

# Age as an equity issue in early learning and development programs?

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NIEER

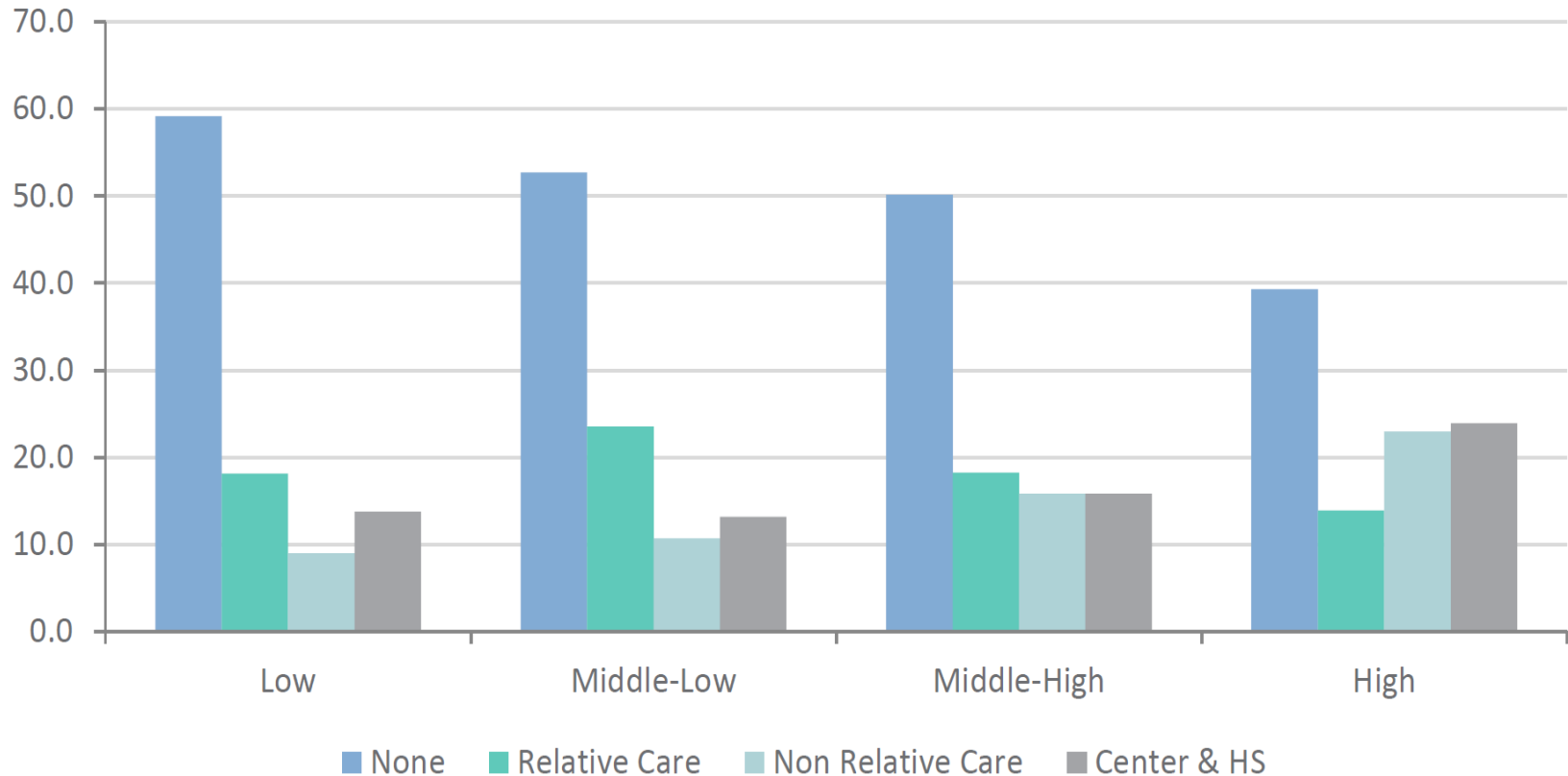
# Inequities in Quality and Access by Age and Family Income

