

# Ensuring Literacy Outcomes for Marginalized Populations

Nonie K. Lesaux, PhD  
October 1, 2024



**CONFIDENTIAL, FOR PROLEER PARTICIPANT USE ONLY**

01

## **Literacy for Today and Tomorrow**

Knowledge, Skills + Competencies for all Learners

---

02

## **Cultivating Literacy in Today's Early Learning Settings**

The Early Learning Study @ Harvard

---

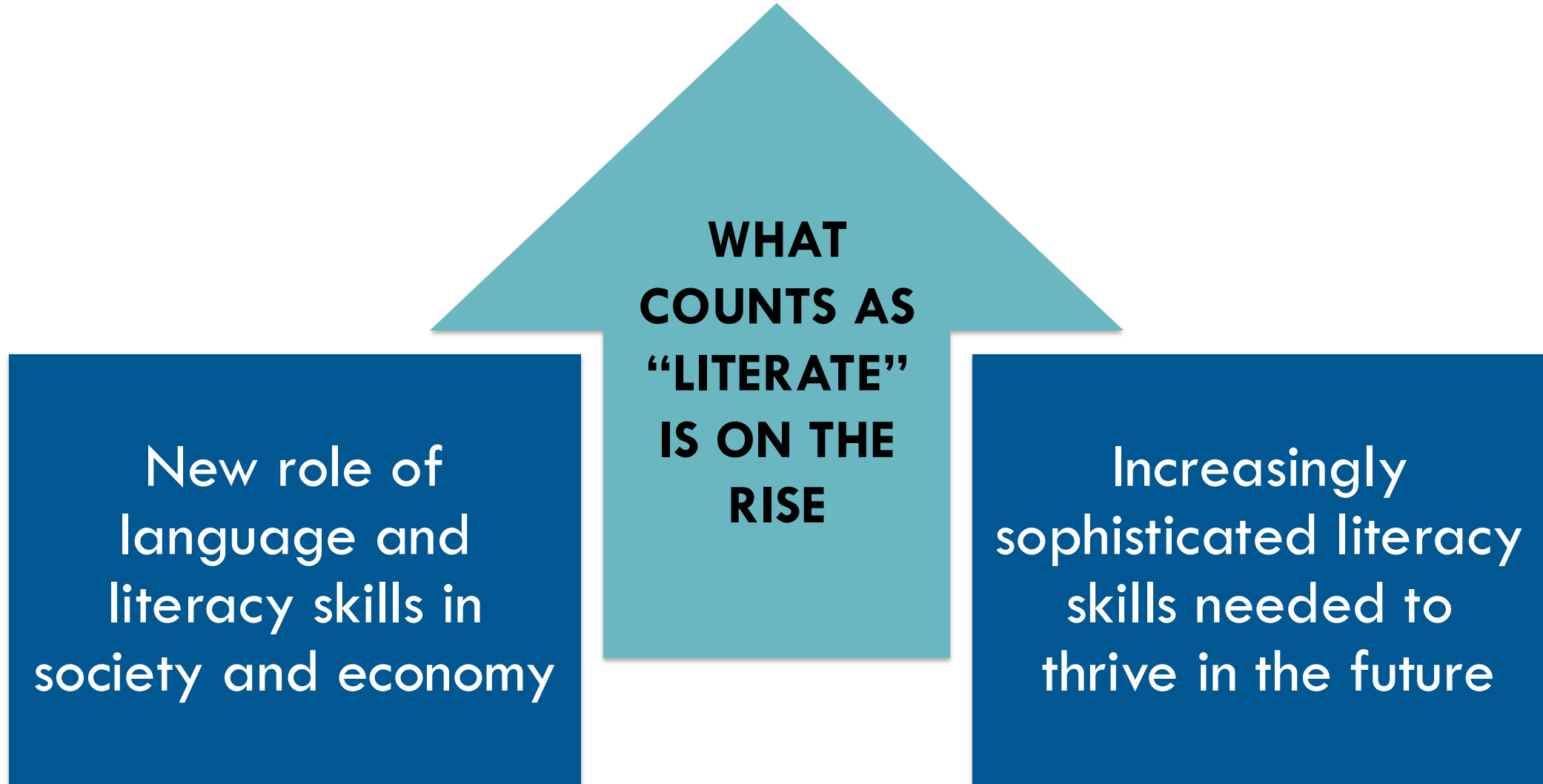
03

## **Implications for Policy and Practice**

Discussion

# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*



# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*



Changing Demands of  
Workforce Participation  
in the 21<sup>st</sup> Century

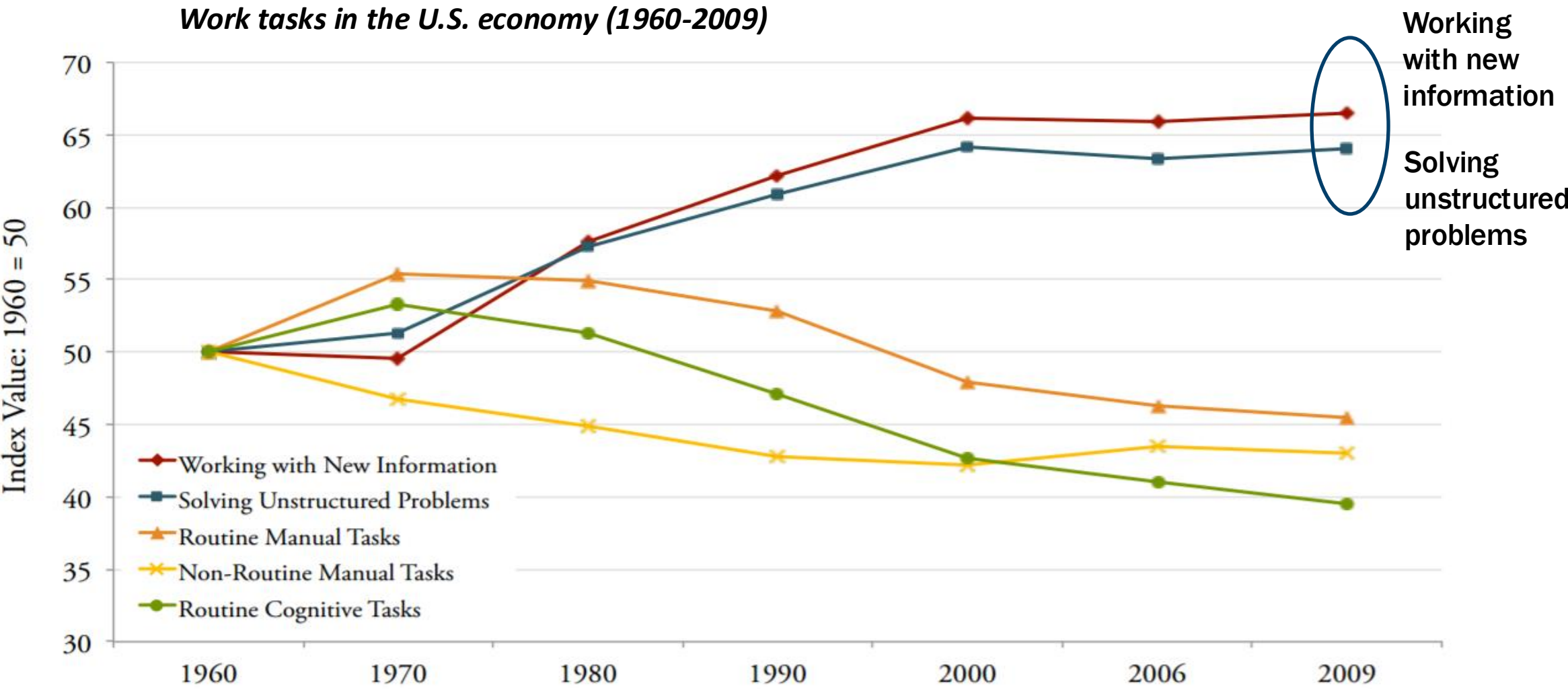
Through technological advancements, the literacy skills necessary for students' success in work and life have been redefined

“In order to prepare young people to do the jobs computers and technology cannot do, we must re-focus our education system around one objective:

**Giving students the foundational skills in problem-solving and communication that computers don't have.”**

# Literacy for Today & Tomorrow

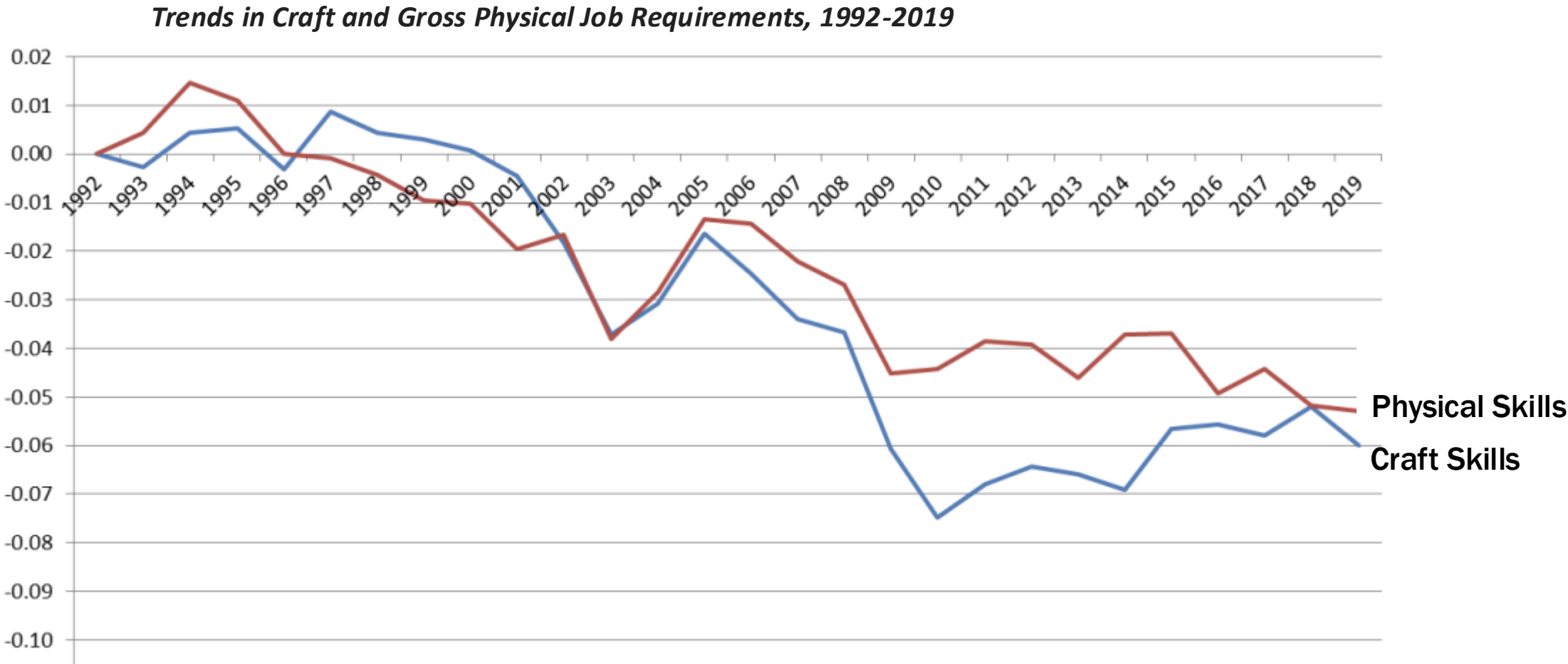
*Knowledge, Skills & Competencies for A New Era*





