

# Why the Early Years of Life Matter

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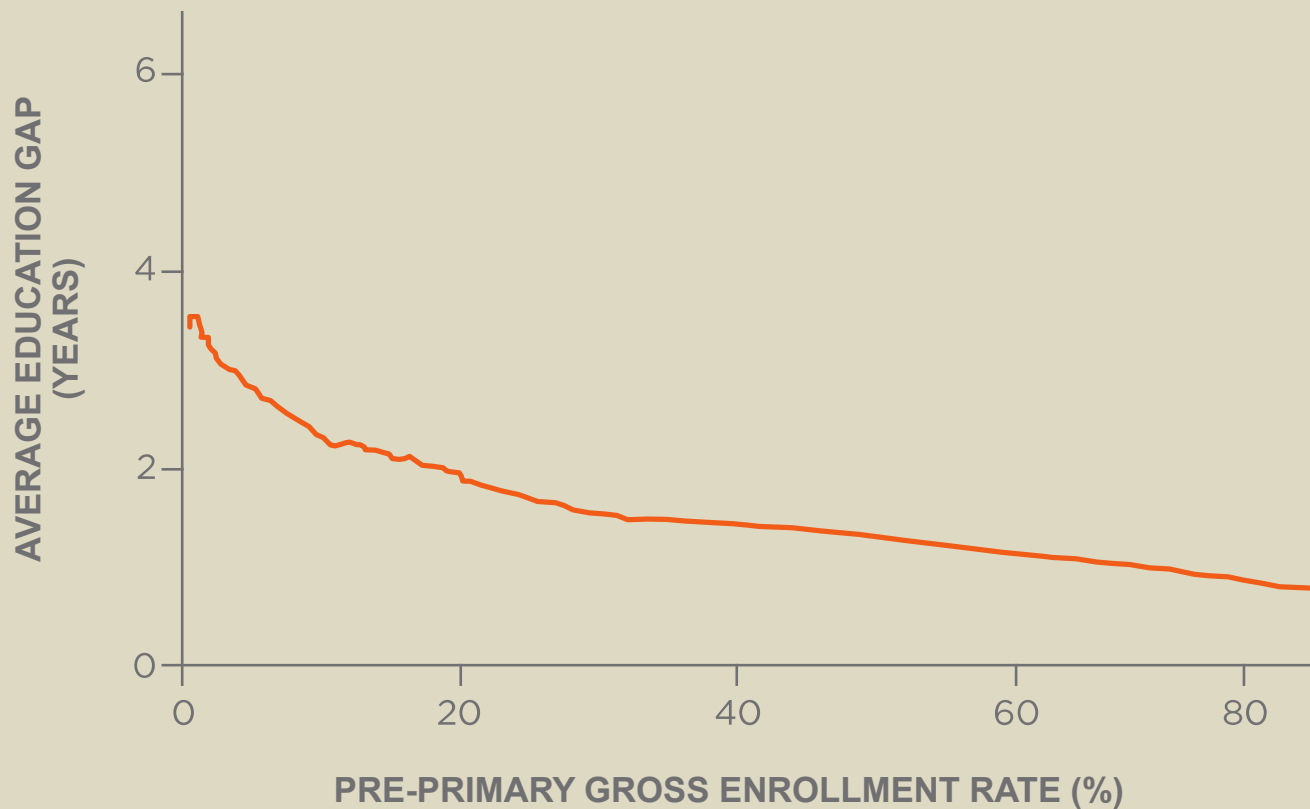
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# Preschool Enrollment Reduces the Achievement Gap

(Data from 73 low- and middle-income countries)




Engle, P., Fernald, L., Alderman, H. et al., 2011



# Early learning begets later learning

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Early learning begets later  
learning and early success  
breeds later success...  
Success or failure at this  
stage lays the foundation for  
success or failure in school...

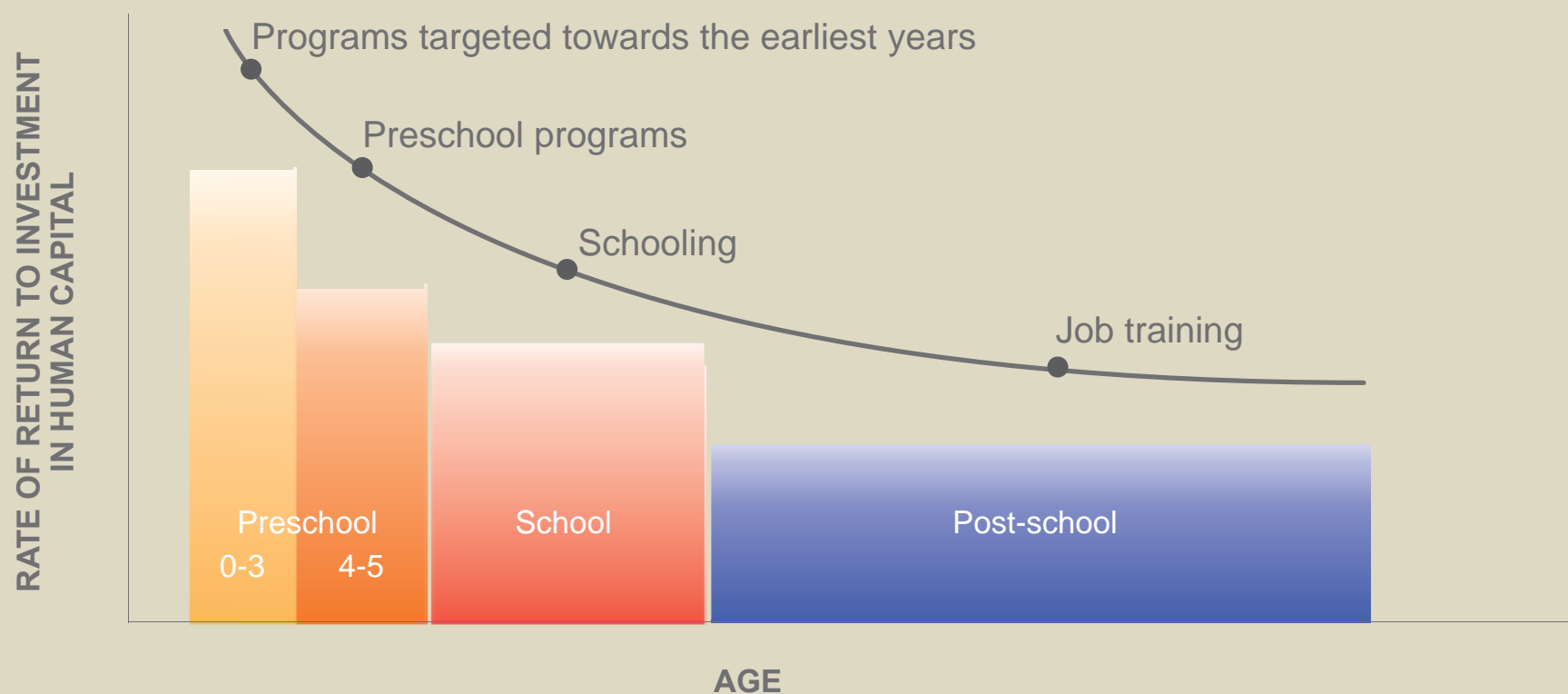
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*James J. Heckman, 2000*



