The Elements of Effective PreK

How are we doing across the states at implementing effective pre-k?

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Academic Abilities at K Entry by Family Income in the US

Academic Ability Scores

60.0
55.0
50.0
45.0
40.0

Bottom 20%  2nd Lowest 20%  Middle 20%  2nd Highest 20%  Top 20%

Family Income

School Readiness Gap

Reading
Math
General Knowledge
“Optimal Development”
Good Preschool is least available to families with the least education, but no one has much.
Enrollment in public ECE: 4-year-olds

50 States & DC

State-Funded Preschool
Preschool Special Education
Head Start

44%
Half Century After Perry Preschool: Pre-K Impacts at Scale are...

- Small on average
- Highly variable
- Sometimes near zero or negative in follow-up
- Most discouraging examples:
  - Head Start and EHS no lasting impacts in RCT
  - TN RCT of state pre-K effects turn negative
  - Quebec universal child care negative effects
Cognitive Gains from Pre-K Programs for Low-income Children in the US by Rigor of Research Design

![Graph showing cognitive gains from Pre-K programs by age at follow-up and design rigor.](image-url)
1st – 8th Grade Effect Sizes in Studies of State-Funded Pre-K Since 1995
What Explains Mixed Results?

- Program design failure: Must replicate all of the components of the best programs
- Implementation failure: Need to plan, analyze, and coach for fidelity and continuous improvement
- Research study design failure - imprecise or no measurement of:
  - Components of the prek program – context, structural & process features
  - Counter-factual – what are the control children experiencing?
  - K-3 experiences
    - Catch up – time and resources dedicated to lowest functioning children
    - Peer effects– critical mass of prek attendees, concentration of poverty
    - Continuity (DLL, inclusion, coherent curriculum, teaching and assessment)
Key Lessons for Program Design

• Initial gains must be large & meaningful
• Structural features (resources) are necessary, but not sufficient
• Program standards should encompass coherent program practices
• Cost should be determined based on design not designed to fit an arbitrary budget figure
• Broader policies and practices before, after, and around preschool interact
A Few Dilemma’s Leaders Face

- Targeted vs Universal
- Access vs Quality (also child care vs education)
- Child Focused vs Two-Generation Focused
- Rigorous Policies vs Local Control
- Reflective Practice vs Structured Teacher Evaluation
- Current Workforce vs Fully Qualified Workforce
- Full day vs Half Day
- One Year vs Two Years
New Jersey’s Urban Prek Transformation

- Teacher with BA with certification + assistant
- Full school day
- All 3 and 4 yr. olds in 31 school systems
- Class size of 15
- Evidence-based curriculum with fidelity
- Early learning standards and program guidelines
- Support for potential learning difficulties
- Professional development for teachers & leaders (scholarships to get qualified)
- Data-based decisions at every level from child to state
NJ UPK Effects on Achievement Grades 4 & 5

Retention & Special Education Effects at Grade 5

Transformation of Quality in NJ (ECERS-R)

Rigorous Policies
Increased Quality
Lasting Benefits
Alabama First Class Pre-K Framework

Student Achievement

- Professional Development
- Alabama Development Standards
- Alabama Reflective Coaching Model
- First Class Classroom Guidelines
- Screening Referrals and Support Services
- First Class Program Guidelines & Quality Assurances
- Program Monitors
- Observation Research Based Assessment
- Credentialed Lead and Auxiliary Teachers
- Support for Intentionally Designed Learning Environments

Family Engagement

Student Achievement

Professional Development

Alabama Development Standards

Alabama Reflective Coaching Model

First Class Classroom Guidelines

Screening Referrals and Support Services

First Class Program Guidelines & Quality Assurances

Program Monitors

Observation Research Based Assessment

Credentialed Lead and Auxiliary Teachers

Support for Intentionally Designed Learning Environments

Family Engagement
Quality of Teacher-Child Interactions in First Class Pre-K Classrooms, 2018

CLASS (Classroom Assessment Scoring System)

<table>
<thead>
<tr>
<th></th>
<th>Social Emotional Support</th>
<th>Classroom Organization</th>
<th>Instructional Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alabama</strong></td>
<td>6.27</td>
<td>5.63</td>
<td>3.21</td>
</tr>
<tr>
<td><strong>National</strong></td>
<td>6.27</td>
<td>5.74</td>
<td>3.00</td>
</tr>
</tbody>
</table>
Impact for Low-Income Students: Reading & Math 3^{rd} & 6^{th} Grades

Statewide analysis among Alabama’s most vulnerable 3^{rd} and 6^{th} grade children shows that children who received First Class Pre-K were more likely to be proficient in reading and math compared with children who did not receive First Class Pre-K.