# Literacy for Today & Tomorrow

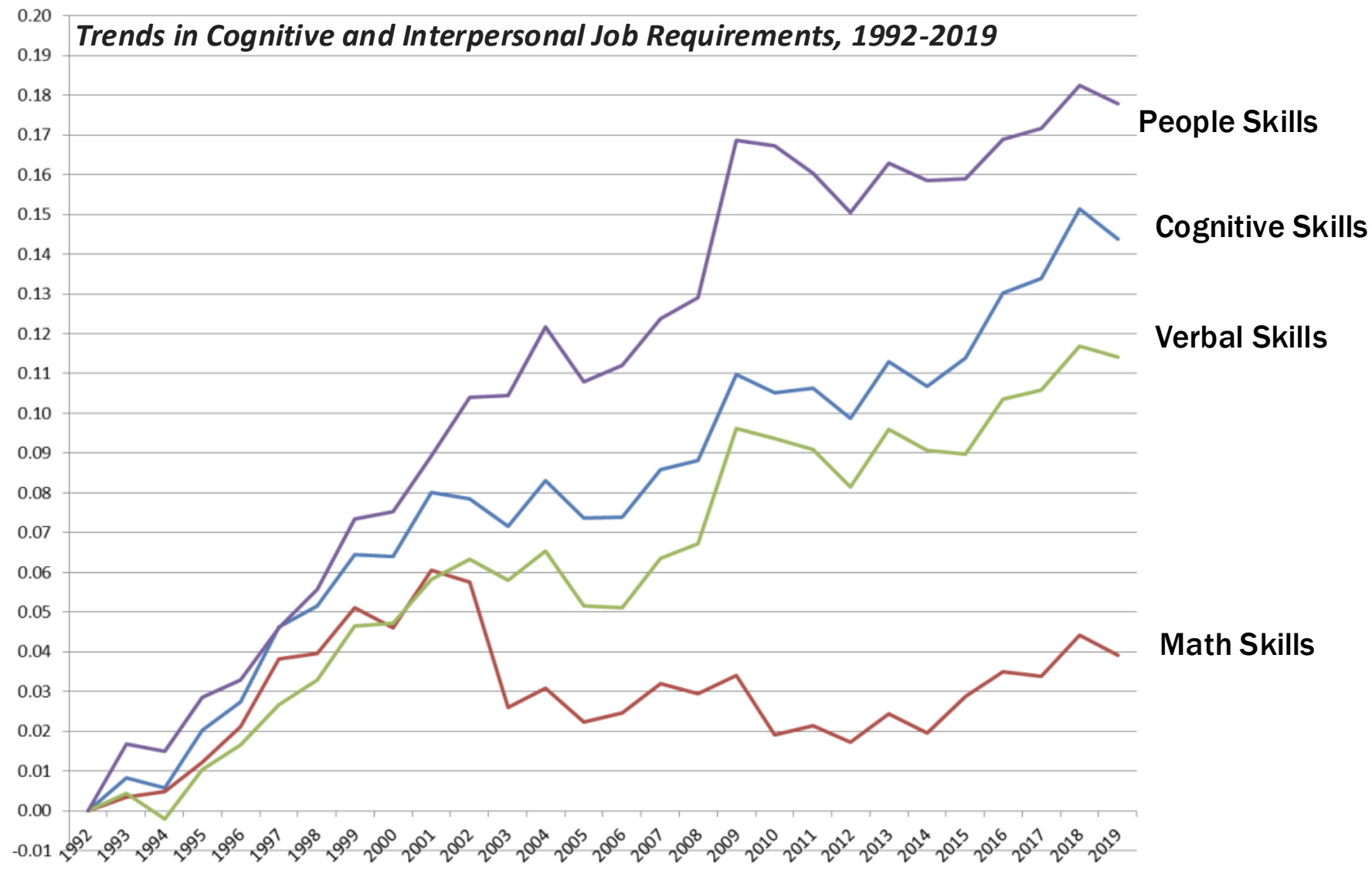
## Knowledge, Skills & Competencies for A New Era



*\*Scaled to the mean in 1992*

# Literacy for Today & Tomorrow

## *Knowledge, Skills & Competencies for A New Era*



*\*Scaled to the mean in 1992*

Handel, 2020, Figure III.8



# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*

*Large-Scale Analysis of U.S. Job  
Descriptions*

Oral and Written  
Communication Skills

Collaboration Skills

Problem Solving  
Skills

Rios et al., 2020

*EdWeek Survey of What Top Executives  
Want from Today's K-12 Students*

Develop + Refine Skills to  
Communicate Clearly, w/ Intention  
(work, client, and personal relationships)

Presentation Skills

Effective Writing

Lieberman, 2021

# What about the Global Context?



# Literacy for Today & Tomorrow

## *Knowledge, Skills & Competencies for A New Era*



McKinsey & Company (2021). Defining the skills citizens will need in the future world of work.

### **METHODOLOGY:**

- 18,000 people
- 15 countries

**GOAL:** to define foundational skills for citizens and to identify priority skills to inform learning and teaching.



World Economic Forum. (2023). Future of Jobs Report: Insight Report.

### **METHODOLOGY:**

- 803 global companies, around the world

**GOAL:** to identify the top 5 skills in demand and on the rise for workers in 2023.

# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*



## COGNITIVE

Critical Thinking, Planning and Ways of Working, Communication, Mental Flexibility



## INTERPERSONAL

Mobilizing Systems, Developing Relationships, Teamwork Effectiveness



## SELF-LEADERSHIP

Self-Awareness and Self-Management, Entrepreneurship, Goals Achievement

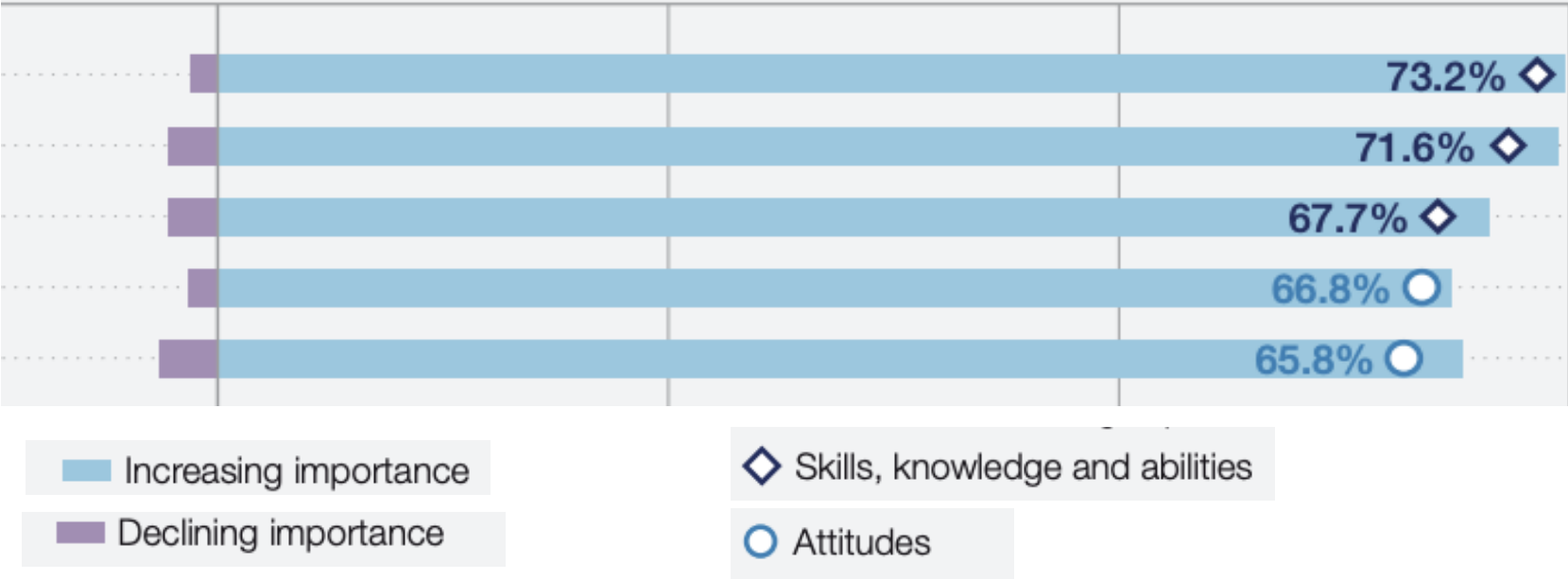


## DIGITAL

Digital Fluency and Citizenship, Software Use and Development, Understanding Digital Systems

# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*



Creative Thinking  
Analytical Thinking  
Technological Literacy  
Curiosity + Lifelong Learning  
Resilience, Flexibility + Agility

# Literacy for Today & Tomorrow

*Knowledge, Skills & Competencies for A New Era*

## **Inter-personal Skills**

- Teamwork and the ability to collaborate in pursuit of a common objective.
- Effective communication with peers, partners, and colleagues.
- Leadership capabilities

## **Intra-personal Skills**

- Motivation and attitude
- The ability to learn
- Problem-solving skills
- Analytical skills



# Literacy for Today and Tomorrow

*Mapping Knowledge, Skills, & Competencies for a New Era to Today's Classrooms*

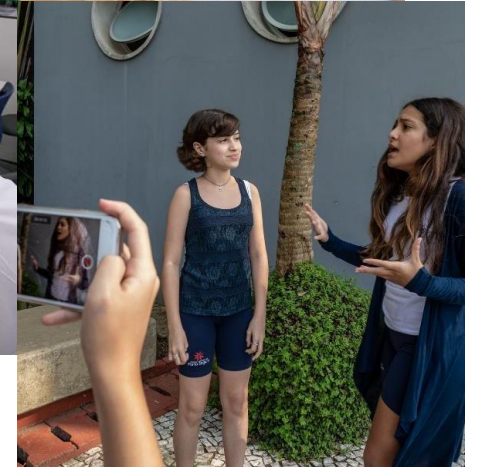
## ENVIRONMENTS WHERE LEARNERS ARE:

Mentally active

Engaged

Socially interactive

Building meaningful connections to their lives





01

## **Literacy for Today and Tomorrow**

Knowledge, Skills + Competencies for all Learners

---

02

## **Cultivating Literacy in Today's Early Learning Settings**

The Early Learning Study @ Harvard

---

03

## **Implications for Policy and Practice**

Discussion

# The Early Learning Study at Harvard (ELS@H)



@ZaentzHarvardEd



ZaentzEarlyEducationInitiative

# Zaentz Initiative Overview

## The Early Learning Study at Harvard (ELS@H)

Breakthrough Research to Drive Action

## The Zaentz Fellows Program

Cultivating the Next Generation of Leaders



## The Zaentz Professional Learning Academy

Strengthening the Field through Professional Learning

## Zaentz Communications and Policy Work

Leading science-informed policy recommendations





# Why ELS@H? Using a Wide-Angle Lens

From evaluating specific programs...



...to identifying, learning about, and scaling quality improvement strategies across all settings where young children learn and grow.