# Investment in human capital as a function of age

*(Rates of Return to an Extra Dollar)*



Source: Dr. James Heckman, University of Chicago

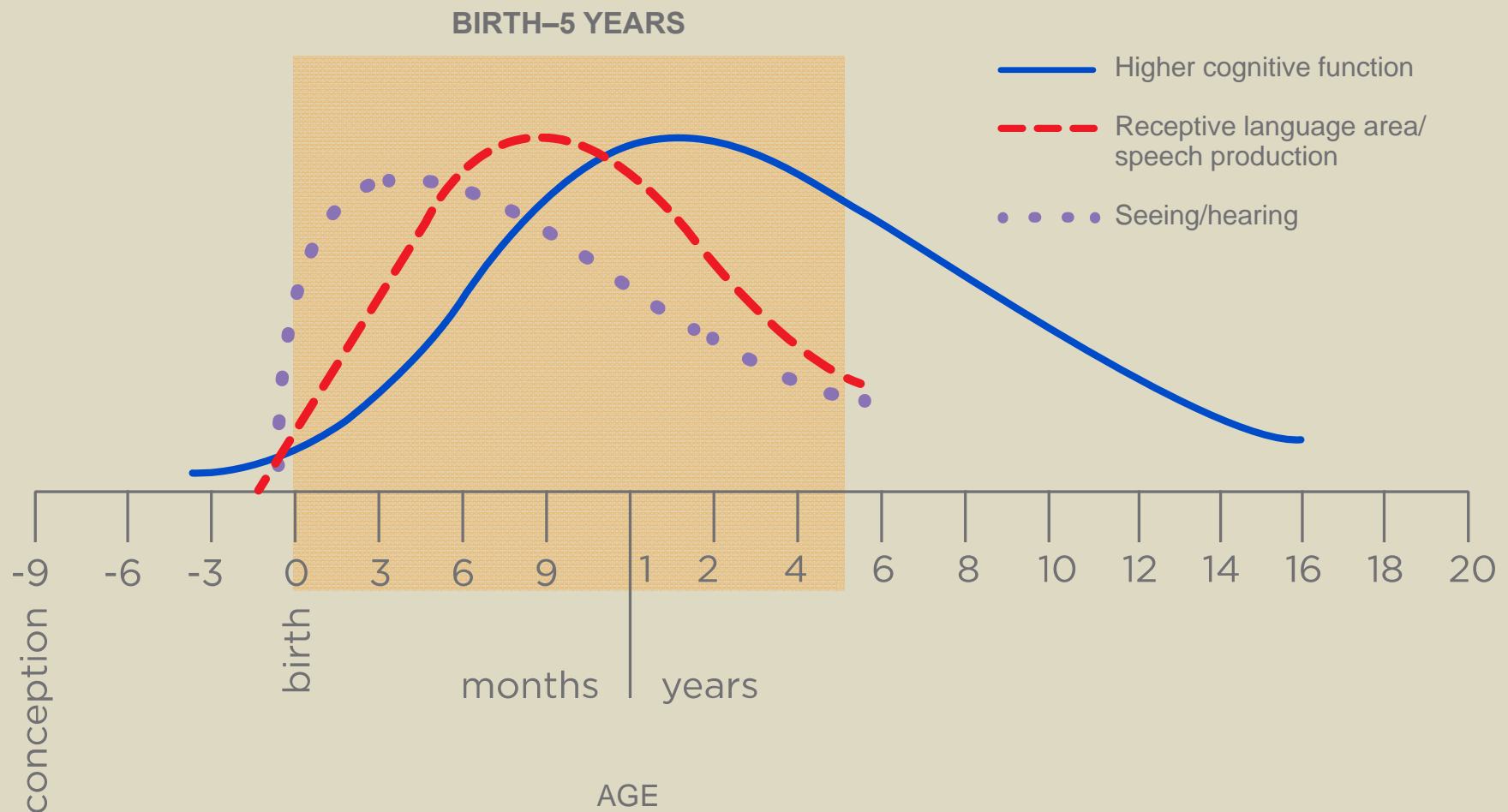
A close-up photograph of a baby's hand reaching out towards several colorful wooden blocks. The blocks are in shades of blue, green, and yellow. The background is a plain, light-colored surface.