### 3^{rd} Grade

- **Reading**: 26.5% proficiency
- **Math**: 23.5% proficiency

### 6^{th} Grade

- **Reading**: 49.7% proficiency
- **Math**: 43.5% proficiency

26.5% 49.7% 23.5% 43.5% 29.1% 40.6% 26.6% 37.2%
Impact: Grade Retention for Low Income Students

Children who received First Class Pre-K are **less likely to be retained in grade** than children who did not attend. These differences mean that **6,503** fewer students could have been retained if all low income children in these grades had received FCPK.

Reducing retention = Fewer “extra years” → cost savings

Estimated potential cost savings of **$59,165,276** for these 4 groups.
Attendance for Low Income Students

Alabama First Class Pre-K children consistently over time and across grades miss fewer days of school. Low income children who received First Class Pre-K are less likely to be chronically absent.

Percentage of Low Income Children who were Chronically Absent by Grade, 2015-2016 school year

<table>
<thead>
<tr>
<th>Grade</th>
<th>FCPK</th>
<th>No-FCPK</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>8.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td>4th</td>
<td>7.3%</td>
<td>8.9%</td>
</tr>
<tr>
<td>5th</td>
<td>6.8%</td>
<td>8.9%</td>
</tr>
<tr>
<td>6th</td>
<td>7.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>7th</td>
<td>7.3%</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

These differences result in an estimated $5,403,655 in cumulative “lost cost” avoided.

Chronically absent students missed 18 or more days per year.
The Leaders’ Balancing Act

- Targeted Universalism
- Access with Quality
- Child Focused with Tiered Support for Families Two
- Rigorous Policies with Local Control of Implementation and Improvement
- Reflective Practice Using Structured Classroom Data
- Current Workforce Developed into Qualified Workforce
- Full day
- Two Years
A Peek Inside the Yearbook

Funded by the Heising-Simons Foundation
Survey Methodology

- Annual survey of state-funded preschool programs serving 3- and/or 4-year-olds
- Data from the 2017-2018 school year on the following topics:
  - Access
  - Resources
  - Quality Standards Benchmarks
  - Policies to support the Preschool Workforce
  - Other policies
- 62 programs in 44 states, D.C., and Guam
  - 6 “no program” states: Information on Head Start and Preschool Special Education provided
  - Montana and North Dakota are included for the first time
  - Indiana no longer met the definition of a state-funded preschool program used in the report because child eligibility is now tied to parent work
Change over time

PERCENT OF STATE POPULATION ENROLLED

<table>
<thead>
<tr>
<th>Year</th>
<th>3-year-olds</th>
<th>4-year-olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>3%</td>
<td>14%</td>
</tr>
<tr>
<td>2005</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>2008</td>
<td>4%</td>
<td>24%</td>
</tr>
<tr>
<td>2011</td>
<td>4%</td>
<td>28%</td>
</tr>
<tr>
<td>2014</td>
<td>4%</td>
<td>30%</td>
</tr>
<tr>
<td>2017</td>
<td>5%</td>
<td>33%</td>
</tr>
<tr>
<td>2018</td>
<td>6%</td>
<td>33%</td>
</tr>
</tbody>
</table>

AVERAGE STATE SPENDING PER CHILD ENROLLED (2018 DOLLARS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$5,600</td>
</tr>
<tr>
<td>2005</td>
<td>$5,149</td>
</tr>
<tr>
<td>2008</td>
<td>$5,030</td>
</tr>
<tr>
<td>2011</td>
<td>$4,887</td>
</tr>
<tr>
<td>2014</td>
<td>$4,214</td>
</tr>
<tr>
<td>2017</td>
<td>$5,183</td>
</tr>
<tr>
<td>2018</td>
<td>$5,170</td>
</tr>
</tbody>
</table>
2018 Enrollment Overview

- Enrollment nearly 1.6 million children
  - 1.3 million 4-year-olds
  - 1/3 of all 4-year-olds in the country
  - 5.7% of 3-year-olds
- Enrollment increased but only very slightly
- 10 states served more than 50% of 4-year-olds
  - 4 of these states served more than 70% of 4-year-olds
- Only DC and VT served more than 50% of 3-year-olds
Disparities in % of 4-year-olds enrolled in state-funded pre-K
2018 Spending Overview