# Why ELS@H? Using a Wide-Angle Lens

## Existing Evidence



Formal, specialized programs and models



Represents mostly small-scale studies and samples



Primarily in the 1960s and 70s; some recent 4-year-old programs in large cities



High-stakes, global measurement focused on the question of whether specific programs “work”

## Today's Realities + Opportunities

About 70-80% of families access some form of child care across varied ECE setting types

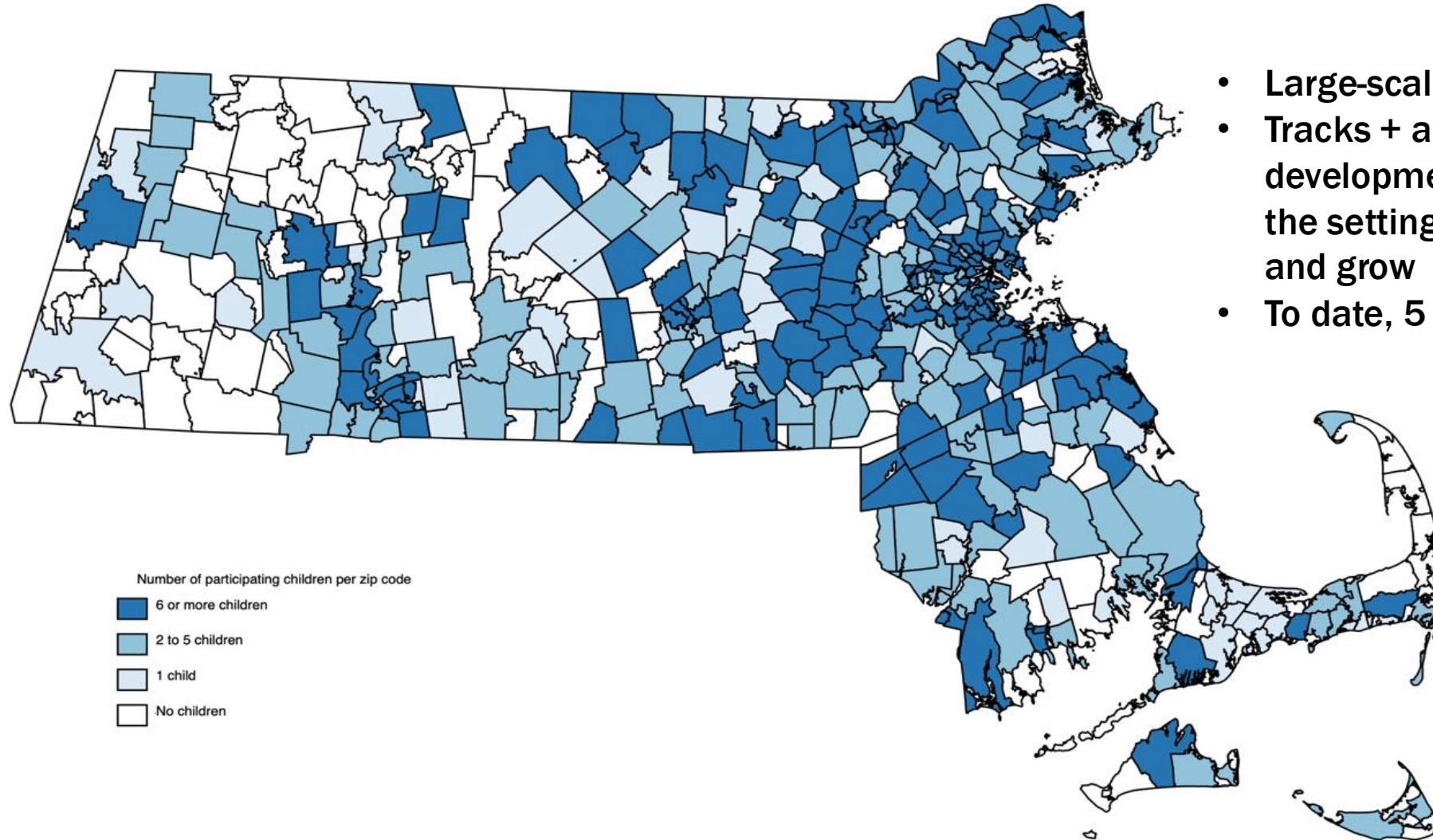
Cities and states engaged in stabilization and expansion efforts to serve the population

Policymakers need current data to inform investments and strategies

Need a robust, actionable measurement strategy to inform design and scaling

# What is the Early Learning Study at Harvard (ELS@H)?

- Large-scale, longitudinal study
- Tracks + analyzes children's development AND the features of the settings in which they learn and grow
- To date, 5 years, beginning of 6<sup>th</sup>



# Study Design

---



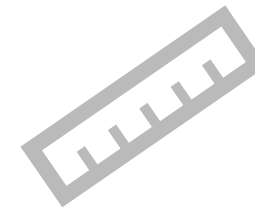
Statewide and  
representative



All setting types  
(formal & informal)



Began with ~3,500 3/4 year olds  
across the state; Following children  
and families longitudinally



Deep and rich measures of structure,  
process, adult and child outcomes



# Building our Sample

---

## Household Survey



Screen all households (95k) in randomly selected block groups

Recruit age eligible children and their settings

## Network Sampling



Recruit additional children in settings identified through the household survey

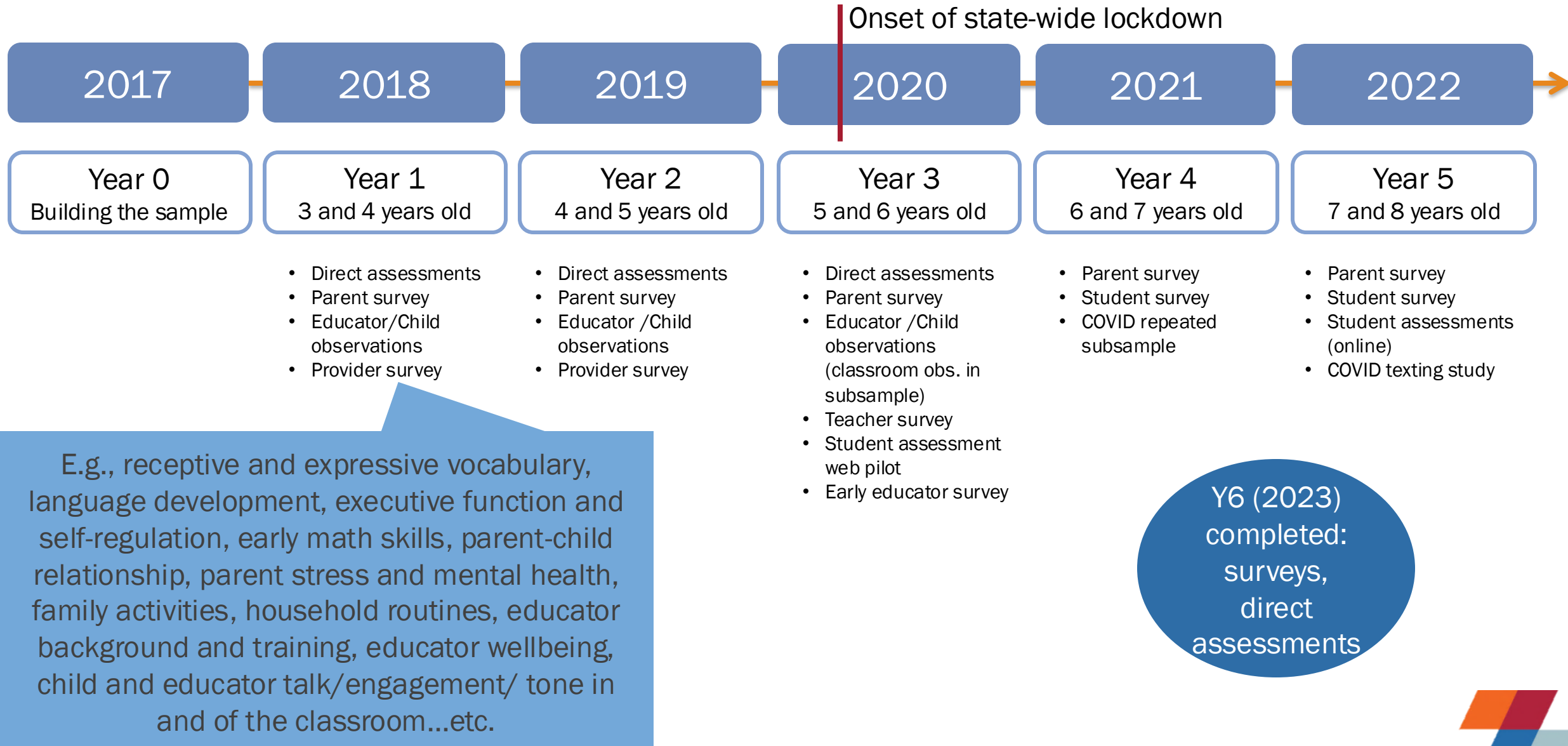
## Setting Sampling



Recruit settings from randomly selected licensed settings from state administrative data

Recruit children in those settings

# Timeline



# Our Sample

Our sample over three years...



**Year 1 (2017-18):**  
3- & 4-year-olds across MA  
~800 settings

**Year 2 (2018-19):**  
4-year-olds in ~400 settings  
5-year-olds in 544 schools in  
200 districts

**Year 3 (2019-20):**  
5- & 6-year-olds in school:  
625 schools in all 289 districts

# Characteristics of Children in Year 1 ( $n = 3,222$ )

---

48% three-year-olds

52% four-year-olds



Children live in households with varied income levels...

11%	<20 K/yr
16%	20-50 K/yr
20%	50-100 K/yr
35%	100-200 K/yr
18%	>200 K/yr

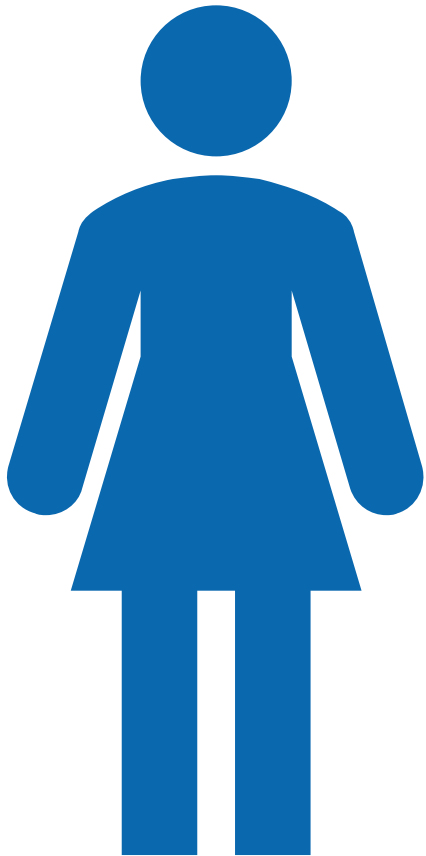
Children are diverse in terms of race/ethnicity including...

63%	White
9%	Hispanic or Latino
8%	Black or African-American
7%	Asian
13%	Multi-racial or Other

9% of children speak a language other than English

# Our Sample of Early Educators

---



Are on average

**45**

years old

**20%**

of providers hold a second job

**98%**

women

Providers  
worked an average of

Have an average of

**18**

years of experience working  
with young children

**11 hours**

per week in addition to their  
role in early education and care

# The Early Learning Study at Harvard

*Breakthrough research to drive action*

---

“I have been in the family child care business for over 25 years and have never been asked to participate in anything like this before. Family child care is always left out of the important research projects and policy conversations.”^



# Wide and Deep Measurement Each Year

---

Direct Child Assessments	Parent Surveys	Provider Surveys	Setting Observations
Language and literacy	Parental health and wellbeing	Provider health and wellbeing	Micro-features of quality (Child and Teacher Observation in Preschool)
Early mathematics	Home environment and activities	Setting environment and activities (structural features)	Global quality (Classroom Assessment Scoring System; Simple Interactions)
Self-regulation	Demographic information	Demographic information	
Social and emotional skills	Parental assessments of child behaviors	Provider assessments of child behaviors	



# Micro-features of Quality

---

The Traditional  
Way of Measuring  
Quality  
(CLASS)



The New Way of  
Measuring Quality  
(COP-TOP)



■ Teacher Observation    ■ Child Observation

Scores for micro-features:

- Instructional quality
- Educator tone
- Student involvement
- Schedule (e.g., whole group, centers, transitions)
- Focus (e.g., ELA, math, music and movement)

# Overarching Questions



## Initial questions...

Where are 3- and 4-year old children receiving their early education and care?

What are the quality features across these ECE setting types?



## Long-term questions...

What learning outcomes and developmental gains can we expect from early learning environments?

- Which of these outcomes are particularly sensitive to high-quality environments?

What features of schooling predict whether the benefits of ECE are maintained or multiplied?

# Specific Lines of Work

## Questions for the field:

1. How can we ensure that all children have access to high-quality early learning and care in the years before school?
2. What role does early education and care play in children's future life chances?

## ELS@H area of work (EEC):

1. Documenting the features and characteristics of early learning environments.
2. Linking features to adult and child outcomes in the short- and long-term.

## Illustrative questions:

1. How much do features of early learning settings vary between settings, between classrooms, and between children?
2. What is the relationship between 3- and 4-year old's early education experiences and their academic and social-emotional outcomes in 3<sup>rd</sup> grade?

## Questions for the field:

1. What is the nature of, and interplay between, developmental domains within and over time?
2. What is the role of experience (and settings) in shaping developmental trajectories over time?