# The foundations of brain architecture are established early in life

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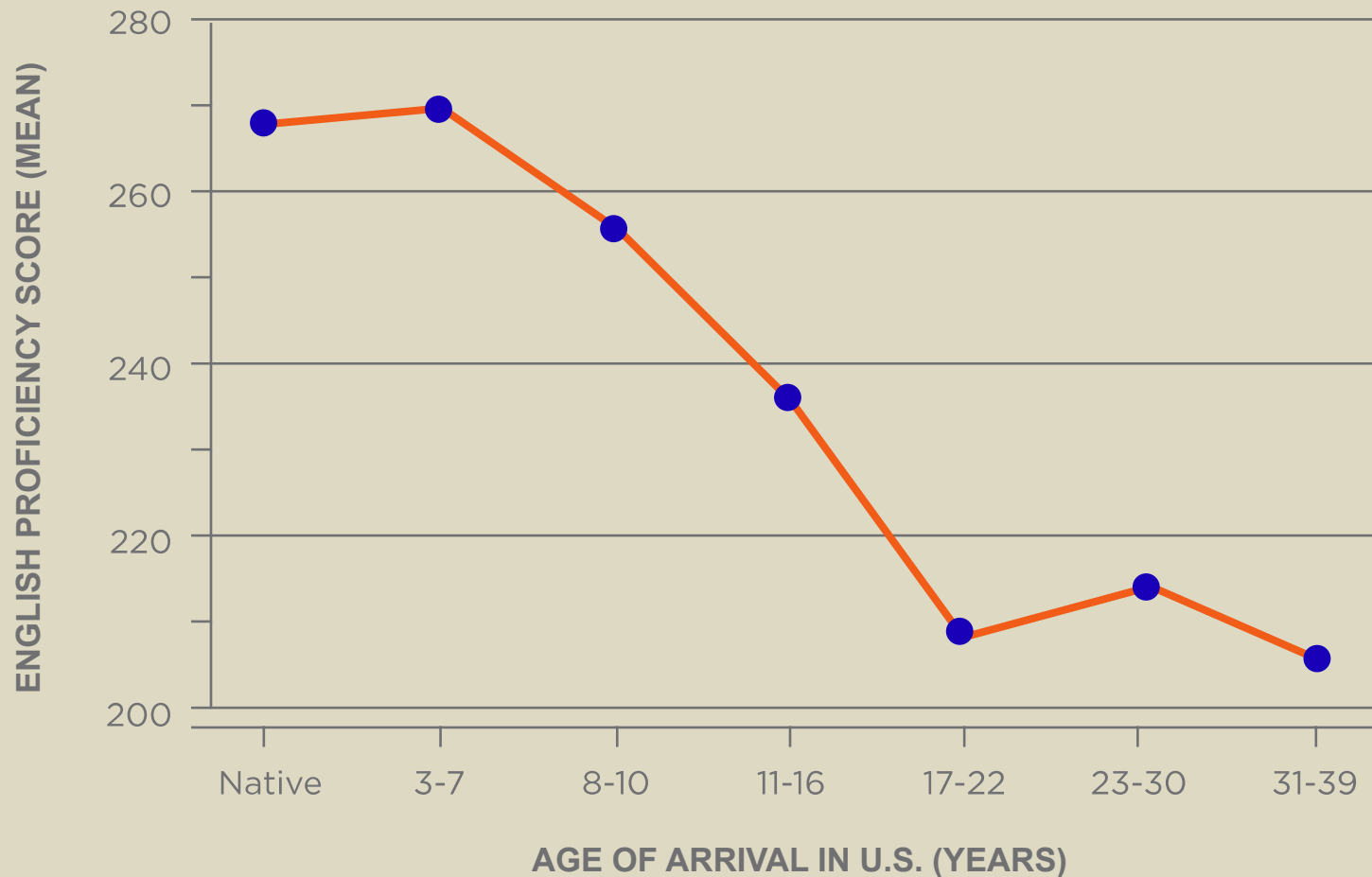
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# Synapse formation in the developing brain




Source: Charles A. Nelson, *From Neurons to Neighborhoods*, 2000

# Sensitive periods in the acquisition of language



From Johnson & Newport, 1989




A young girl with curly, light brown hair and freckles is standing in front of a green wall. She is wearing a bright pink short-sleeved polo shirt. The wall behind her has two windows with red frames. The ground is a light-colored concrete sidewalk.

# Ability to alter learning and behavior decreases with age

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A young girl with curly, light brown hair and freckles is standing in front of a green wall with windows. She is wearing a bright pink polo shirt. The text is overlaid on the left side of the image.

Although the window  
of opportunity for  
development remains  
open for many years,  
the costs of remediation  
grow over time.

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*National Scientific Council on the Developing Child*





