</td>
<td>0.77</td>
<td>0.72</td>
<td>0.65</td>
<td>0.61</td>
<td>0.68</td>
<td>0.62</td>
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<tr>
<td>N</td>
<td>403,630</td>
<td>386,575</td>
<td>93,575</td>
<td>88,147</td>
<td>111,587</td>
<td>102,791</td>
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</table>

R2: 0.77, 0.72, 0.65, 0.61, 0.68, 0.62
N: 403,630, 386,575, 93,575, 88,147, 111,587, 102,791

+ p<0.1; * p<0.05; ** p<0.01

Very Preliminary
Summary of Findings

1. Expanded pre-K enrollment increases early test score performance, with differences in magnitude and persistence by race/ethnicity.
2. Consistent with prior research, effects shrink over time, sometimes resurfacing in later grades.
3. Effects are larger in districts where k-12 schools are less well funded, and where schools are less economically segregated.
Limitations & Next Steps

- IV for State Level Pre-K expansion
- Add Head Start and other Programs that may substitute or supplement state pre-k
- Robustness to alternative instruments (e.g. pre-K spending)
- Differences by Urban/Rural settings
- Interaction with high growth school district
- Exploit timing of exposure to changing post-pre-K environments
Policy & Research Implications

• Many researchers and advocates and policymakers in the room already on it!
• Dynamic Complementarities vs. Dynamic Cascade
• Integration vs. Segregation/Isolation
• Comprehensive finance reforms
Notes on “Fade Out”

• Pre-k neither silver bullet, nor metaphorical bulletproof vest
• Long-term benefits vs. Consistently Measurable benefits
• A bar too high or a poorly conceptualized bar?
• Don’t obsess on “Fade Out”
• Don’t forget Childhood Goods!
• “Better to build strong children than repair broken men?”
Notes on Policy/Program Evaluation

• Limitations of partial equilibrium or “ceteris paribus” evaluations
• Vital interactions of policy systems
• Dynamic complementarities and sustaining environments
Closing Thoughts

While it makes intuitive sense for evaluations of early childhood investments to focus on the goal of lasting measurable benefits, a focus on “fade-out” or convergence of performance, neglecting policy-sensitive subsequent experiences merits scrutiny. Just as those interested in educational equity in the k-12 system have increasingly looked beyond the school walls to find solutions to vexing "achievement gaps," this talk suggests early childhood researchers look beyond design and implementation of preschool or head start programs into developing sustaining supportive environments for the children they serve.
Thanks.
Thoughts?
Questions?