

Universal vs. Targeted

HCRC Brown Bag Seminar
Nov. 20, 2012



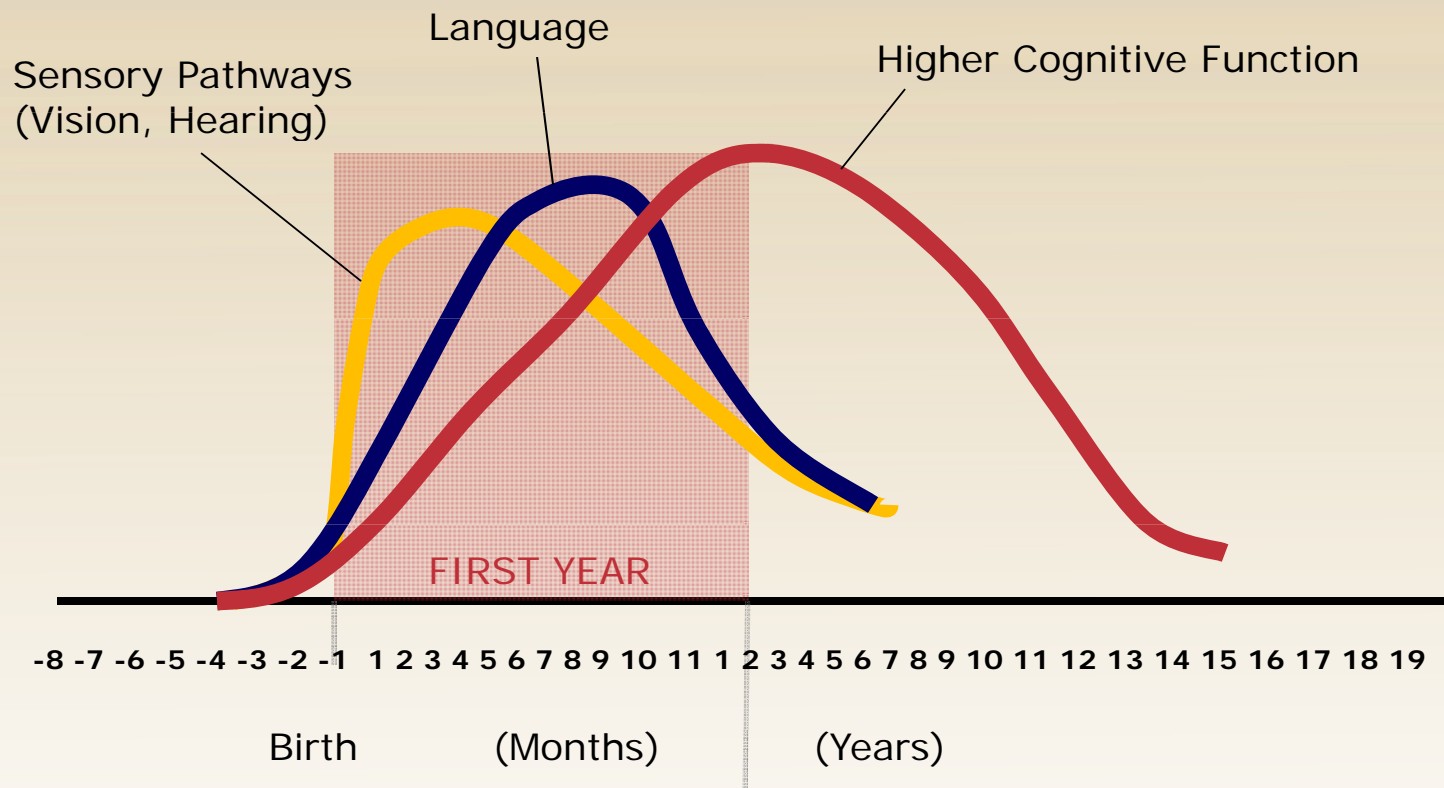
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Federal Reserve Bank of Minneapolis



Human Brain Development

Synapse Formation Dependent on Early Experiences



Source: Nelson (2000)