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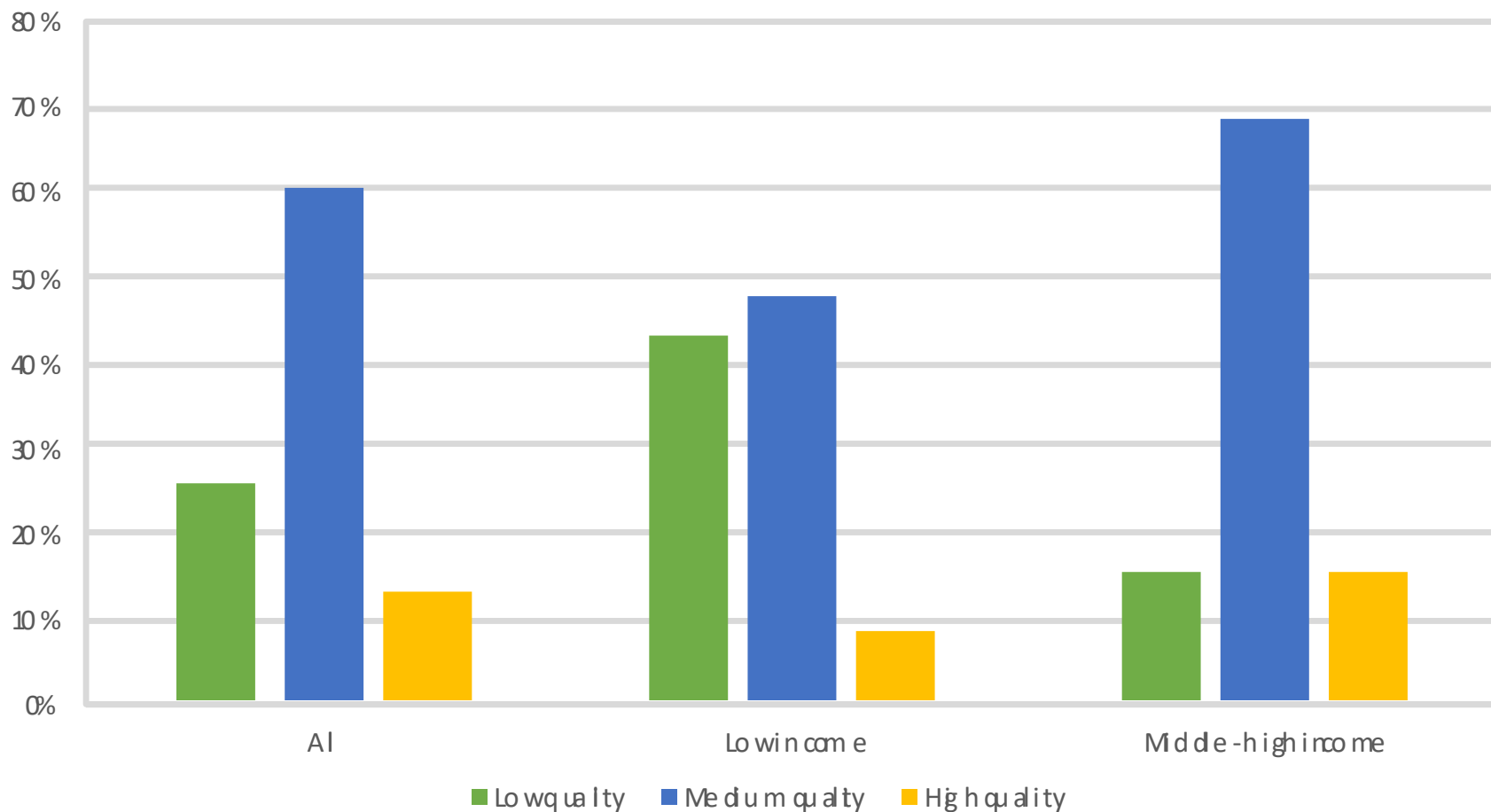
# Toddler Care Arrangements by Type and Income