## ELS@H area of work (DEV):

1. Tracking developmental domains, experiences, and features of settings over many years and transitions.

## Illustrative questions:

1. What are the dynamics between early self-regulation and early language development and reading (for example)?
2. Do developmental trajectories slip, jump, or shift at key points (e.g., the end or beginning of the "school" year, or when features of settings undergo substantial change)?

## Questions for the field:

1. What is the long-term impact of COVID on child and adult health and wellbeing?
2. What is the nature of academic "loss" and recovery?

## ELS@H area of work (COVID):

1. Tracking developmental domains, experiences, and features of settings with COVID in mind.

## Illustrative questions:

1. You get the idea....

# ELS@H + Capturing Pandemic Impacts: Major Findings

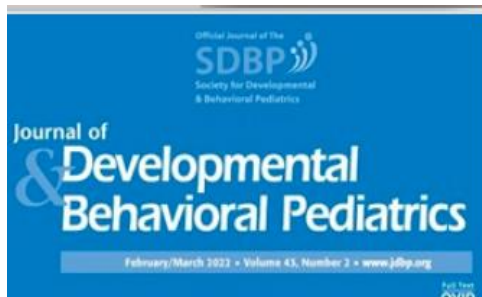
## In the first months after the shutdown...

- Parents/guardians reported significant disruptions to their daily lives and welfare, as well as heightened stress and anxiety, disproportionately affecting low income households.
- Early educators experienced substantial economic losses, with family child care providers faring the worst even as they stepped in to serve families and essential workers.
- Early educators found creative ways to connect with families, but often with limited support for their own mental health and well-being.



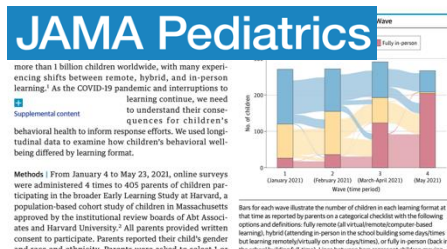
## Comparing children's behavior and family dynamics pre-shutdown to post-shutdown...

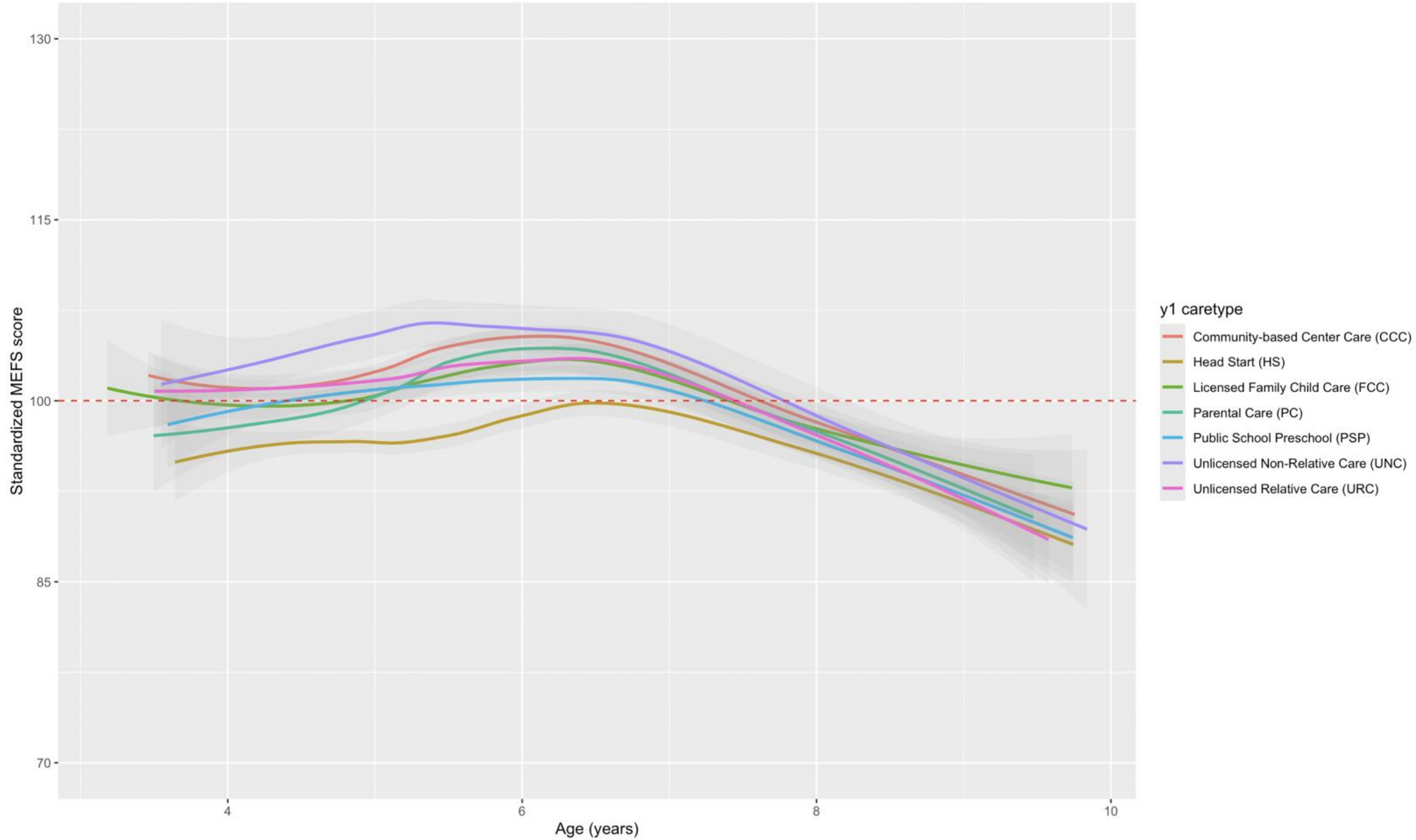
- Children's aggressive, dysregulated, and anxious behavior increased substantially while their adaptive behaviors declined.
- Parental stress, parent-child conflict, and household chaos increased substantially.
- Yet families also drew strength from time together and from the support provided by teachers and schools.



## Over the course of the 2020-2021 school year...

- Children's behavior was significantly worse during periods of remote learning compared to periods of either in-person or hybrid learning.





# Overarching Questions



## Initial questions...

Where are 3- and 4-year old children receiving their early education and care?

What are the quality features across these ECE setting types?



## Long-term questions...

What learning outcomes and developmental gains can we expect from early learning environments?

- Which of these outcomes are particularly sensitive to high-quality environments?

What features of schooling predict whether the benefits of ECE are maintained or multiplied?