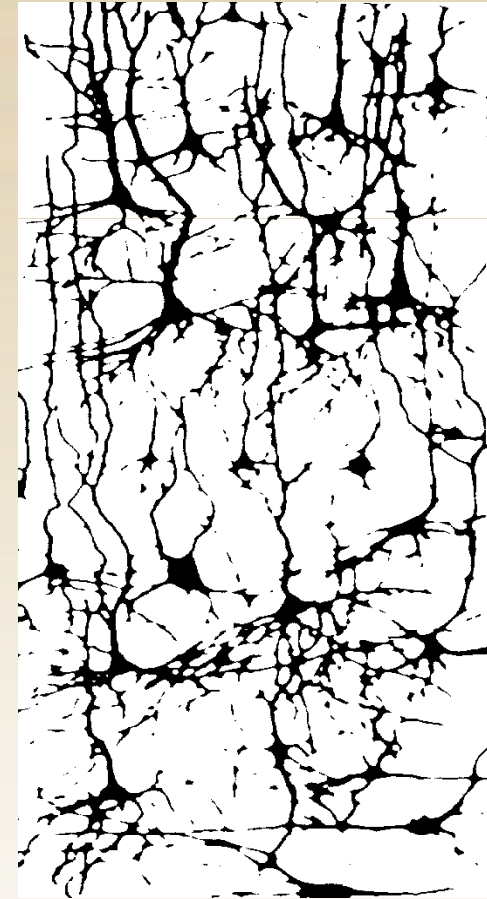
Human Brain
at Birth



6 Years Old



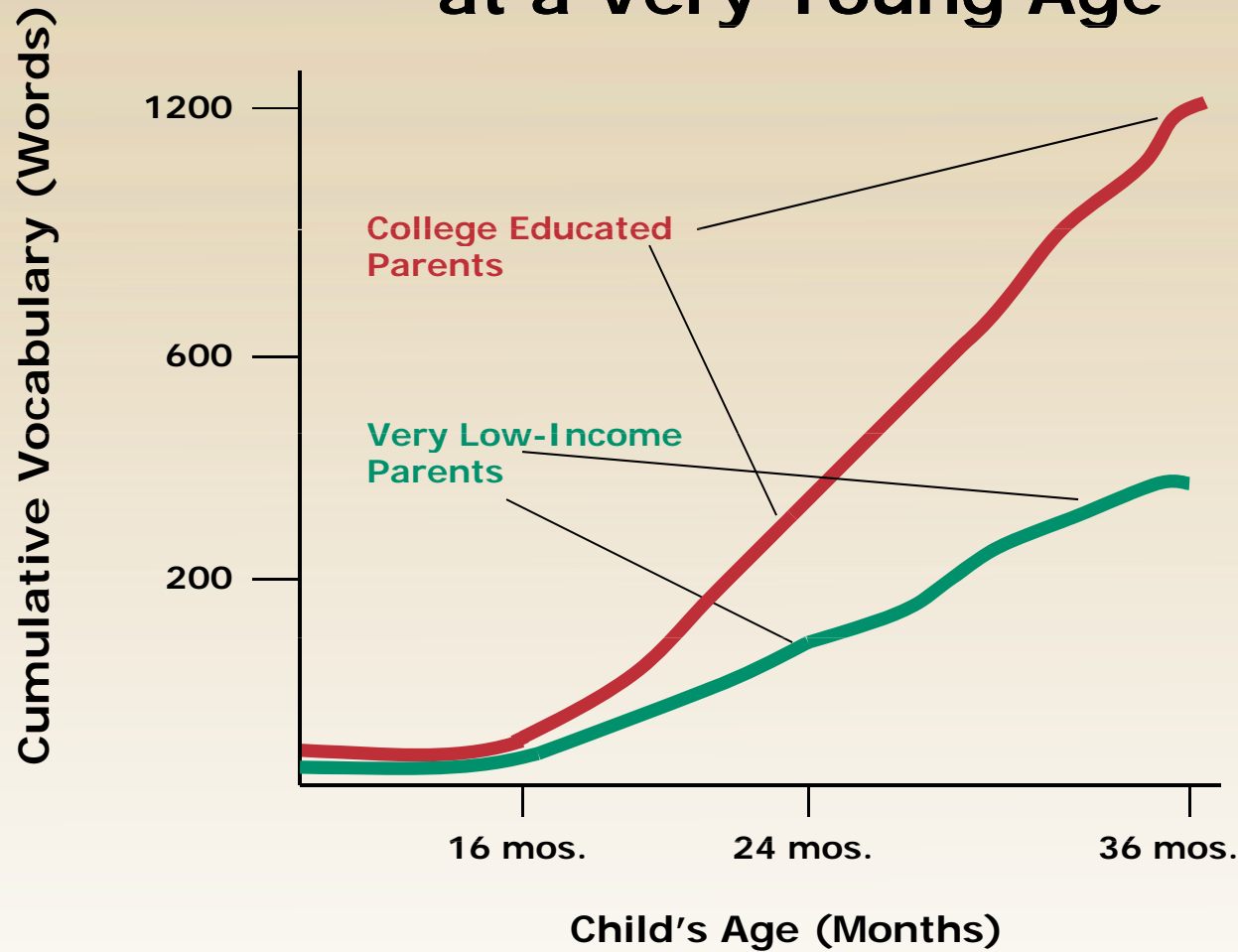
14 Years Old



Source: Chugani, Phelps & Mazziotta (1987)



