

Untangling the Evidence on Preschool Effectiveness, A Preview



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Linda Darling-Hammond

President

Learning Policy Institute

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Agenda

- **Welcome & Introduction**

Linda Darling-Hammond, *President*, Learning Policy Institute

- **Research Presentation**

Beth Meloy, *Senior Researcher and Policy Analyst*, Learning Policy Institute

Marjorie Wechsler, *Principal Research Manager*, Learning Policy Institute

- **Discussion**

Madelyn Gardner, *Research and Policy Associate*, Learning Policy Institute

Beth Meloy, *Senior Researcher and Policy Analyst*, Learning Policy Institute

Marjorie Wechsler, *Principal Research Manager*, Learning Policy Institute

- **Question & Answer**



Great Expectations

Preschool programs of the '60s and '70s

The Child Parent Centers

Chicago, IL

The Perry Preschool Program

Ypsilanti, MI

The Abecedarian Project

Raleigh/Durham, NC

Delivered benefits in the short term...

- Improved cognitive development
- More prepared for school
- Less likely to be placed in special education and retained in grade

...and improved outcomes into adulthood

- More likely to graduate high school and attend college
- Less likely to become teen parents
- Less likely to commit crimes
- Less likely to depend on welfare as adults
- Higher earnings in adulthood

These benefits pay off

Return on every dollar spent

\$2  **\$17**

**Even a \$1 return means the program
pays for itself**



The Public Preschool Boom

State investments skyrocketed

By 2017

- **43 states** provided preschool
- States invested **\$7.6 billion**
- More than **1.5 million** children enrolled

Many evaluations of new efforts create a more complex research landscape.

Presenter



Beth Meloy

Senior Researcher and Policy Analyst

Learning Policy Institute

@BethMeloy

bmeloy@learningpolicyinstitute.org



Our Review

Evaluations included in our review

At School Entry:

Arkansas Better Chance Program

Husted, Barnett, Jung, & Thomas (2007)

Boston Public Schools K1

Weiland & Yoshikawa (2013)

California Transitional Kindergarten

Manship, Holod, Quick, Ogut, Brodziak de los Reyes, et al. (2017)

Connecticut School Readiness Program

The Connecticut Academy of Science and Engineering (2016)

Georgia's Pre-K Program

Peisner-Feinberg, Schaaf, LaForett, Hildebrant, & Sideris (2014)

Head Start

U.S. Department of Health and Human Services (2010)

Michigan Great Start Readiness Program

Wong, Cook, Barnett, & Jung (2008)

New Jersey Abbott Preschool Program

Frede, Jung, Barnett, Lamy, & Figueras (2007)

New Mexico Pre-K

Hustedt, Barnett, Jung, & Friedman (2010)

North Carolina Pre-K

Peisner-Feinberg & Schaaf (2011)

Oklahoma 4-Year-Old Program

Wong, Cook, Barnett, & Jung (2008)

San Francisco Preschool for All

Applied Survey Research (2013)

South Carolina 4K and First Steps to Success

Wong, Cook, Barnett, & Jung (2008)

Tennessee Voluntary Pre-K

Lipsey, Farran, & Durkin (2018)

Tulsa ECE Programs: CAP Tulsa Head Start

Gormley, Phillips, & Gayer (2008)

Tulsa ECE Programs: Universal Pre-K

Gormley, Phillips, & Gayer (2008)

Virginia Preschool Initiative

Huang (2017)

West Virginia Pre-K

Wong, Cook, Barnett, & Jung (2008)

Evaluations included in our review

Throughout School:

Arkansas Better Chance Program

Jung, Barnett, Husted, & Francis (2013)

California Transitional Kindergarten

Manship, Holod, Quick, Ogut, Brodziak de los Reyes, et al. (2017)

Florida Pre-Kindergarten Early Intervention

Figlio & Roth (2009)

Florida Voluntary Pre-K

Miller & Bassok (in press)

Georgia's Pre-K Program

Cascio & Schanzenbach (2013)

Head Start

U.S. Department of Health and Human Services (2012)