- Total state pre-K spending exceeded $8.1 billion
  - Inflation-adjusted increase of $284 million (3.6%)
  - 1.5 times the size of the prior year increase
  - 8 states reported an increase in total state spending of more than $10 million
- State $/child = $5,174
  - Inflation-adjusted decrease of $9
  - 16 states increased spending per child
- “All reported” spending topped $9.36 billion
  - Includes state, federal, and local dollars
State Spending per Child Varies
<table>
<thead>
<tr>
<th>Policy Benchmark</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning goals</td>
<td>Comprehensive early learning and development standards to guide teaching and assessment</td>
</tr>
<tr>
<td>Curriculum supports</td>
<td>Guidance for choosing and using content-rich curriculum</td>
</tr>
<tr>
<td>Teacher education level</td>
<td>Lead teachers required to have a bachelor’s degree</td>
</tr>
<tr>
<td>Teacher specialized training</td>
<td>Lead teacher has specialized training for teaching Pre-K</td>
</tr>
<tr>
<td>Assistant teacher education</td>
<td>Assistant teacher has a formalized entry-level credential</td>
</tr>
<tr>
<td>Policy Benchmark</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Professional development</td>
<td>Ongoing training for teachers and assistant teachers</td>
</tr>
<tr>
<td>Maximum class size</td>
<td>Maximum number of children per classroom is 20</td>
</tr>
<tr>
<td>Teacher-child ratio</td>
<td>Ratio of teachers to children is 1:10 or better</td>
</tr>
<tr>
<td>Health screening and referral</td>
<td>Screenings for vision, hearing, health, and development concerns, along with referrals to needed services</td>
</tr>
<tr>
<td>Continuous quality improvement system</td>
<td>System to assess program quality used to guide improvement</td>
</tr>
</tbody>
</table>
2018 Quality Standards Benchmarks Overview

- AL, MI, RI met all 10 new quality standards benchmarks
- 12 programs met fewer than half
  - Includes states serving large numbers of children in poverty
- Professional Development benchmark is the most difficult to meet: Only 9 programs met it
New Early Learning & Development Standards

• Met by 57 programs
• Strengthened in 3 ways beyond comprehensive
  • Aligned
    • Vertically with state standards for older and younger ages
    • Horizontally with child assessments (if required)
• Supported:
  • Professional Development on the ELDS, or
  • Resources available to support implementation
• Culturally sensitive content/support for DLLs
Curriculum Supports

• Entirely New
• Met by 55 programs
• Requirements of the Curriculum Supports benchmark
  • The State supports curriculum selection, examples:
    • Guidance on how to select an evidenced-based curricula
    • A list of approved or recommended curricula
    • Requires adoption of specific curricula
    • Requires alignment of curricula with ELDS
  • The State supports curriculum implementation, examples:
    • Provides or sponsors PD/training on implementation
    • Offers TA on curriculum implementation
    • Funding for curriculum implementation, PD/training
Staff Professional Development

• Met by only 9 programs
• To meet the new PD benchmark:
  • At least 15 hours/year of PD for LEAD and ASSISTANT teachers
  • Written individual annual PD plans for LEAD and ASSISTANT teachers
  • Includes PD that is teacher/classroom specific (such as classroom-embedded support, coaching)
Continuous Quality Improvement System (CQIS)

- 35 programs met the CQIS standard in 2018
- CQIS requirements include:
  - Systematic approach to classroom observations
    - Could include random samples, focus on low performing classrooms
    - At least every 3 years
  - Data are used at both the state and local levels for program improvement
7 states meet all 4 process-quality focused benchmarks

* These multi-program states have programs with different quality standards. Data displayed on the map reflect quality standards benchmarks in the largest program in the state.
If we get these components right:

- Pre-service Preparation
- In-situ Professional Learning
- Comparable Compensation
- Supportive Working Conditions

It enables:

- Improved Recruitment
- Positive Teaching Environment
- Ongoing Professional Growth
- Continuous Improvement
- Increased Retention

Which lead to:

- Beneficial outcomes for children that last
Only 4 states require salary parity

- 28 states require at least a BA
- 25 states require a BA + certification
- 4 states require a BA + certification + salary parity (NJ, OK, HI, RI)
Low wages for pre-K teachers

PRE-K TEACHER SALARY GAPS WITH K–3

- Private provider pre-K
  - Average salary: $10,273

- Public school pre-K
  - Average salary: $7,456

- Public school K–3
  - Average salary: $17,729
Two worlds of State Pre-K

Fewer supports for state pre-K teachers in private providers than in public schools
What Can Elected Officials Do?

1. Pre-K as a remedy is like penicillin – it does no good if the “dosage” (quality, duration) isn’t administered as prescribed.
2. Get educated about the factors that make Pre-K effective. ✅
3. Calculate the full cost of preschool program quality.
4. Ask if the QRIS (if your state has one) is designed to be an on-ramp for programs to meet Pre-K standards.
5. Ensure that the state agency that administers Pre-K has capacity to provide both oversight and support for improvement (set aside of 2% at minimum).