Nores & Barnett, 2014



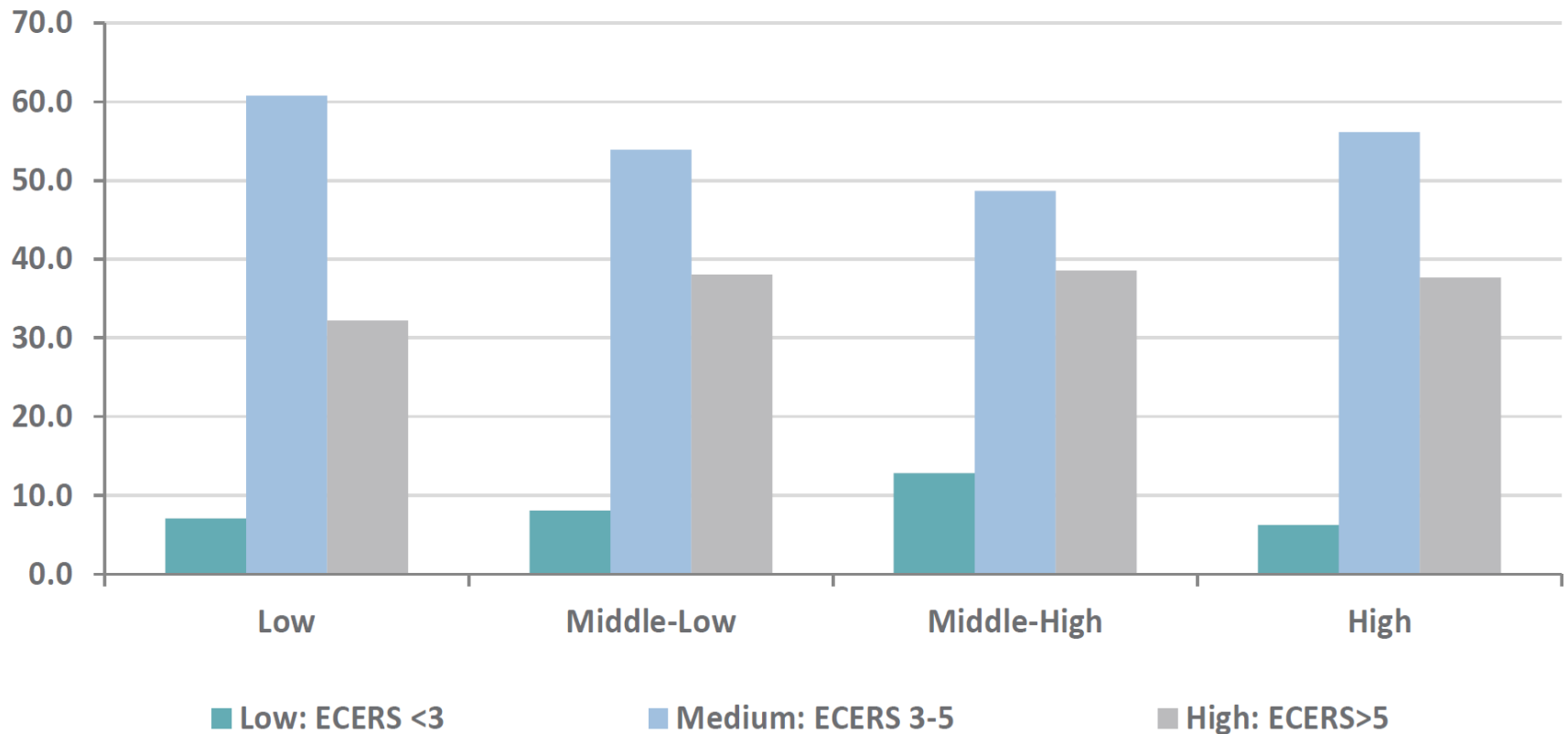
# Quality of Toddler Care by Income



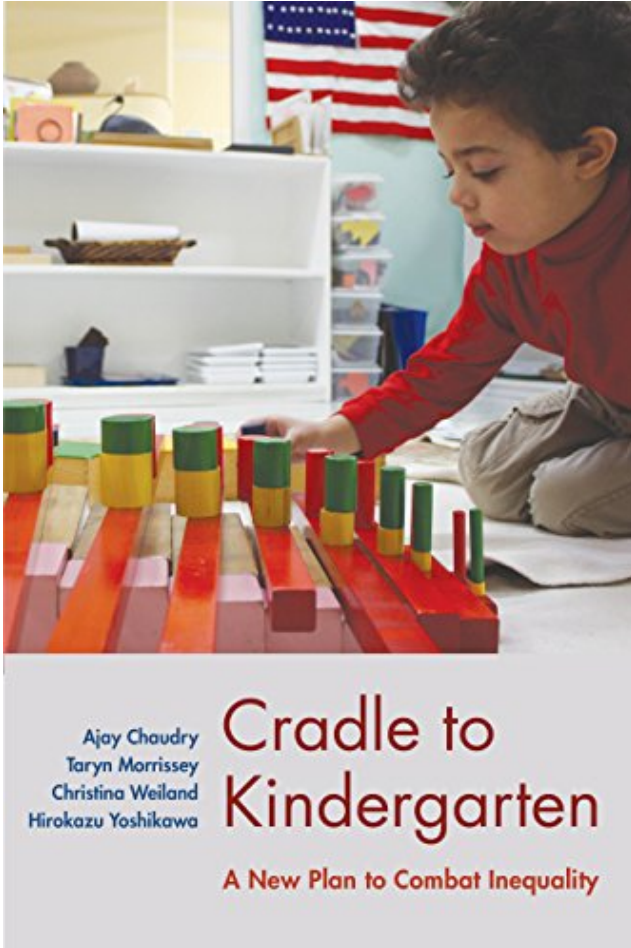
Ruzek, Burchinal, Farkas & Duncan (2014)



# Quality of Four Year-Olds Care by Income



# Early Learning and Development “Straw” Plan



- Paid parental leave,
  - Guaranteed childcare assistance for working parents,
  - Universal early education starting at age 3, and
  - Reimagined Head Start that focuses health and education interventions for children under age 3 in areas of concentrated poverty
- + **Coherent P-3 system\***

\*Stipek, et al (2017 [https://www.srcd.org/sites/default/files/documents/spr\\_30\\_2\\_final.pdf](https://www.srcd.org/sites/default/files/documents/spr_30_2_final.pdf))