Deming (2009)

New Jersey Abbott Preschool Program

Barnett, Jung, Youn, & Frede (2013)

North Carolina Pre-K

Peisner-Feinberg, Mokrova, & Anderson (2017);
Dodge, Bai, Ladd, & Muschkin (2016)

Oklahoma 4-Year-Old Program

Cascio & Schanzenbach (2013); Smith (2016)

Tennessee Voluntary Pre-K

Lipsey, Farran, & Durkin (2018)

Tulsa ECE Programs: CAP Tulsa Head Start

Phillips, Gormley, & Anderson (2016)

Tulsa ECE Programs: Universal Pre-K

Hill, Gormley, & Adelstein (2015); Gormley, Phillips, & Anderson (2017)

Virginia Preschool Initiative

Virginia University Research Consortium on Early Childhood (2015)

Washington ECEAP

Bania, Kay, Aos, & Pennucci (2014)



Findings

Early benefits are clear

Most studies examined children's early literacy and mathematics outcomes and found benefits.

- **17 out of 18** found clear benefits for children's **early literacy.**
- **14 out of 16** found clear benefits for children's **early mathematics skills.**

Early benefits are clear

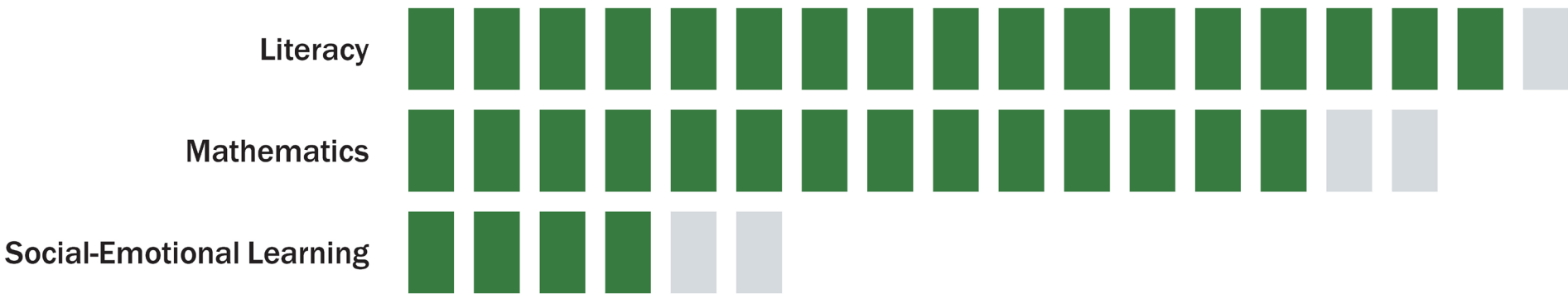
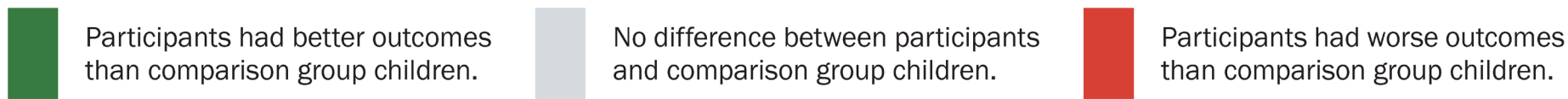
Fewer studies examined children's social-emotional skills and executive function.

- **4 out of 6** found benefits for at least one measure.

Preschool prepares children for school

Impacts of Preschool at School Entry

Each box represents a separate evaluation of a preschool program.



Note: Evaluations usually include many measures of child outcomes across different domains. Additional domains not included here are described in the full report.

School progress benefits often last

Several studies examined special education placements and grade retention throughout school.

- **4 out of 7** found **reductions in special education placements** in elementary school.
- **6 out of 10** found a **reduction in grade retentions.**

Early learning experiences of comparison children can make a difference.

These benefits pay off

- School districts spend an average of **\$13,119** per child per grade.
- Costs **double** whenever a student is retained.
- Retaining a child increases the likelihood of future retentions, **compounding costs**.
- Providing special education services can cost **more than twice** that of general education.