# The engine of change in early childhood

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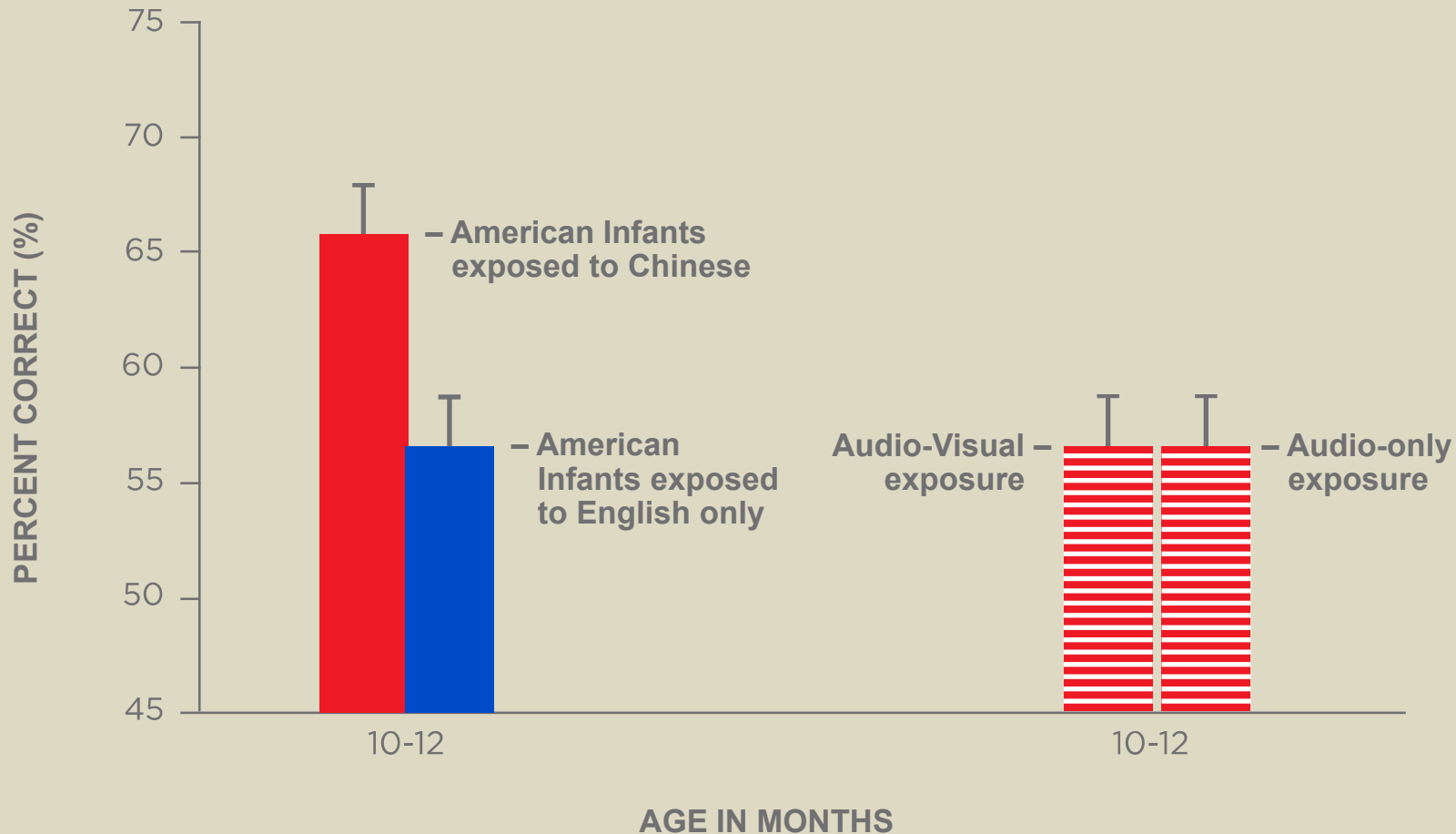
# Relationships

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# Impact of relationships on the acquisition of phonetic skills in infancy



Kuhl P K et al. PNAS 2003; 100:9096-9101.



**Nurturing relationships  
and responsive interactions  
provide the strongest  
foundation for later learning,  
behavior, and health.**