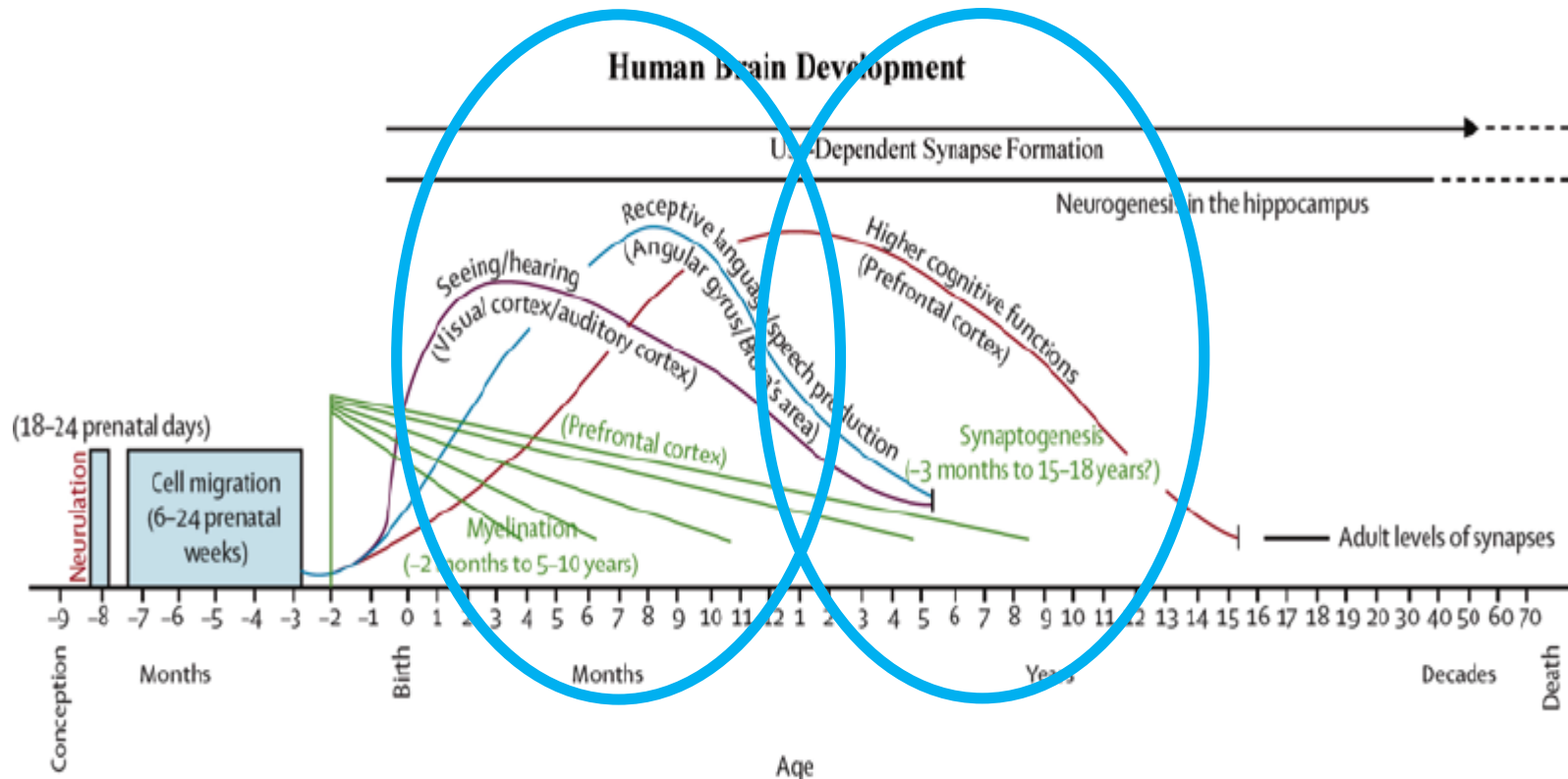


# ECE “Fake News”

- “90% of the child’s brain is developed by age 3 . . . 5 . . . 6”
- “30 million word gap”
- Heckman curve and ROI is 1:7, 1:17, 1:3
- Pre-k effects fade out



# Brain Growth (Volume) vs Elaboration





# Language “Gap”: What the Truth?

- According to Sperry and colleagues the word gap may be closer to 4 million at age 3.

<https://onlinelibrary.wiley.com/doi/abs/10.1111/cdev.13072>

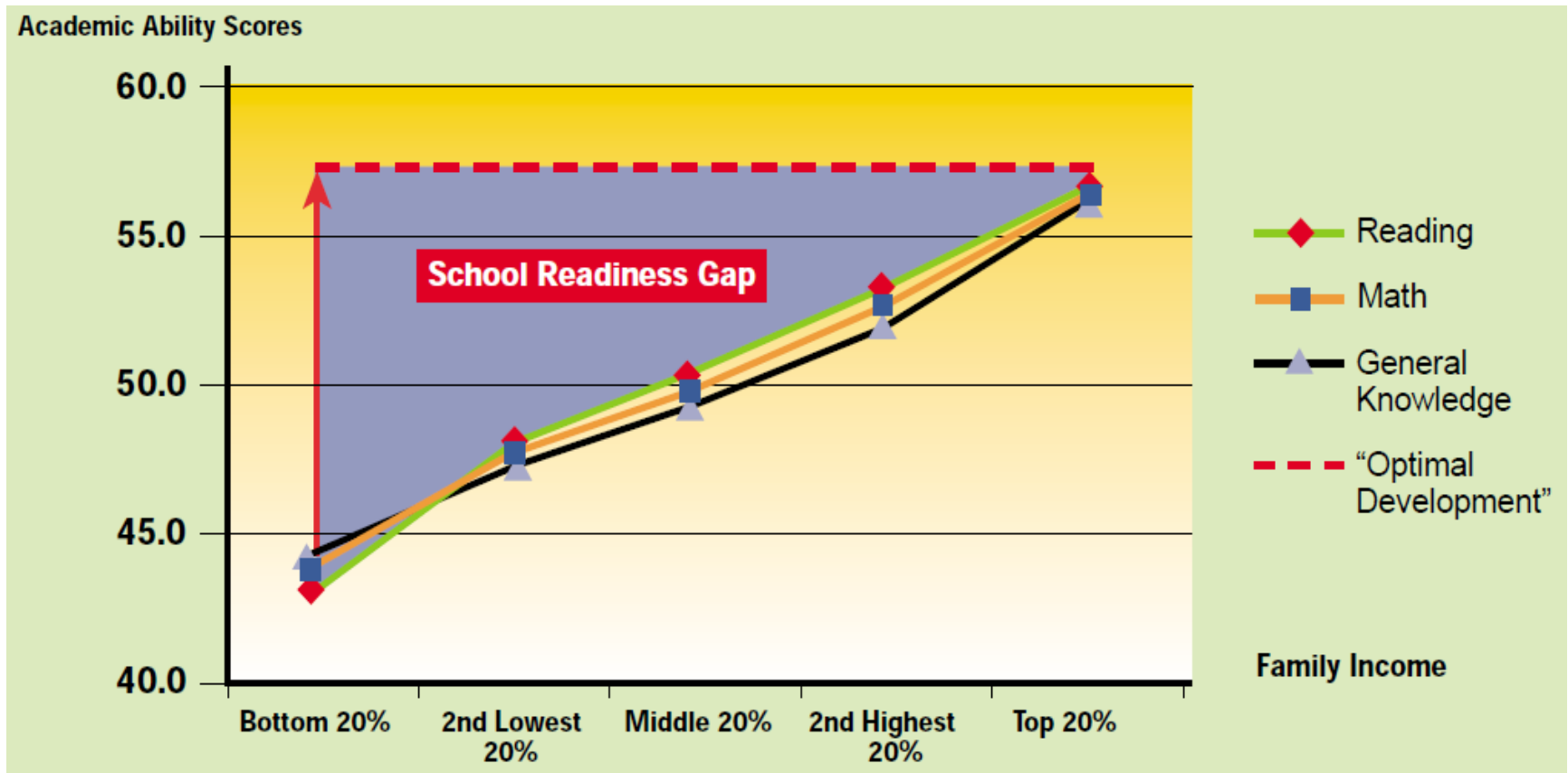
Hirsch-Pasek and Golinkoff response defends the original findings:

<https://www.brookings.edu/blog/education-plus-development/2018/05/21/defending-the-30-million-word-gap-disadvantaged-children-dont-hear-enough-child-directed-words/>

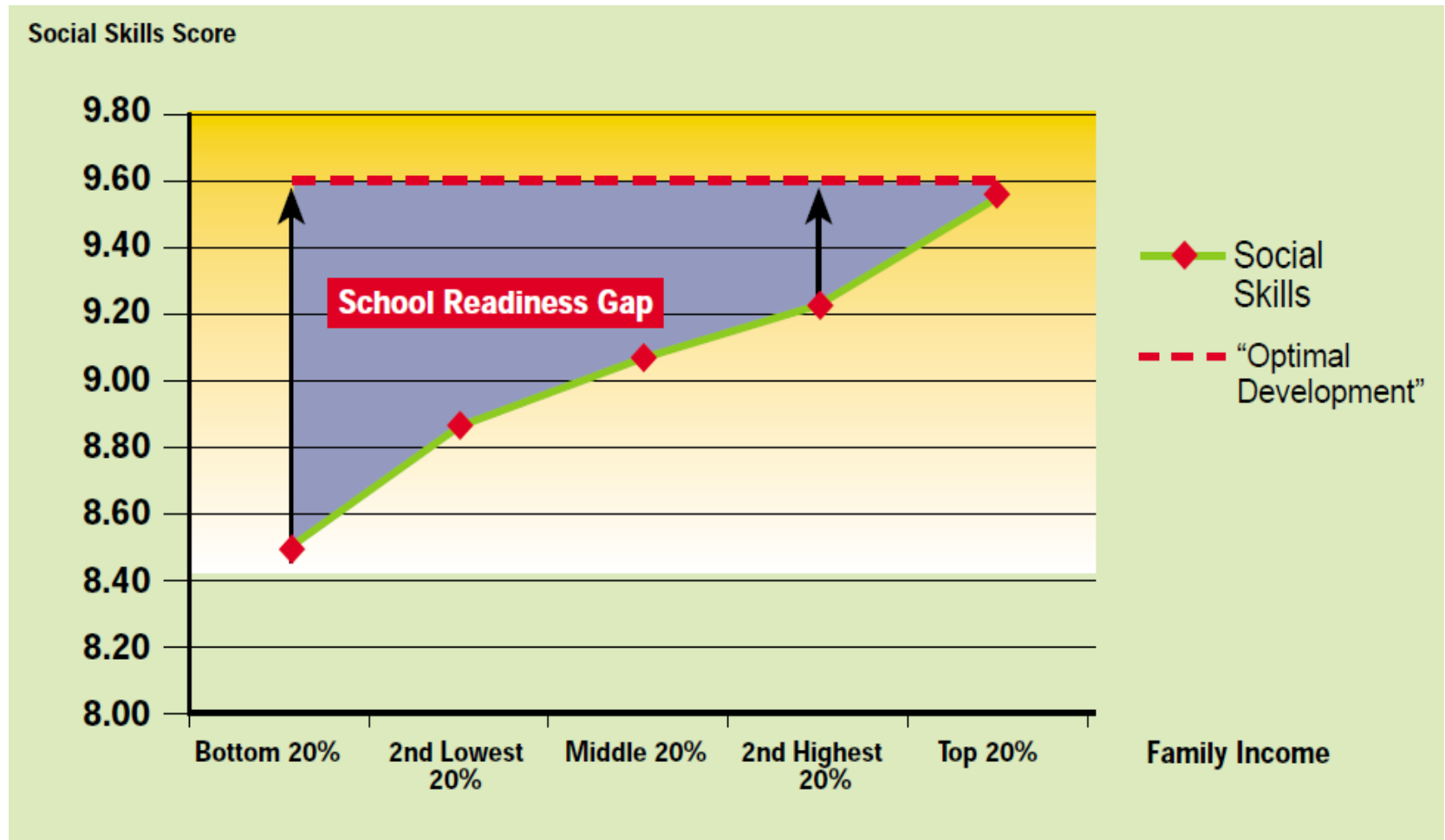
- The “readiness gap” at k entry in language is approximately 18 months.
- As the next slides depict the gap is not just between low-income and middle income.