Academic benefits can persist

Most studies examined children's literacy and mathematics outcomes throughout school.

- **About half** of the studies found significant benefits for children's **reading performance**—up to 5th grade.
- **10 out of 13** studies found significant benefits for children's **mathematics performance** throughout school.

Study methods can make a difference.

Preschool *can* have lasting impacts

Impacts of Preschool Throughout School

Each box represents a separate evaluation of a preschool program.



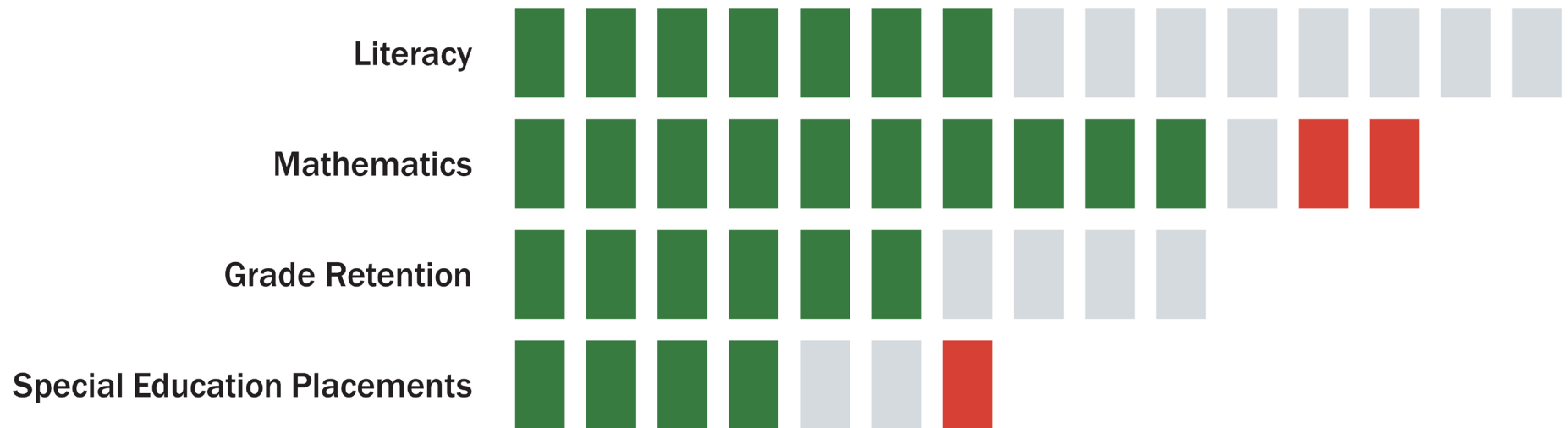
Participants had better outcomes than comparison group children.



No difference between participants and comparison group children.



Participants had worse outcomes than comparison group children.



Note: Evaluations usually include many measures of child outcomes across different domains. Additional domains not included here are described in the full report.

What about “fade out”?

Many studies found little impact on children’s reading performance into elementary school.

- A finding of “no difference” **does not mean children stagnate** or lose skills or knowledge over time.
- Preschool participants and comparison group children **continue to learn**, but over time the difference between them diminishes.
- Their performance **converges**.

What about ‘fade out’?

The bulk of the evidence points to the overall effectiveness of pre-k, but findings from Head Start and Tennessee have sparked questions about whether that evidence should be trusted.

- **Both studies** found evidence that preschool participants **did less well than comparison group children in mathematics** in the early elementary grades.
- The **Tennessee evaluation** found that children were **more likely** than comparison group children to be placed in **special education** in elementary school.

Research points to three key questions

To understand how the evidence fits together, we need to consider:

- (1) What are the **early learning experiences** of comparison group children?
- (2) What is the **quality** of the program?
- (3) What is the quality of instruction in the **early elementary years**?

What did the Head Start evaluation find?

At **school entry**—

- Benefits for literacy and math skills at school entry.