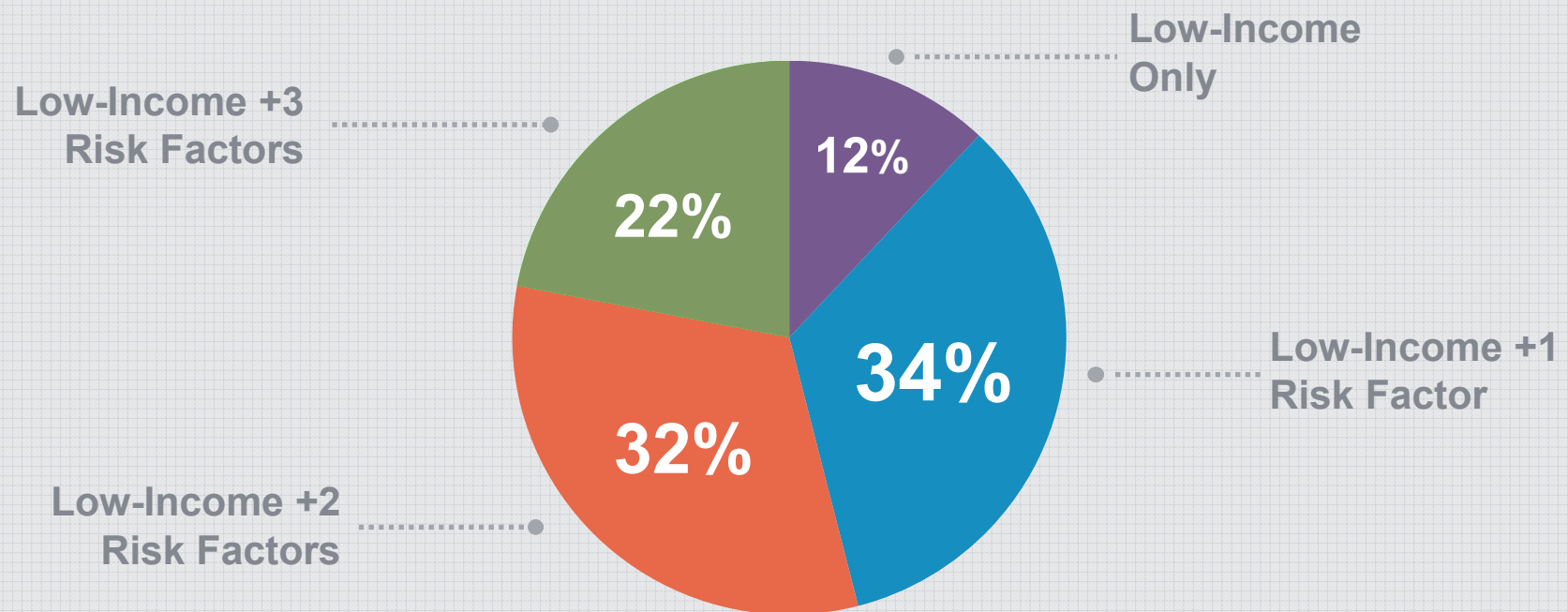


# Why some children don't thrive

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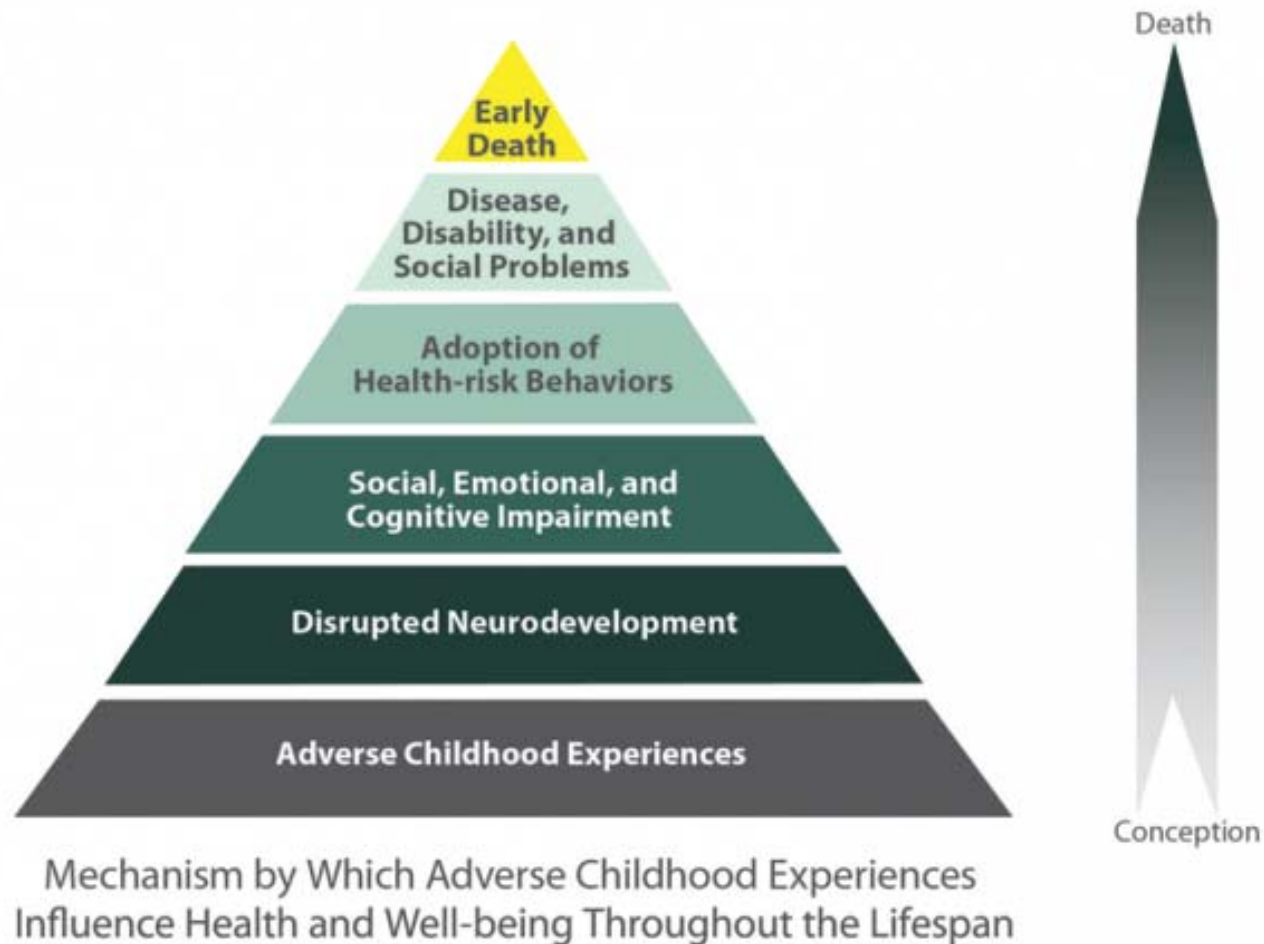
# Interaction of Poverty and Risk Factors ( $\geq 200\%$ poverty)