## SNAPSHOT: 3 BIG-PICTURE FINDINGS



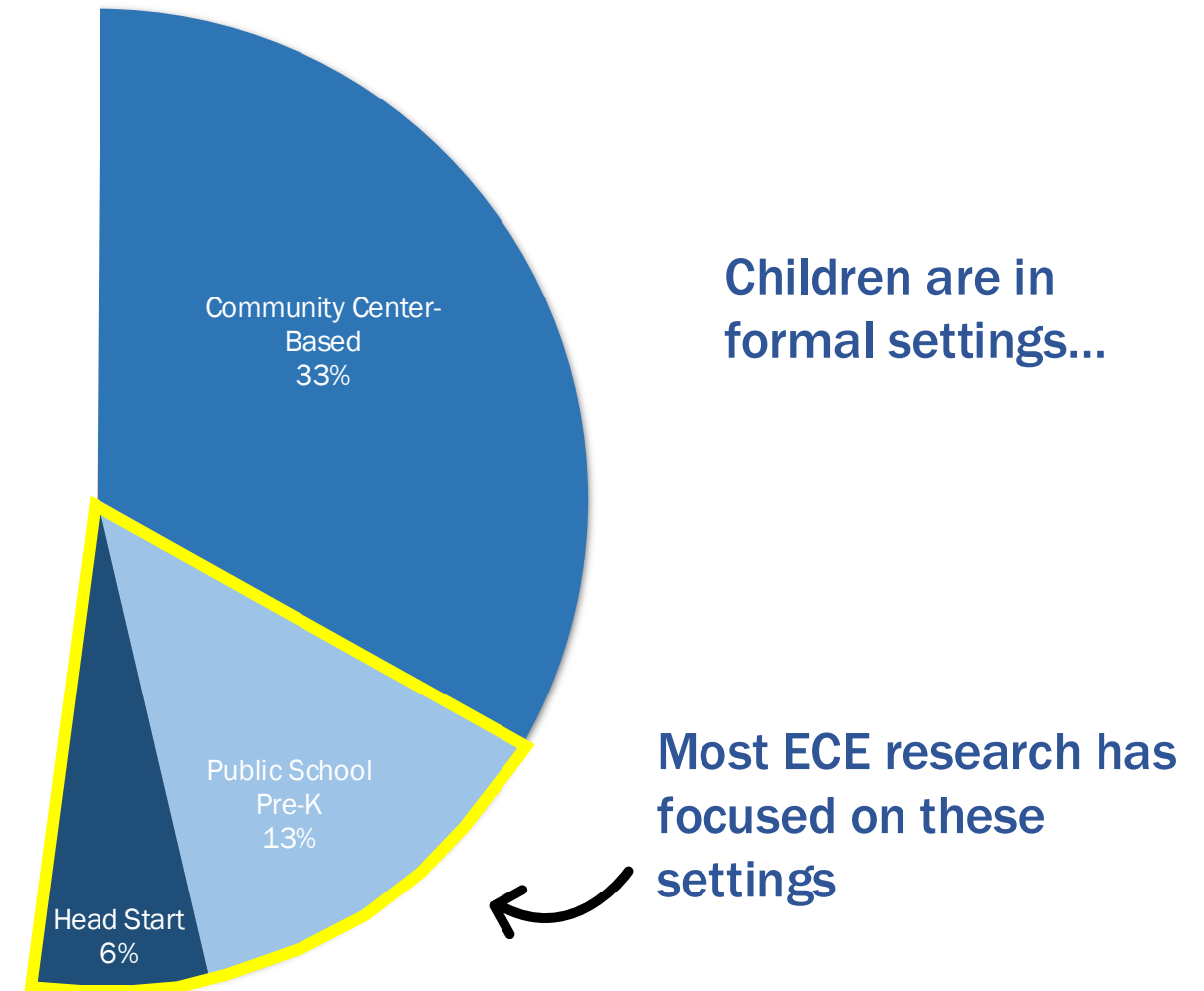


# Finding 1

## Families Rely on and Engage with Diverse ECE Setting Types

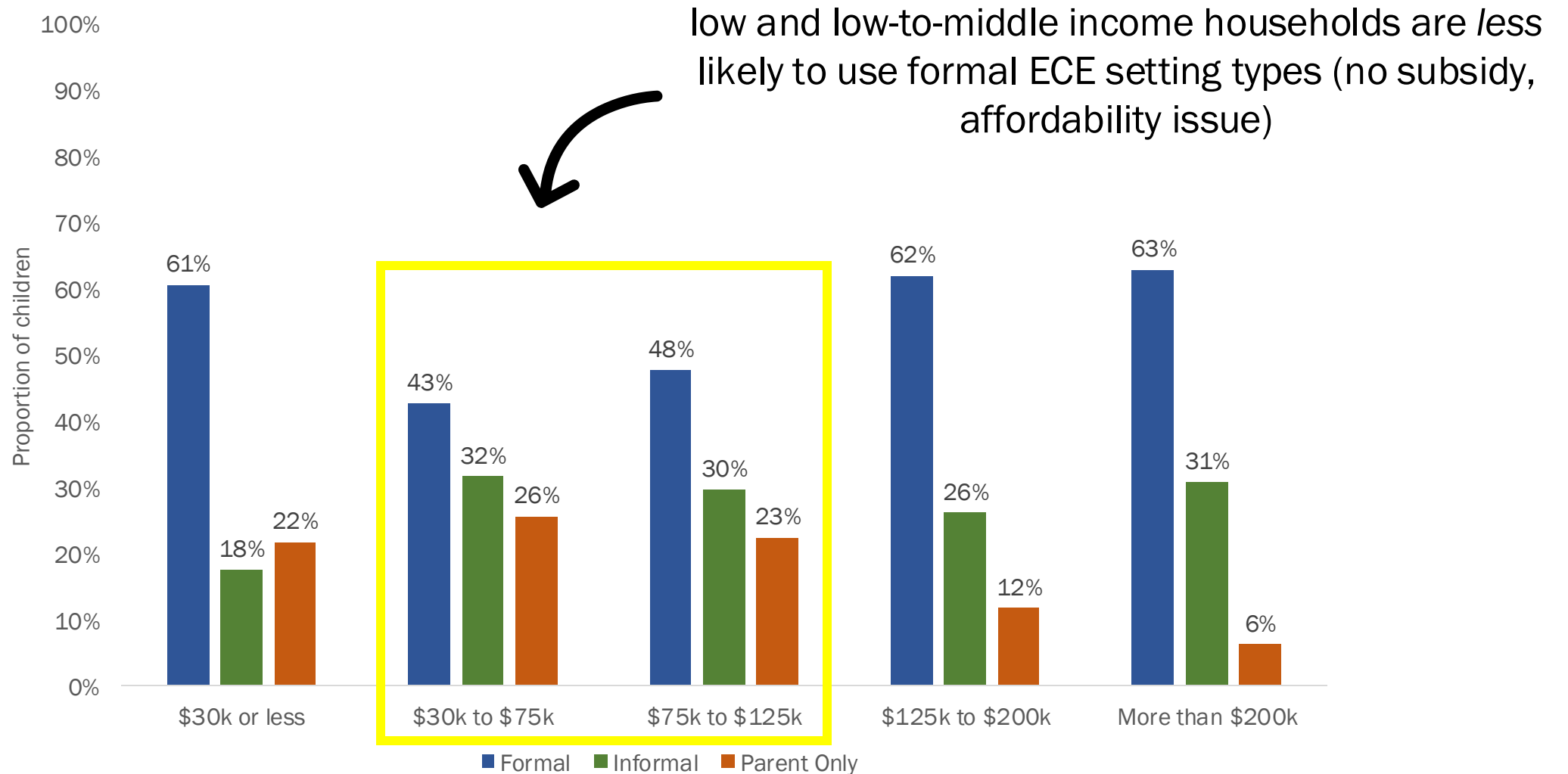
**Some children are  
cared for by their  
parents only.**

**...And informal  
ones, too.**



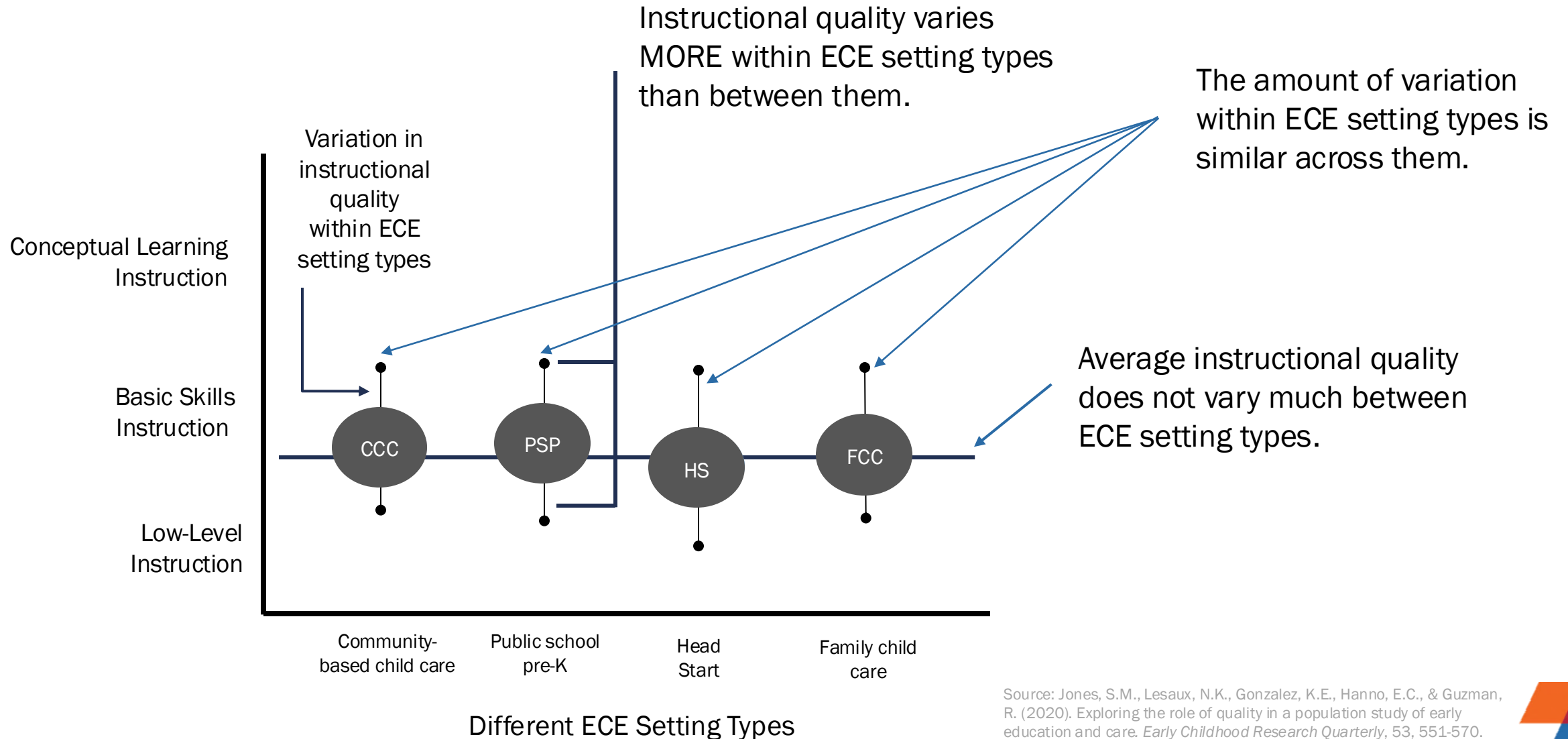
# Finding 1

## Families Rely on and Engage with Diverse ECE Setting Types



## Finding 2

### Quality Varies but ECE Setting Type is Not the Key Differentiator

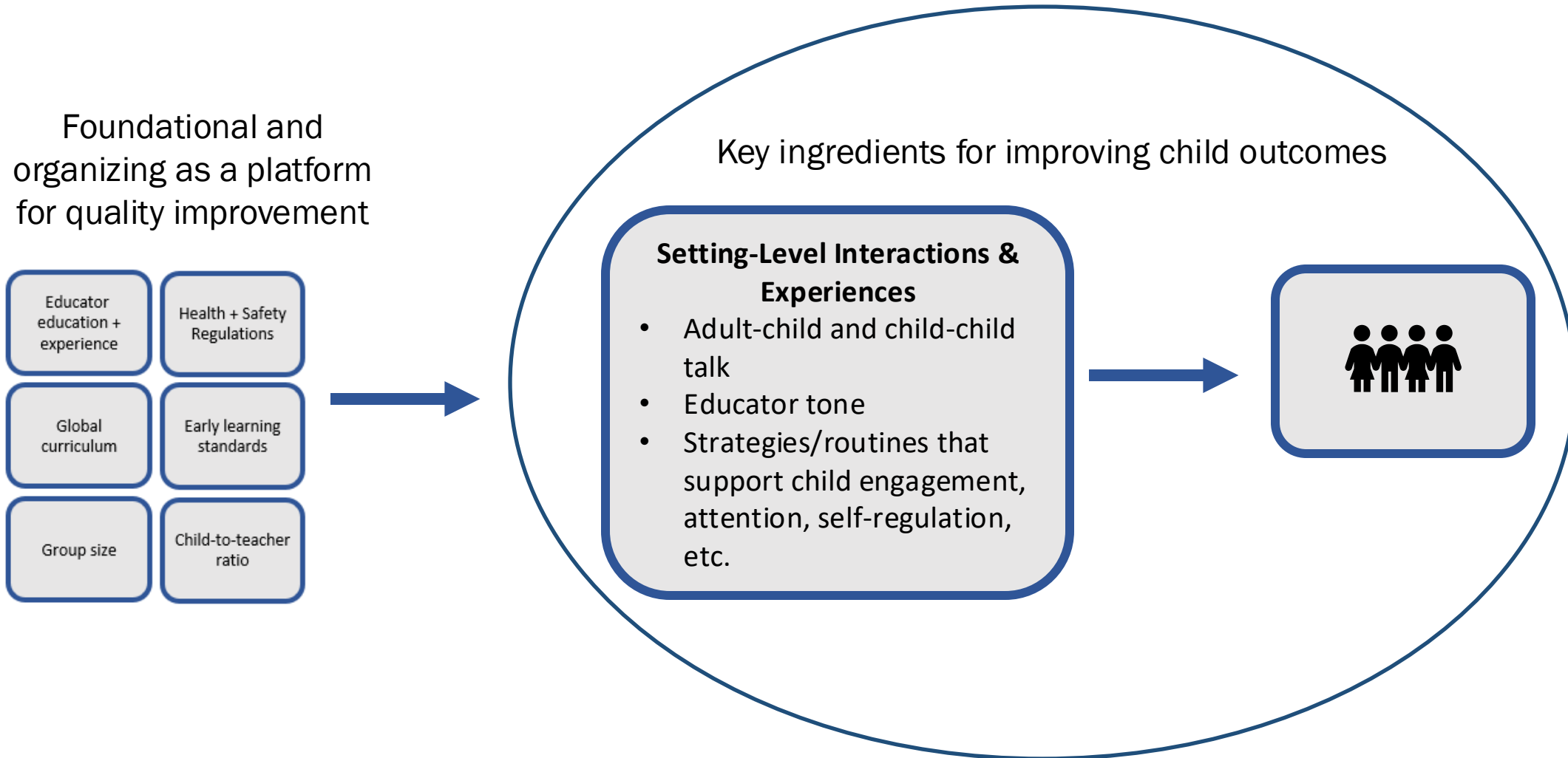


Source: Jones, S.M., Lesaux, N.K., Gonzalez, K.E., Hanno, E.C., & Guzman, R. (2020). Exploring the role of quality in a population study of early education and care. *Early Childhood Research Quarterly*, 53, 551-570.