Throughout school—

- No benefits for children's literacy or grade retention in 3rd grade.
- Head Start participants did worse than comparison children on math tests in elementary school.

Understanding Head Start's findings

(1) What are the **early learning experiences** of comparison group children?

Many children **attended other early learning programs** (including other Head Start programs).

A re-analysis found **larger, longer lasting benefits** for participating children without access to ECE alternatives.

Understanding Head Start's findings

(2) What is the **quality** of the program?

Head Start program quality is **highly variable**.

Program performance standards that set out quality guidelines were recently **overhauled**.

One study found that programs with higher quality had **larger, longer lasting benefits**.

Understanding Head Start's findings

(3) What is the quality of instruction in the **early elementary years**?

Head Start children are more likely to attend low-quality and **low-performing elementary schools**.

Benefits of Head Start are **larger** when investments are also made in k-12 education.

What do the Head Start findings mean?

Head Start prepares children for school.

Whether long-lasting benefits are noted depends on

- what **alternatives** are available to both comparison group and participating children,
- the **quality** of individual programs, and
- the quality of **elementary school instruction**.

What did the Tennessee Pre-K evaluation find?

At **school entry**—

- Benefits for literacy and math skills.

By **3rd grade**—

- No benefits, relative to the comparison group, for children's literacy in third grade.
- Program participants did worse than the comparison group on math skills.

Understanding Tennessee's findings

(1) What are the **early learning experiences** of comparison group children?

Tennessee's evaluators **have not accounted for** the early learning experiences of comparison group children in their analysis.

There is evidence that comparison group children may have been **more advantaged** than the pre-k participants.

Understanding Tennessee's findings

(2) What is the **quality** of the program?

Tennessee earns a **5 out of 10** on NIEER's revised preschool quality metric.

An evaluation of Tennessee classroom environments found **substantial variation** in the quality of teacher-child interactions, with some scoring **extremely low**.

Understanding Tennessee's findings

(3) What is the quality of instruction in the **early elementary years**?

We **don't know** the quality of instruction that Tennessee's participants received in the early elementary years.

But a recent national study found sustained benefits of preschool only when children subsequently attend **high-quality elementary schools**.

What do the Tennessee findings mean?

The program may be more effective for children **without early learning alternatives.**

Program **quality and later school experiences** may be responsible.



Is Preschool Effective?

It can be

1. High-quality preschool is an effective strategy for improving children's school readiness.
2. It is clearly possible for the benefits of preschool to persist into elementary and middle school.
3. Researchers and policymakers should focus on how to ensure preschool is effective.