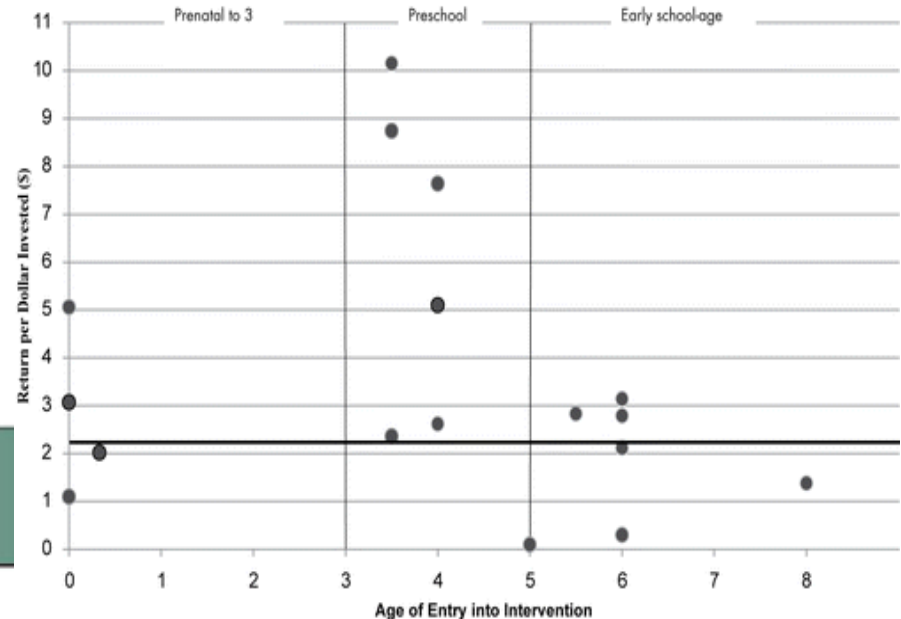
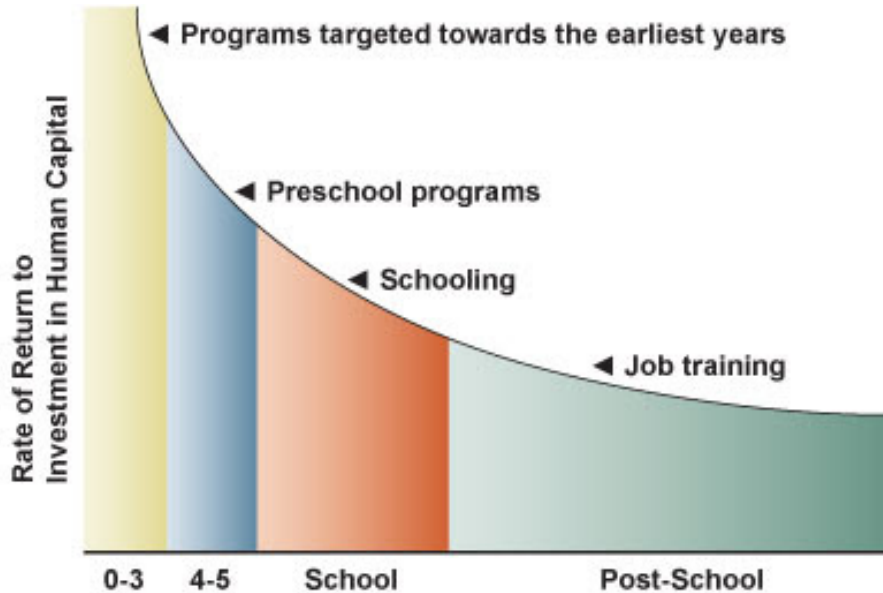
# Academic Abilities at K Entry by Family Income