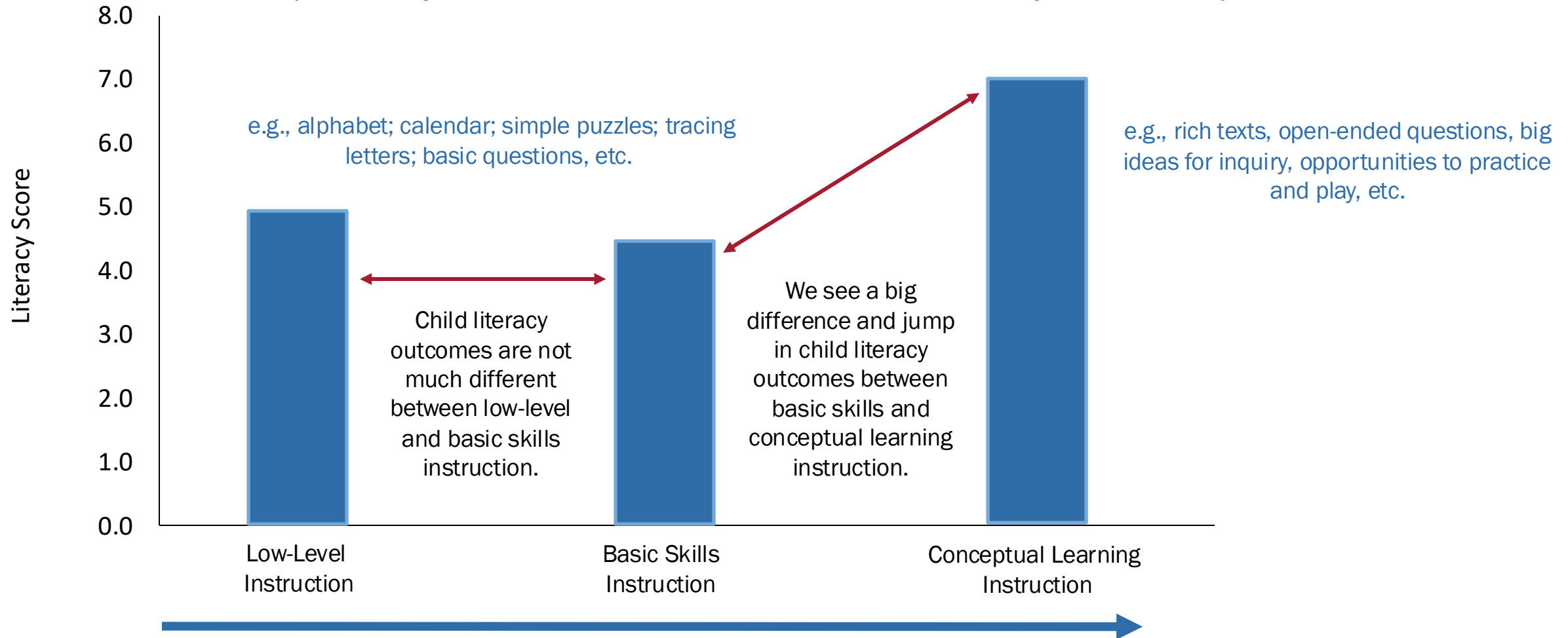
# Finding 3

Traditional approaches to quality are not sufficient for child outcomes  
(the impact lies in the interactions + experiences)



## Finding 3

Traditional approaches to quality are necessary but not sufficient for child outcomes  
(the impact lies in the interactions + experiences)



To boost child outcomes: Targeted or tailored strategies that move educators on a pathway to conceptual learning.



SNAPSHOT: KEY FEATURES OF THESE SETTINGS



# The Early Learning Study at Harvard

---

Instructional quality is low across the sample



↑  
Average  
instructional  
quality

**1.64**

Children were mostly engaged in activities with **little instructional content** (e.g., puzzles, singing songs) or focused on concrete **low-level skills** like counting or recognizing letters

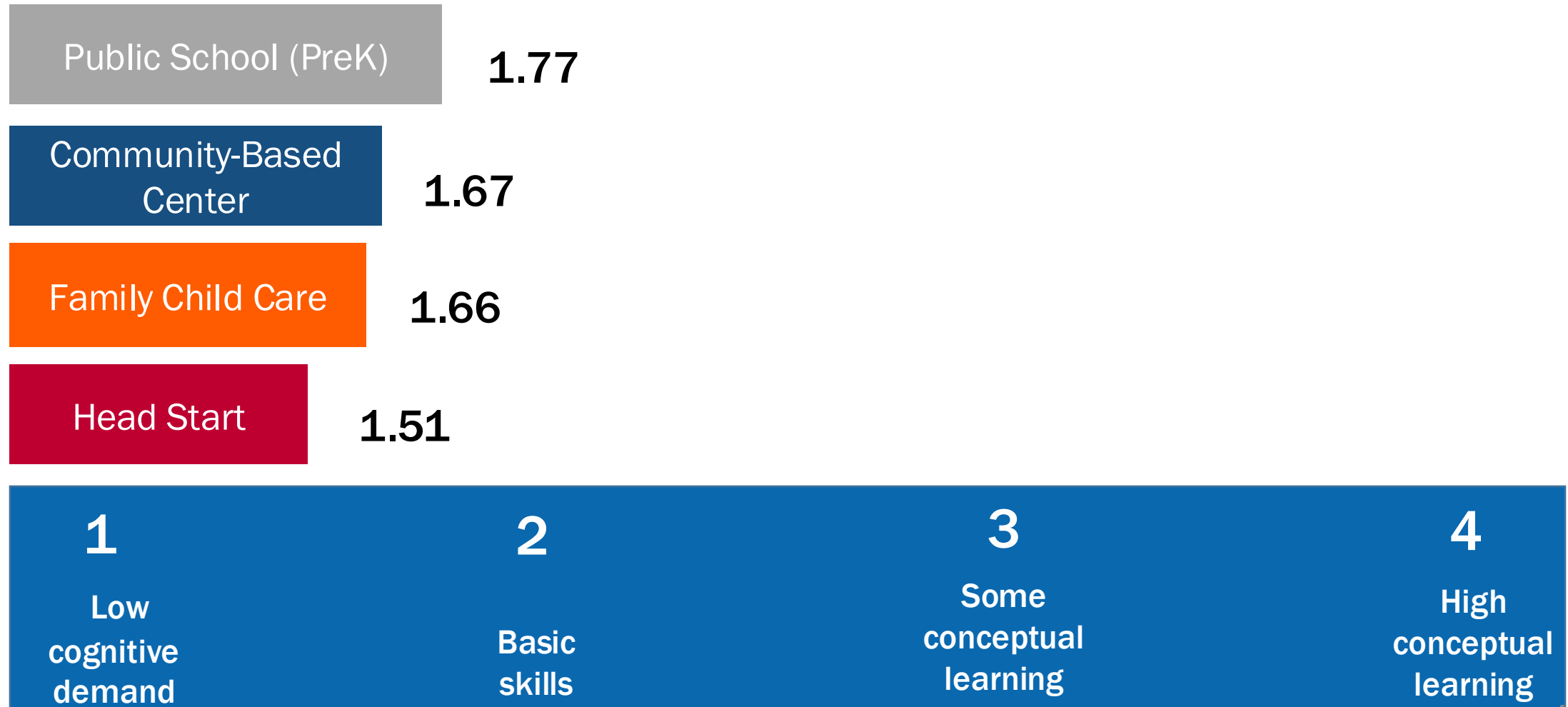




# The Early Learning Study at Harvard

---

## Instructional quality in different settings



# Learning Environment

Children are mostly engaged in activities with **little conceptual content** or focused on concrete **low-level skills** like counting or recognizing letters

Children's outcomes grow the most when instruction includes some **conceptual learning** organized around big ideas, rich texts, and open-ended questions

ELS@H classrooms

1.65

1

Low  
cognitive  
demand

2

Basic  
skills

3

Some  
conceptual  
learning

4

High  
conceptual  
learning

# Educator Tone

Educator tone, or the emotional nature of her interactions, tends to fall **between flat and pleasant**

Children's outcomes grow the most when educator tone is **consistently pleasant**

ELS@H classrooms

**3.41**

1

Extreme  
negative

2

Negative

3

Flat

4

Pleasant

5

Vibrant

# Child Engagement

Children's engagement is between low and medium, meaning in the learning environment, children are **easily distractible** or **only partially attentive**

Children's outcomes grow the most when the learning environment engages them to be **deeply focused** in activities

ELS@H classrooms

2.38

1

Low

2

Medium  
Low

3

Medium

4

Medium  
High

5

High

# The Early Learning Study at Harvard

---

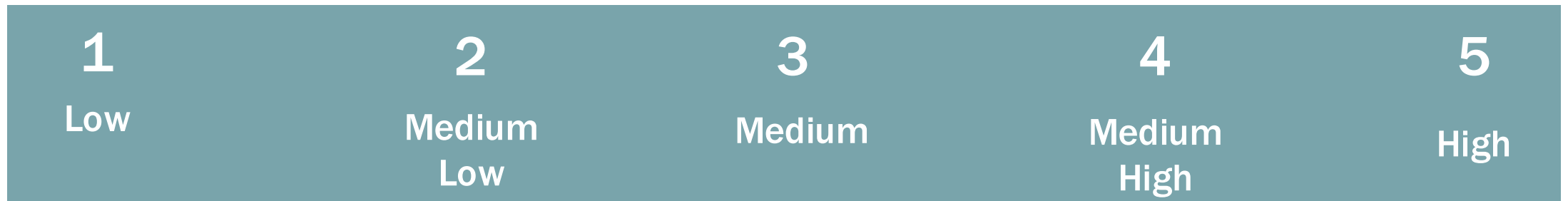
Children were most engaged in Family Child Care and PreK

Family Child Care 2.57

Public School (PreK) 2.51

Community-Based Center 2.34

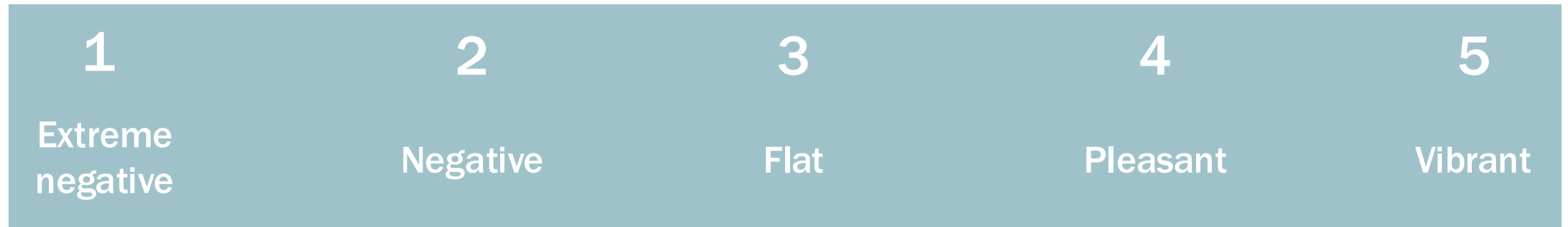
Head Start 2.06



# The Early Learning Study at Harvard

---

Educator affect was somewhat positive across settings



Average tone

**3.40**

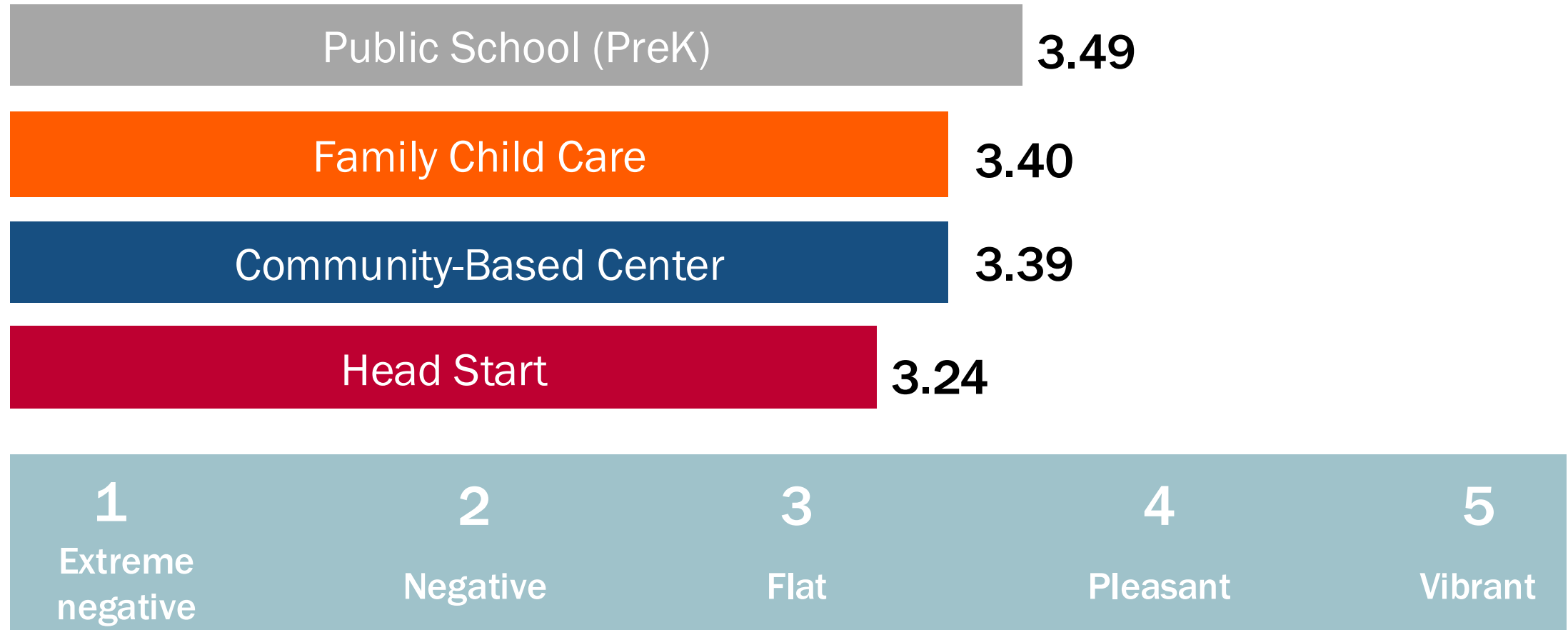




# The Early Learning Study at Harvard

---

## Educator affect in different settings



# The Early Learning Study at Harvard

---

Across all classrooms in our sample...