Barriers to Social Mobility Emerge at a Very Young Age



Source: Hart & Risley (1995)

Perry Preschool — Estimated Return on Investment



- Benefit-Cost Ratio = \$16 to \$1
- Annual Rate of Return = 18%
- Public Rate of Return = 16%
- Heckman Reanalysis = 10%

Sources: Schweinhart, et al. (2005); Author's calculations; Heckman, Moon, Pinto, Savelyez, & Yavitz (2010)



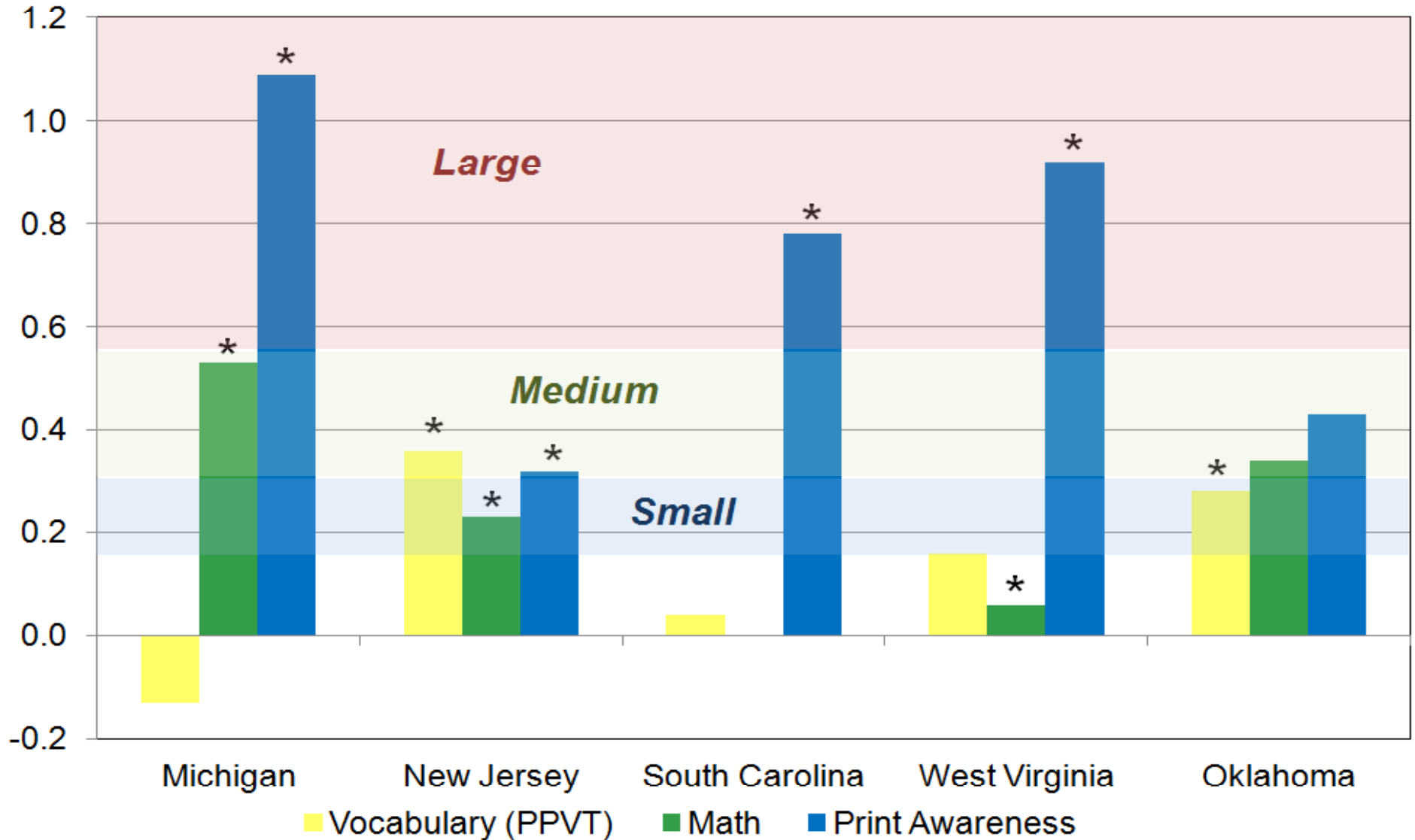
Benefit-Cost Ratios for Other Longitudinal Studies