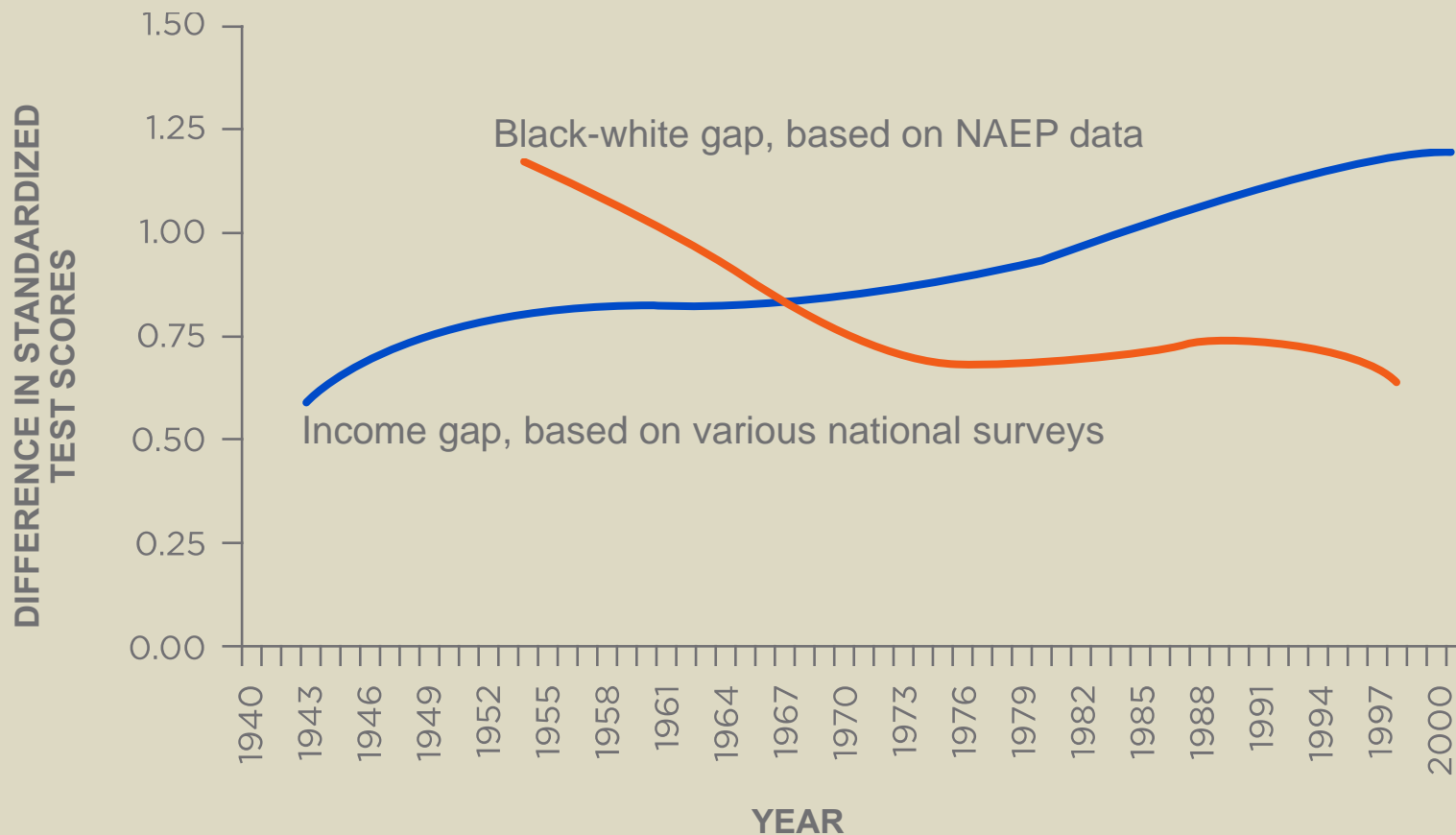
Source: Urban Institute (2008)



# Impact of ACEs



# Estimated gaps in reading achievement between black and white and high- and low-income students, by birth year



From: G.J. Duncan & R.J. Murnane (Eds.) (2012), *Whither opportunity? Rising inequality, schools, and children's life chances*. New York: Russell Sage Foundation. (Chapter 1)



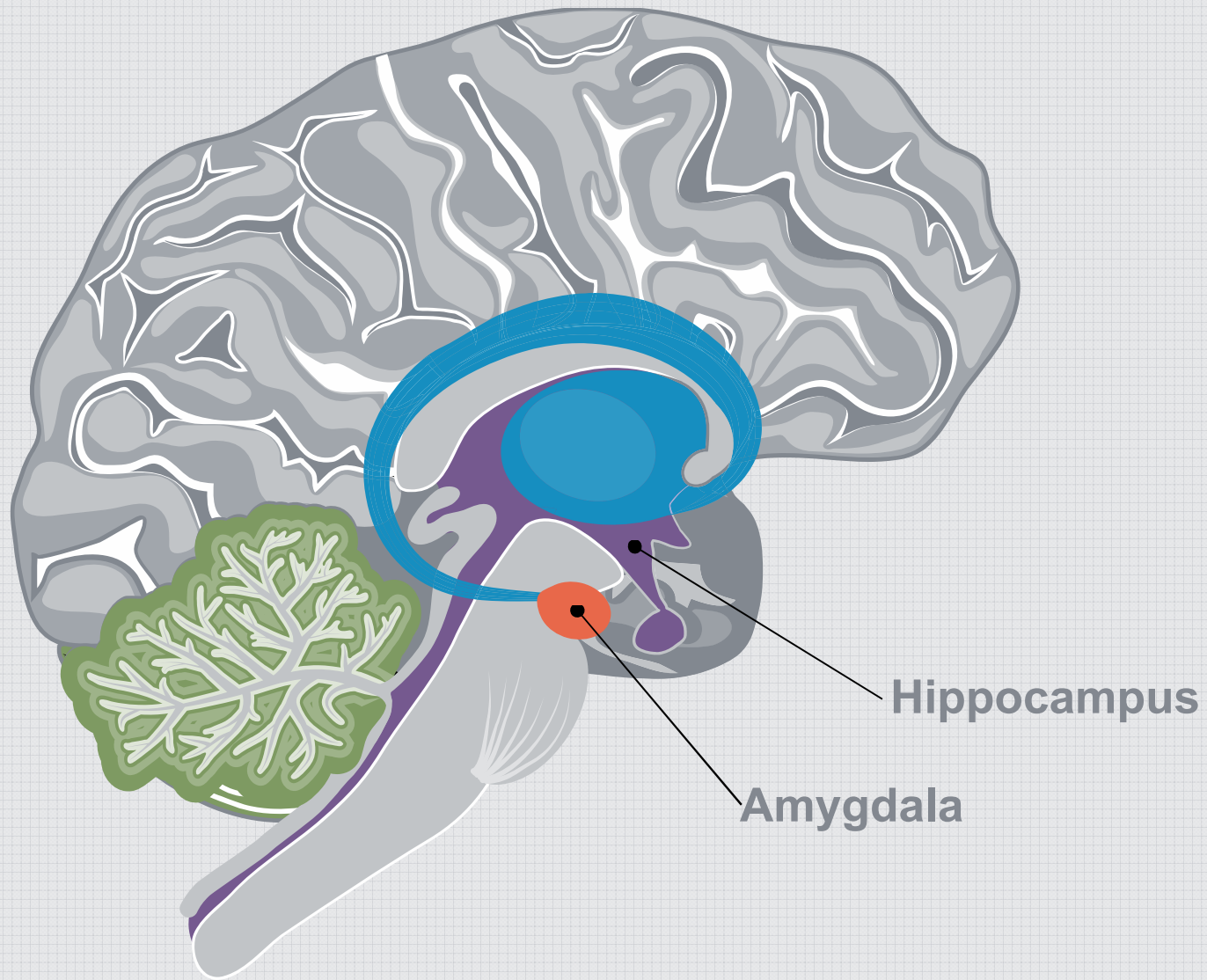
**Poverty can  
shrink a child's  
brain beginning  
at birth**