Adults talk to children

**57%**

of the time



Children talk to adults or  
other children

**25%**

of the time



# The Early Learning Study at Harvard

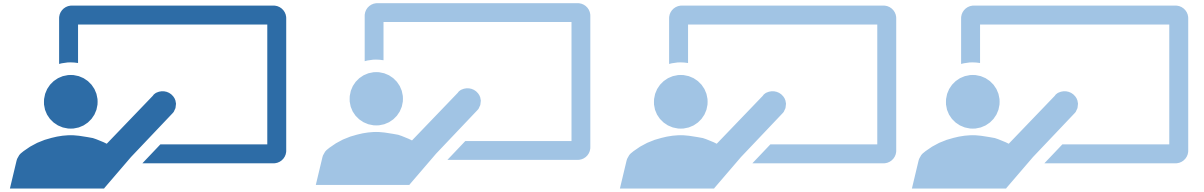
---

Teachers spend little time listening to children

Adults listen to  
children

6%

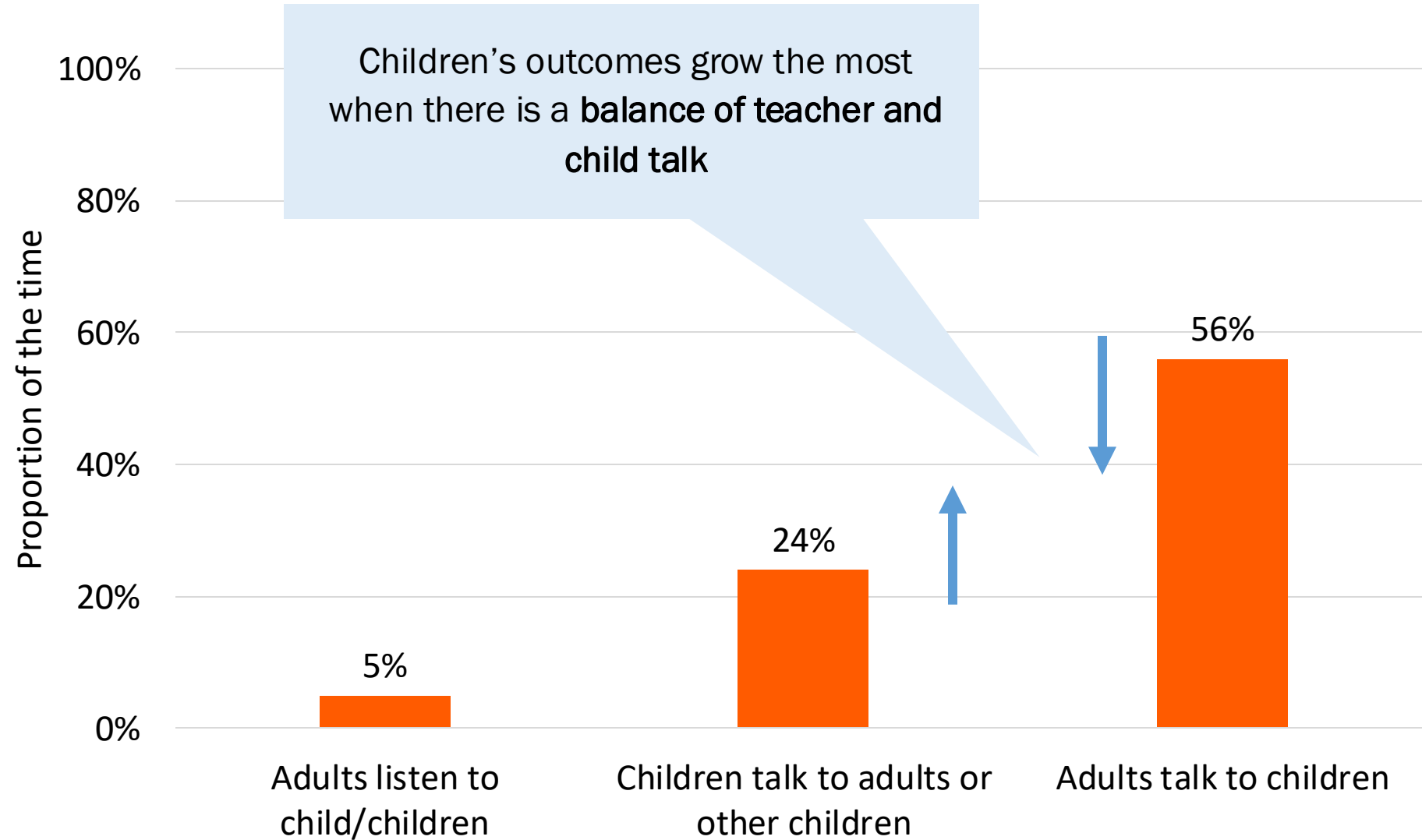
of the time



In 1 of 4 classrooms,  
educators ***never*** listen  
to children



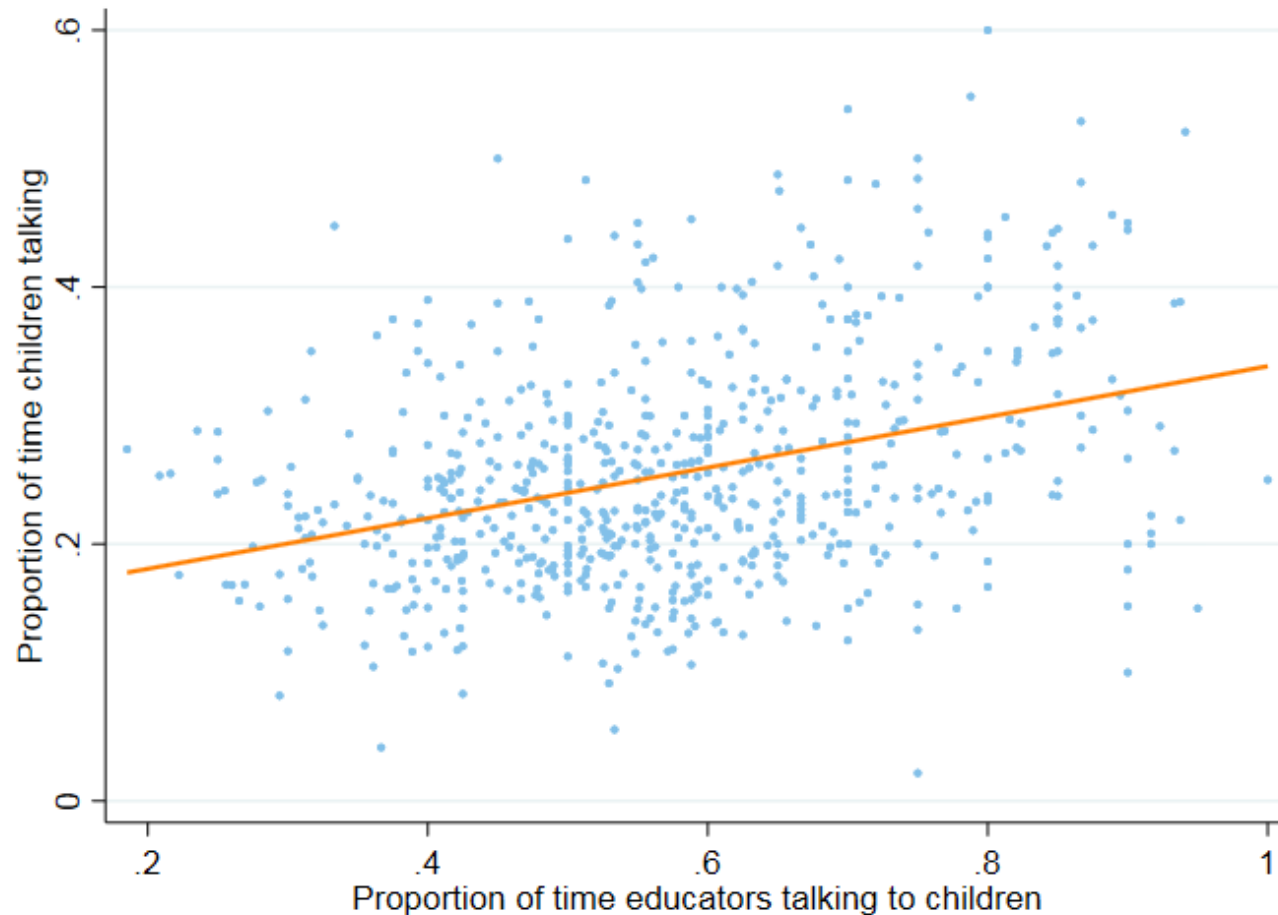
# Teacher and Child Talk



# The Early Learning Study at Harvard

---

The more adults talk, the more children talk



In classrooms where adults spoke 75% of the time, **children spoke 50 percent more of the time** than they did in classrooms where adults spoke 25% of the time.



01

## **Literacy for Today and Tomorrow**

Knowledge, Skills + Competencies for all Learners

---

02

## **Cultivating Literacy in Today's Early Learning Settings**

The Early Learning Study @ Harvard

---

03

## **Implications for Policy and Practice**

Discussion



# Key Insights: Implications

- ① Families rely on and engage with diverse ECE setting types, across the mixed-delivery system
- ② Quality varies across the mixed-delivery system, but ECE setting type is *not* the key differentiator of quality
- ③ Traditional approaches to quality are important for system design but are not sufficient to improve child outcomes

## Needed strategic investments:

- Strengthening the mixed-delivery system and improving family access to *all* types of settings
- Enacting workforce strategies and supports
  - conditions to promote retention, drive improved practice, mitigate burnout, etc.
  - respond to ongoing COVID-related challenges



# Key Insights: Implications

## Systems-Building Needs

**1. Data Infrastructure + Mapping** of ECE settings across a state or community; linking data systems; and learning more about the specific features of quality that drive outcomes