# Social Skills at K Entry by Family Income



# Return on Investment: Theory to Actual



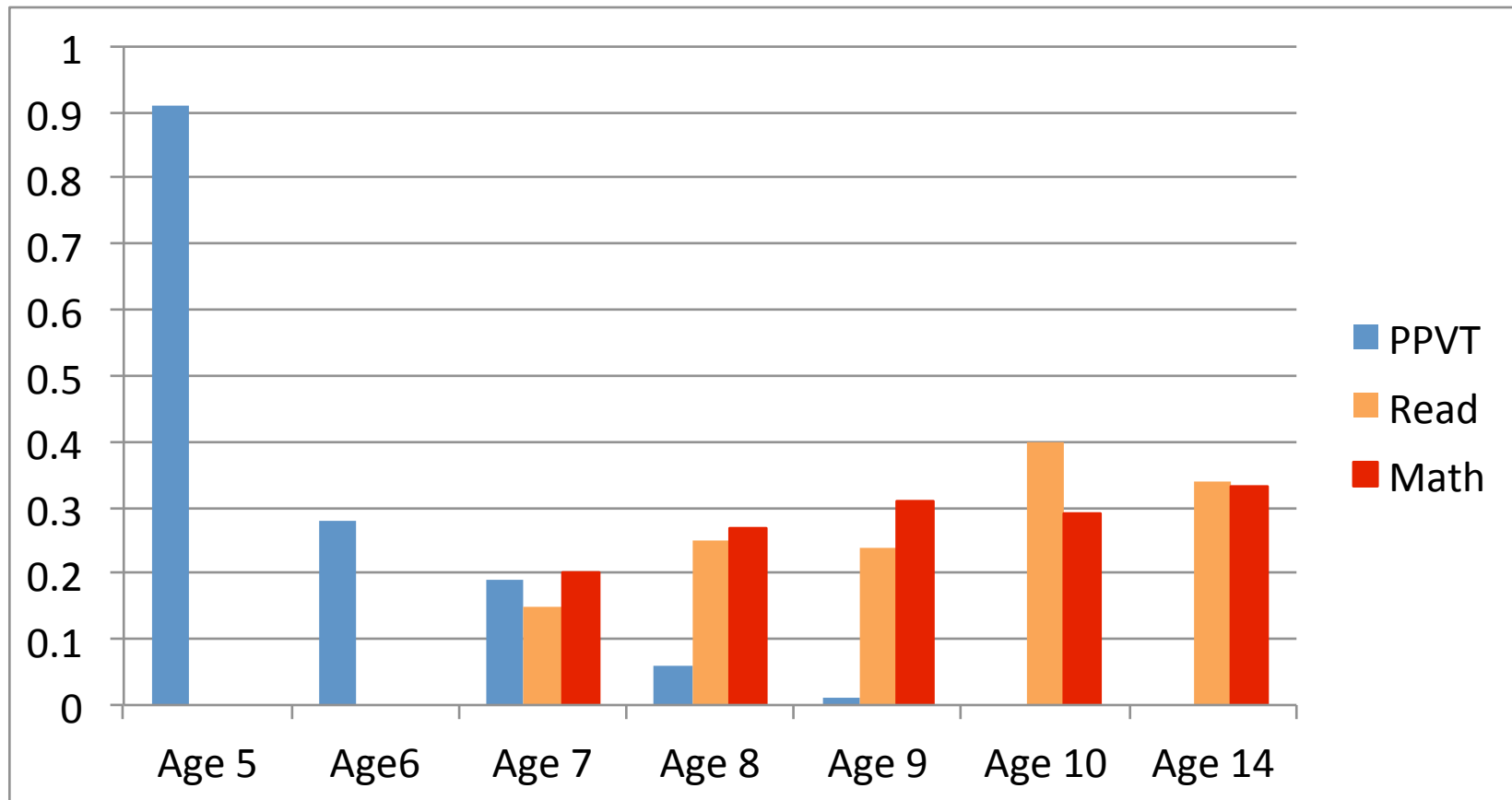
Heckman equation.org

AR Reynolds AJ, Temple JA. 2008.  
Annu. Rev. Clin. Psychol. 4:109-39.