**Brains of children from families in the lowest income bracket are up to 6% smaller than those of children from affluent families**

*Noble et al. (2015)*

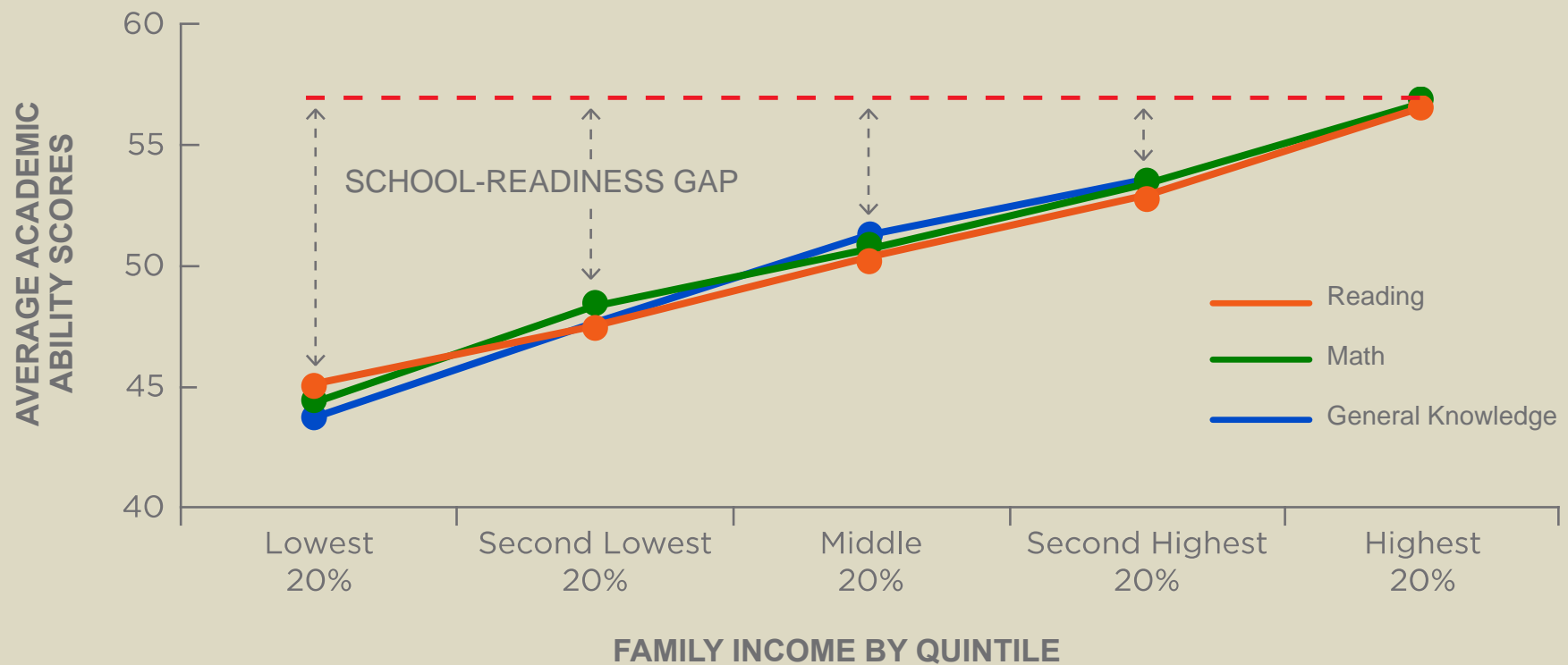






**Economic  
disparities  
can have  
long-term  
effects**

# Family income and the school-readiness gap



Source: Analysis of data from the Early Childhood Longitudinal Study, Kindergarten class of 1998-99.  
(See [NCES.ED.GOV/ECLS/KINDERGARTEN.ASP](http://NCES.ED.GOV/ECLS/KINDERGARTEN.ASP)) By W. Steven Barnett and Milagros Nores for The National Institute for Early Education Research.