**2. Building** new, dynamic approaches to measuring quality and supporting improvement

## In Response: Zaentz Initiative Strategic Projects Underway

**1. State Data Infrastructure Toolkit + Workforce Dashboard:** The Zaentz Initiative team is developing:

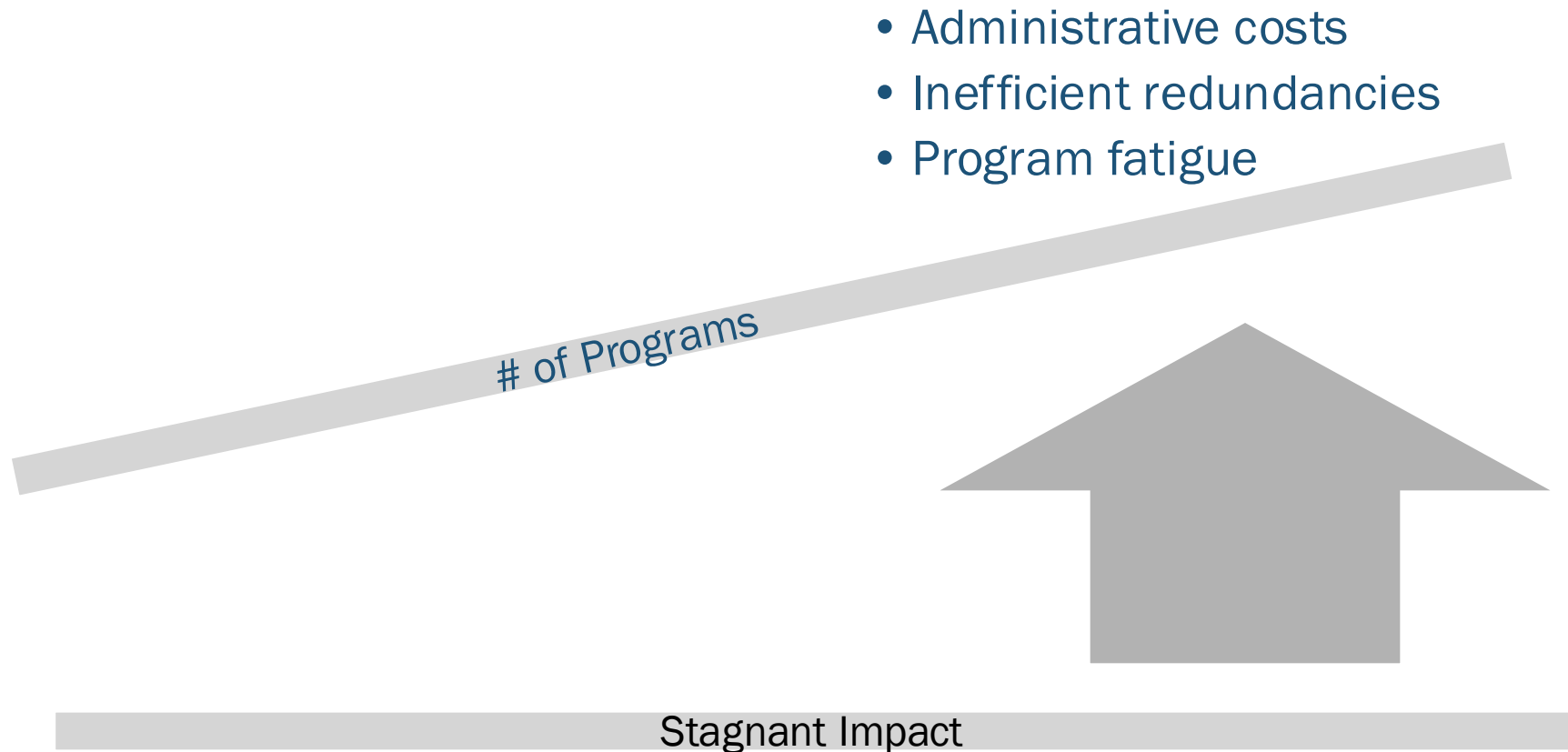
- a how-to data infrastructure toolkit for states
- an interactive, user-friendly dashboard to provide state leaders with critical early ed workforce data (e.g., demographics, setting features, compensation, education + professional learning requirements + supports, etc.)

**2. Educator-Centered Quality Measure:** Informed by lessons learned through ELS@H, the Zaentz Initiative is developing a new tool for measuring quality that is:

- Digital
- Easy-to-implement
- Reflective of the latest science
- Supports and responds to the educator's needs + profile

# Key Insights: Pitfalls to Avoid

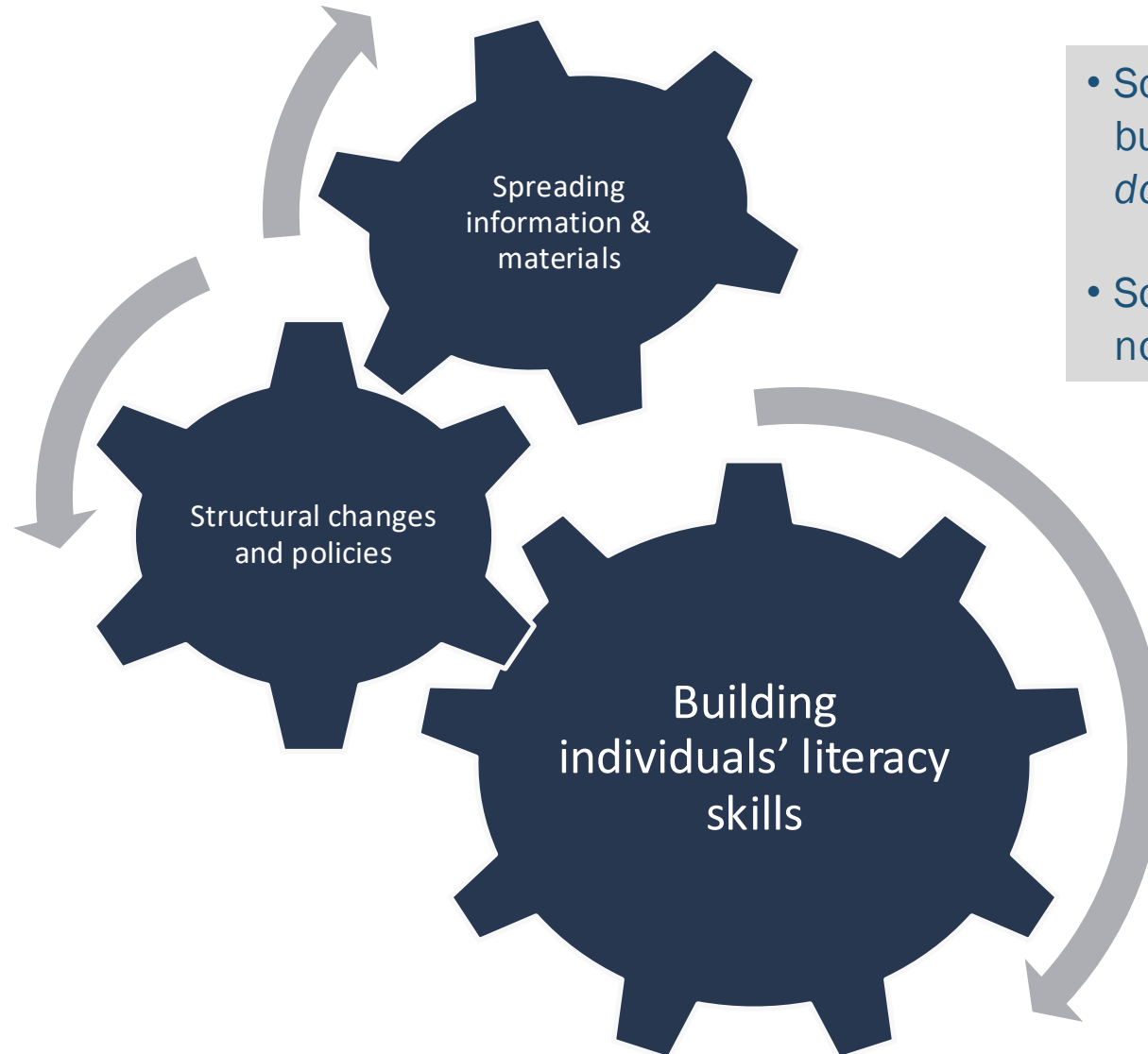
## Pitfall 1. Reacting to Limited Success or Challenges By Adding New (and More) Programs



- Key issues underlying limited success remain unaddressed (e.g., intensity, duration, and scope)

# Key Insights: Pitfalls to Avoid

## Pitfall 2. A Disconnect Between What We've Invested in and What we Expect

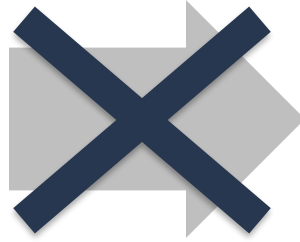


- Some efforts have the *right design*, but implementation *lacks sufficient dosage* for outcomes
- Some efforts sufficiently intensive but not enough of them for scale

## Key Insights: Pitfalls to Avoid

### Pitfall 3. Lack of Sufficient Attention to Program Design

Program or Service



Child Reading  
Outcomes

## Program Design for Impact





# Program Design for Impact



## **FOR EXAMPLE:**

- Whole class instruction
- One-on-one intervention
- Small group instruction
- Center time
- Family engagement activities
- Book buddies
- Read aloud
- Professional Learning Communities
- PD initiatives/sessions
- Tutoring programs
- After-school/summer programming
- Community-wide book drive
- Book bag distribution
- Kindergarten transition fairs
- Parent Home Visitor, Early Intervention visits

## Program Design for Impact

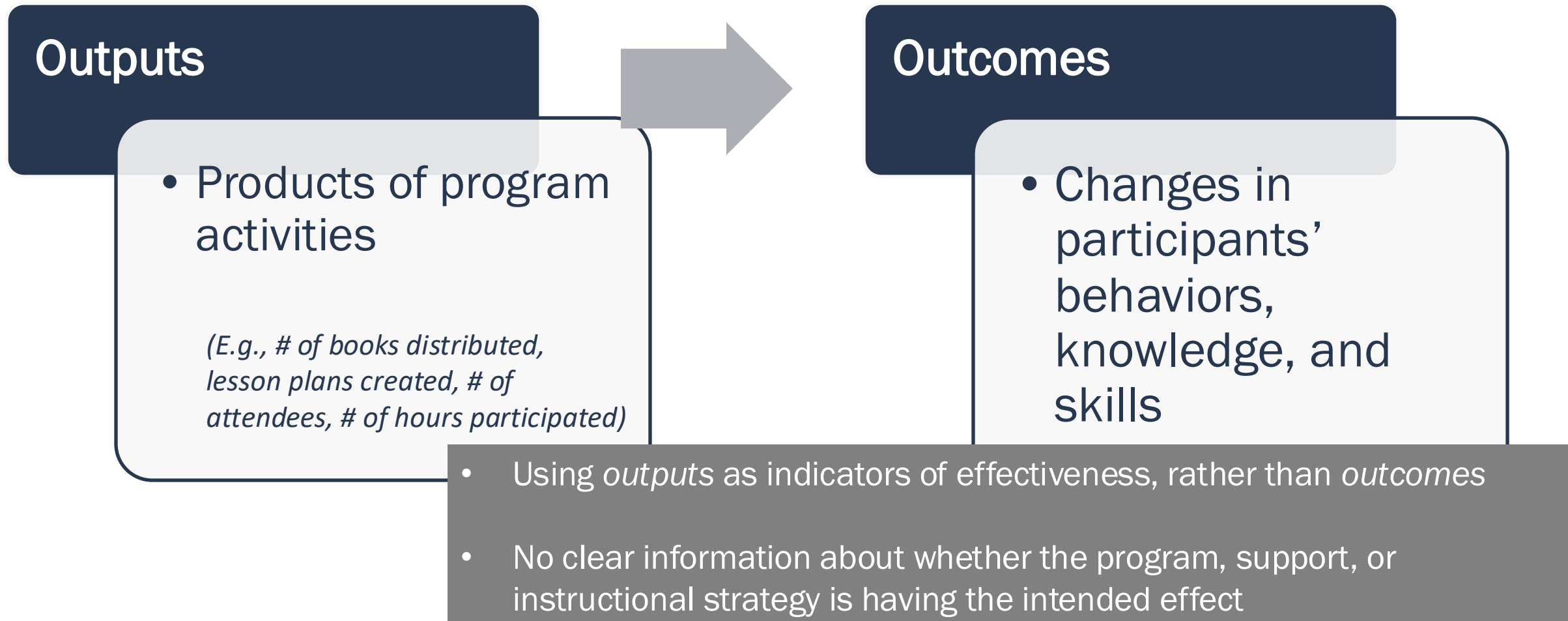


**FOR EXAMPLE:**

- Promoting back-and-forth conversation
- Inciting rich discussions
- Using open-ended questions
- Modeling text-based talk
- Building a reader's self-concept

# Key Insights: Pitfalls to Avoid

## Pitfall 4. No Clear Distinction between Outputs and Outcomes



01

## **Literacy for Today and Tomorrow**

Knowledge, Skills + Competencies for all Learners

---

02

## **Cultivating Literacy in Today's Early Learning Settings**

The Early Learning Study @ Harvard

---

03

## **Implications for Policy and Practice**

Discussion