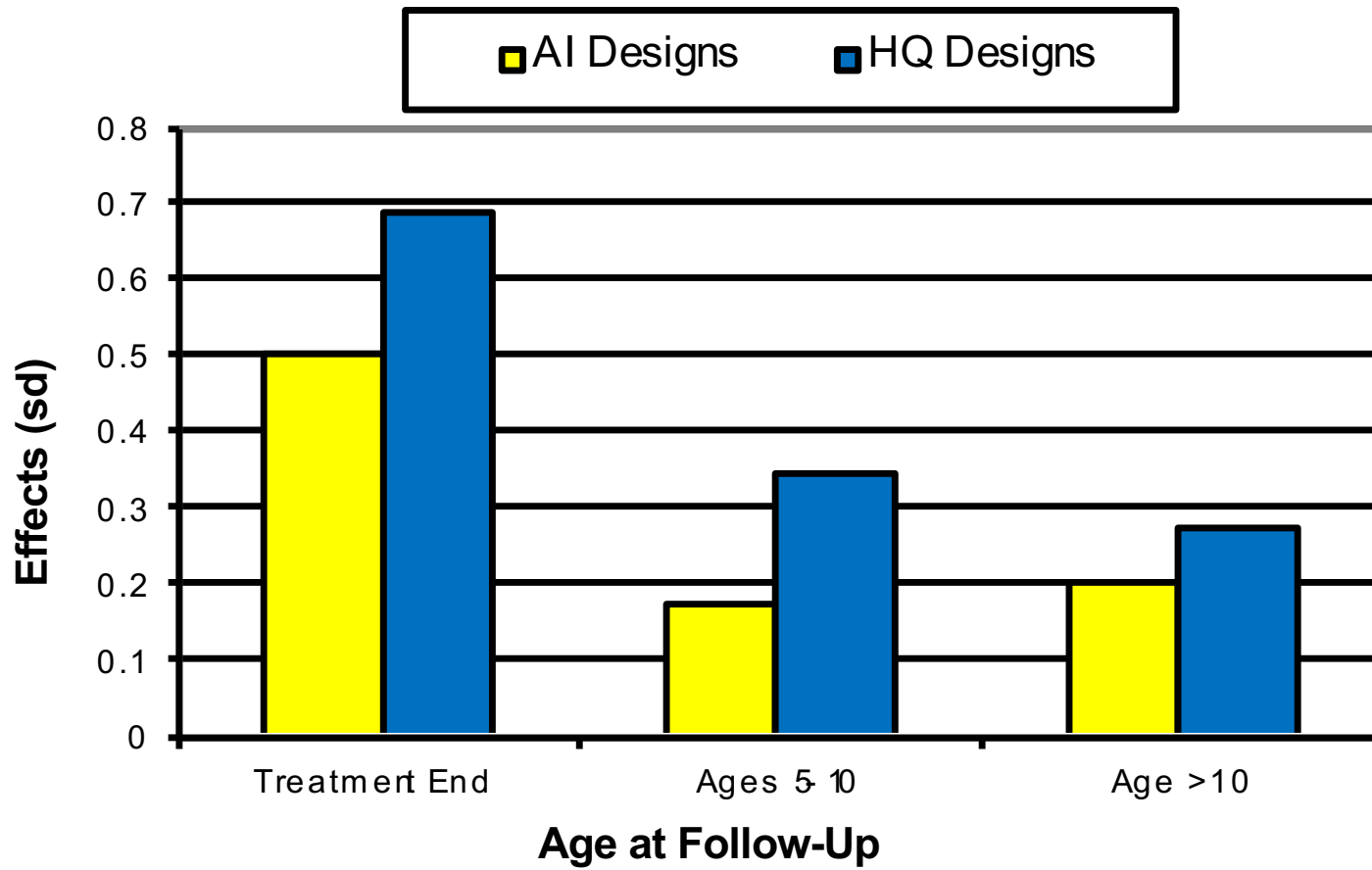
The existing data don't fully support Heckman's theory. It is clear that infants and toddlers need and deserve access to safe and nurturing experiences at all times. What is not clear is how to deliver programs at this age, at scale that actually result in lasting educational benefits.



# Pre-K Effects don't fade out but they do fade: Perry IQ and achievement effects over time



# Cognitive gains from Prek programs for low-income children in the US by rigor of research design

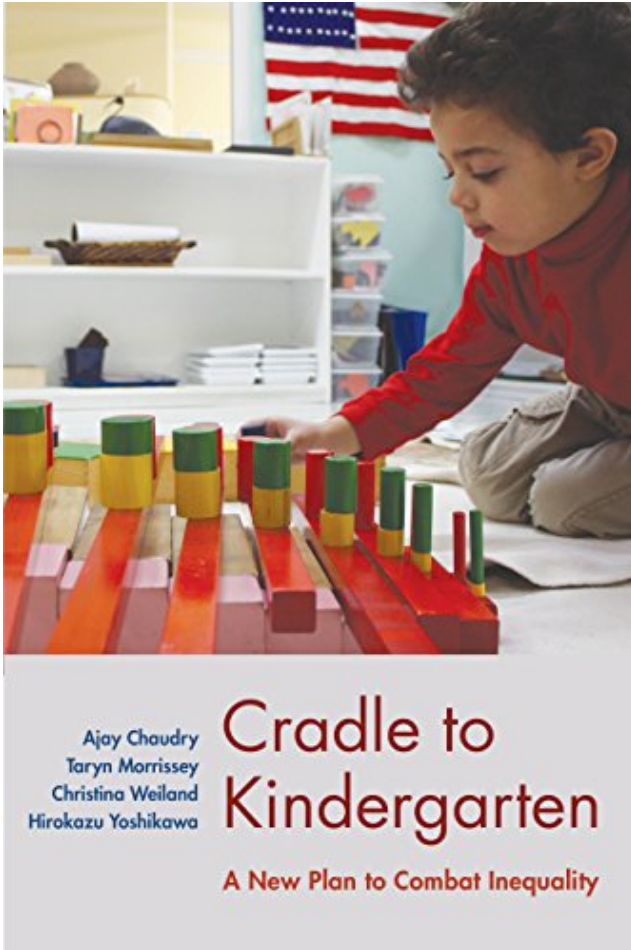


# Fade-out, Fading or Catch Up: What explains mixed results?

- Program design failure: replicate all of the components of the best programs and focus on coherence across 0-8 years
- Implementation failure: plan, analyze, and coach for fidelity and continuous improvement
- Research study design failure - imprecise or no measurement of:
  - Components of the prek program – a rose is not a daisy is not a petunia
  - 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)



# Is This the Recipe for Equity 0 – 8 in Your State?



- Infants: Paid parental leave,
  - 0 – 13: Guaranteed childcare assistance for working parents,
  - 3 & 4: Universal early education starting at age 3, and
  - 0-3: Reimagined Head Start that focuses health and education interventions for children under age 3 in areas of concentrated poverty
- + 3 – 8: Coherent P-3 system**