# Closing the Gap By Changing Children's Early Life Experiences

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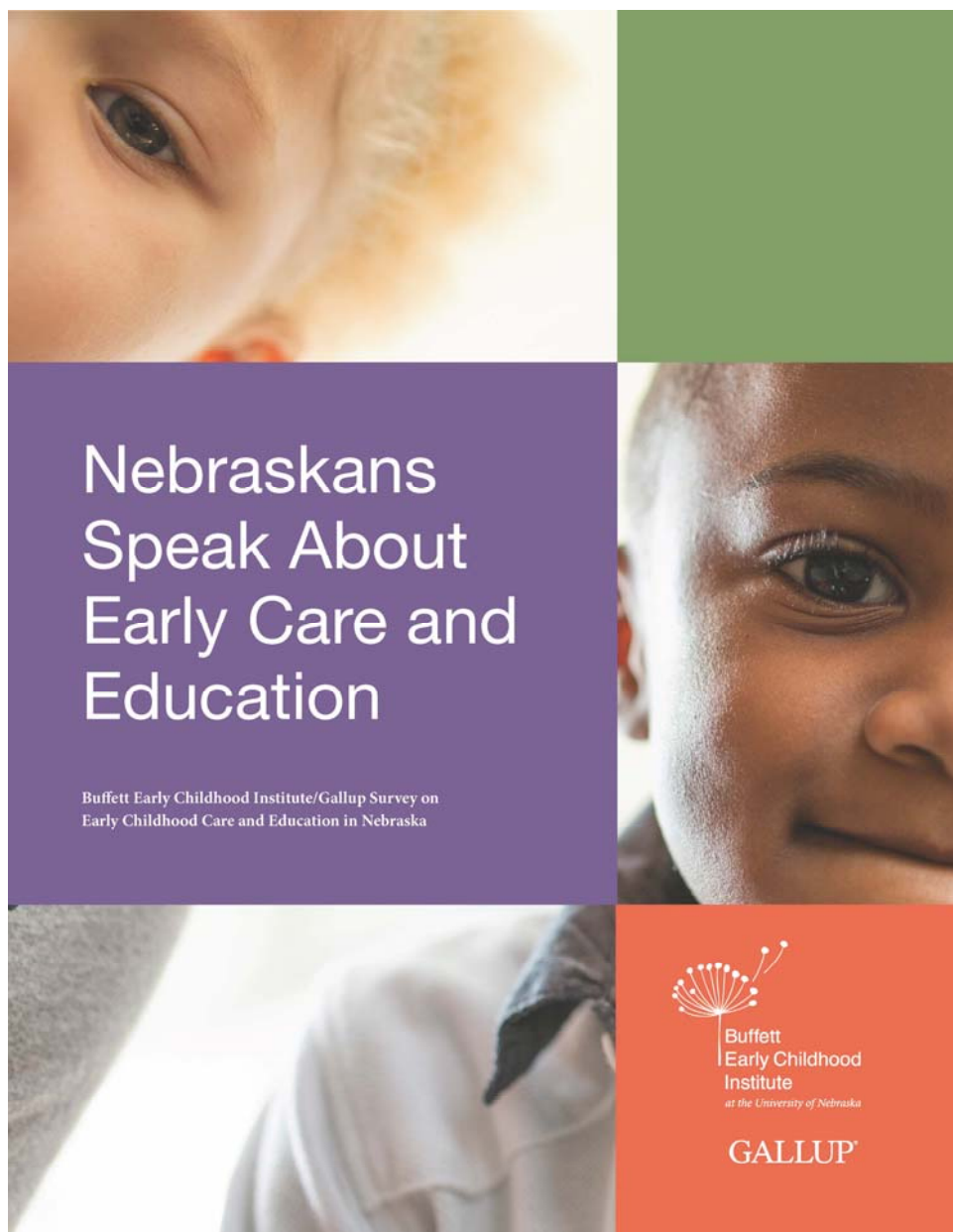
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Buffett  
Early Childhood  
Institute

*at the University of Nebraska*



# Nebraskans Speak About Early Care and Education

Buffett Early Childhood Institute/Gallup Survey on  
Early Childhood Care and Education in Nebraska

## Buffett Institute/ Gallup Survey on Early Care and Education in Nebraska

# Purpose of Survey



1. Understand Nebraskans' attitudes, beliefs, and knowledge about early childhood care and education.
2. Inform our investment in early care and education.
3. Gather opinions about the state's support for young children at greatest risk.

# Main Report Takeaways

1. Early care and education is important to Nebraskans.
2. More affordable and available high-quality child care is needed.
3. Nebraskans believe the state should invest more in early care and education.
4. Nebraskans voice strong support for children in greatest need.





# Concern for the Future

37% & 40%

OF NEBRASKANS WITH  
YOUNG CHILDREN

OF NEBRASKANS WITH NO  
CHILDREN

believe that children's lives will get better  
10 years from now.

# Superintendents' Early Childhood Plan

Learning Community  
Of Douglas &  
Sarpy Counties



# The Goal

Increasing opportunity to learn and eliminating income- and race-based achievement gaps by the end of Grade 3





# Three Levels of Support

1. Professional Development for all
2. Customized Assistance to selected school district, and community-based organizations
3. Full Implementation (Birth through Grade 3 at 12 school sites)




# Achievement Gap Challenge: Big Ideas



# Birth Through Grade 3

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A close-up photograph of a man with dark hair and a beard, wearing a black t-shirt and a small hoop earring, kissing a young child on the cheek. The child is smiling and wearing an orange and white plaid shirt. The background is blurred, suggesting an outdoor setting.

# Parent and Family Support


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# School as Hub

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# Developmental Change



A photograph of a young boy and an adult woman sitting at a wooden table. The boy, on the left, is wearing a grey and maroon zip-up jacket with 'ROCK' and 'Wash. State' visible on it. He is looking down at a book or paper on the table. The woman, on the right, has blonde hair and is wearing a blue and white patterned shirt. She is also looking down at the book. The background shows a classroom setting with shelves and toys.

# Professional Learning and Support

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A photograph of two young children crouching on a paved surface, drawing with chalk. The child on the left is a boy with light brown hair, wearing a dark blue long-sleeved shirt with the text 'THE CRAPER' and 'SHEEPUS EXPOS' visible. He is focused on drawing a pink line. The child on the right is a girl with dark hair in pigtails, wearing leopard print leggings and red sneakers with white laces. She is holding a piece of light blue chalk. The background shows a brick building and a clear blue sky. The text 'Persistence of Effort Yields Persistence of Effect' is overlaid in white on the lower part of the image.

# Persistence of Effort Yields Persistence of Effect



# The “Ready Child” equation



A chalkboard with a wooden frame, displaying the 'Ready Child' equation. The equation is written in white chalk and consists of four terms: 'Ready Families', 'Ready Communities', 'Ready Services', and 'Ready Schools', each preceded by a plus sign. These terms are arranged in two rows. A horizontal chalk line separates the terms from the result, '= Ready Children', which is written in a larger font below the line.

$$\begin{array}{ccccccc} \text{Ready} & & & & \text{Ready} & & \\ \text{Families} & + & & & \text{Communities} & & \\ & & + & & & & \\ & & & & \text{Ready} & + & \text{Ready} \\ & & & & \text{Services} & & \text{Schools} \end{array}$$

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$$= \text{Ready Children}$$



# Start early. Start well.



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