Presenter



Marjorie Wechsler

Principal Research Manager

Learning Policy Institute

mwechsler@learningpolicyinstitute.org

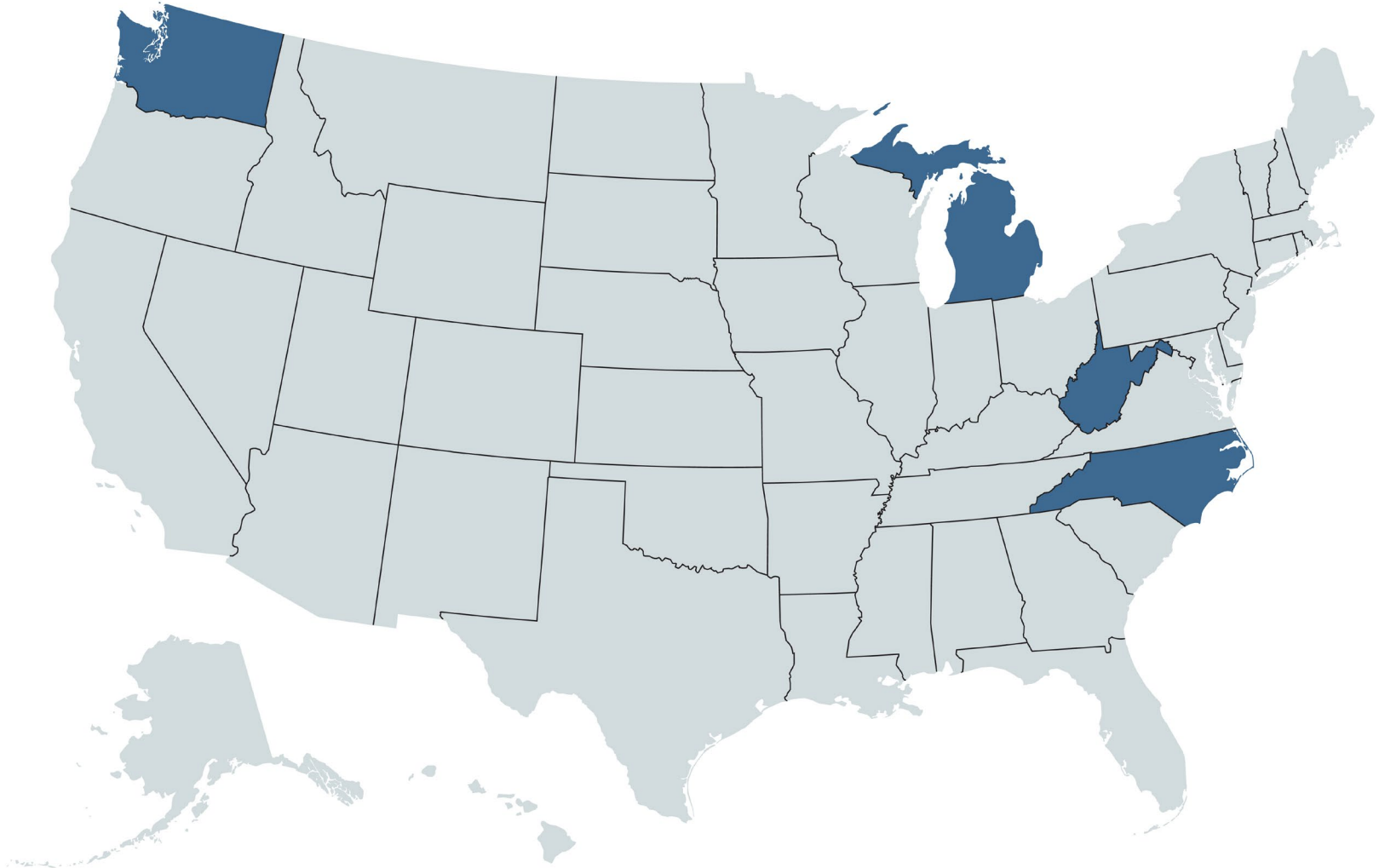


How Can States Support Effective Programs?

Building blocks of high-quality early learning systems

- Strong **program structure**
- Engaging and meaningful **learning experiences**
- Highly skilled and well-supported **workforce**
- **Comprehensive services** for children and families
- **Continuous quality improvement**

Learning from successful states



Lessons from the states

QUALITY



- Program Quality
- Workforce
- Coordination
- Funding
- Political Support



Prioritize quality and continuous improvement

- Standards and assessments
- Quality rating and improvement systems
- Funding linked to quality ratings
- Local infrastructure



Invest in training and coaching

- High requirements
- Accessible training
- Scholarships and salary supplements
- Coaching

Coordinate the administration of birth-through-grade three programs

- Coordinated program administration
- Shared data
- Aligned curriculum and instruction



Combine multiple funding sources to increase access and improve quality

- Combined funding sources
- Short-term funds
- Public-private partnerships





Create broad-based coalitions and support

- Broad-based coalition
- Choice
- Political champion

Audience Q&A

Question & Answer



Madelyn Gardner

*Research and Policy
Associate, Learning Policy
Institute*

@maddiegardner



Beth Meloy

*Senior Researcher and Policy
Analyst, Learning Policy
Institute*

@BethMeloy



Marjorie Wechsler

*Principal Research Manager,
Learning Policy Institute*

mwechsler@learning
policyinstitute.org

Resources



Untangling the Evidence on Preschool Effectiveness

Insights for Policymakers

Beth Meloy, Madelyn Gardner, and Linda Darling-Hammond



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