- Abecedarian Educational Child Care
 - \$4 to \$1
- Chicago-Child Parent
 - \$10 to \$1
- Elmira Prenatal/Early Infancy Project
 - \$5 to \$1

Sources: Masse & Barnett (2002); Reynolds, Temple, White, Ou, & Robertson (2011); Karoly, et al (1998)

Effect of Pre-K on children's test scores

Effect sizes (calculated using sample standard deviations)



Math not assessed in South Carolina

*Significant at 5%

Source: Wong, Cook, Barnett, & Jung (2008)

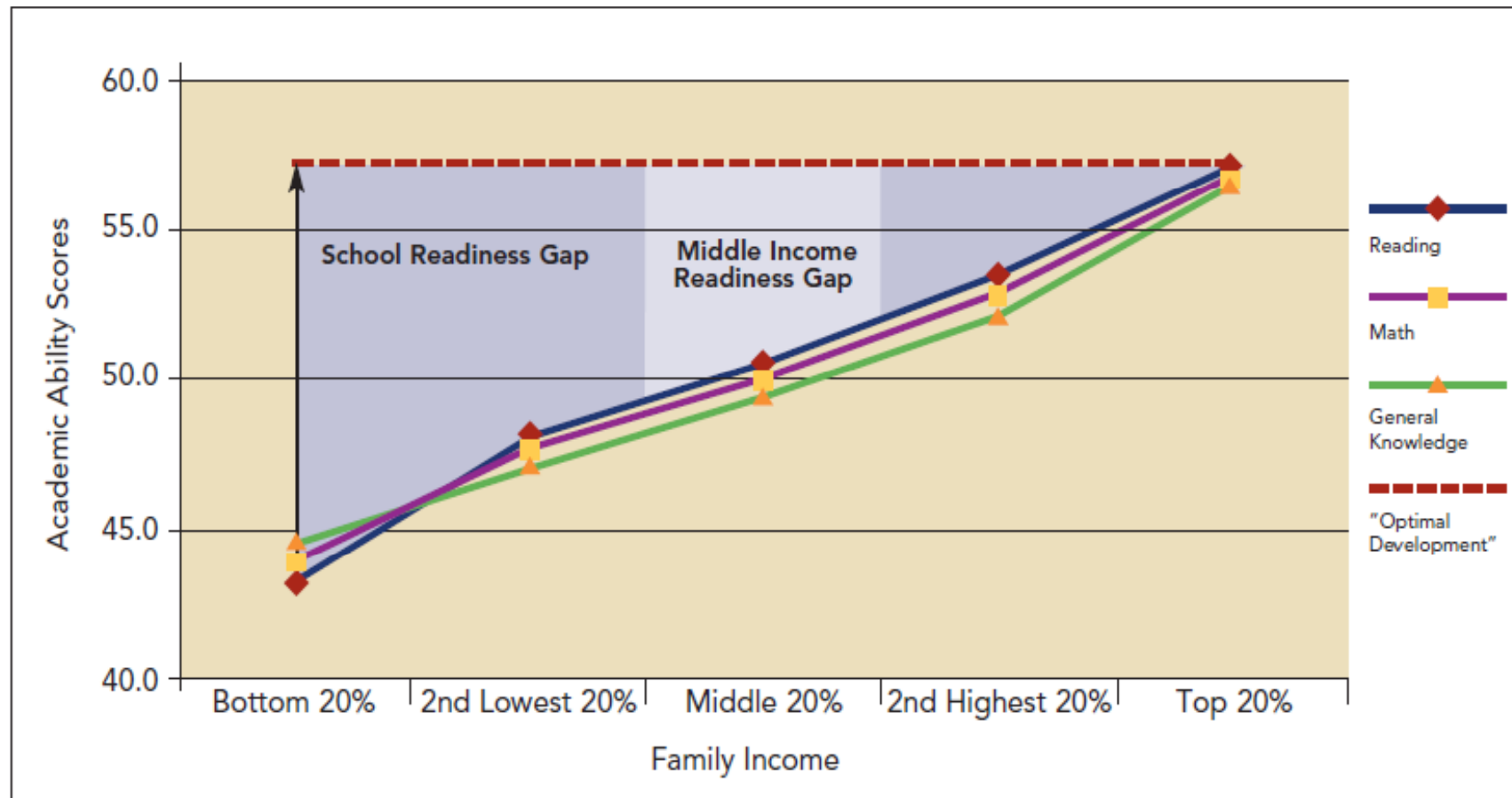


The Case for Universal

- Sizeable return on investment from making sure all children are prepared for school



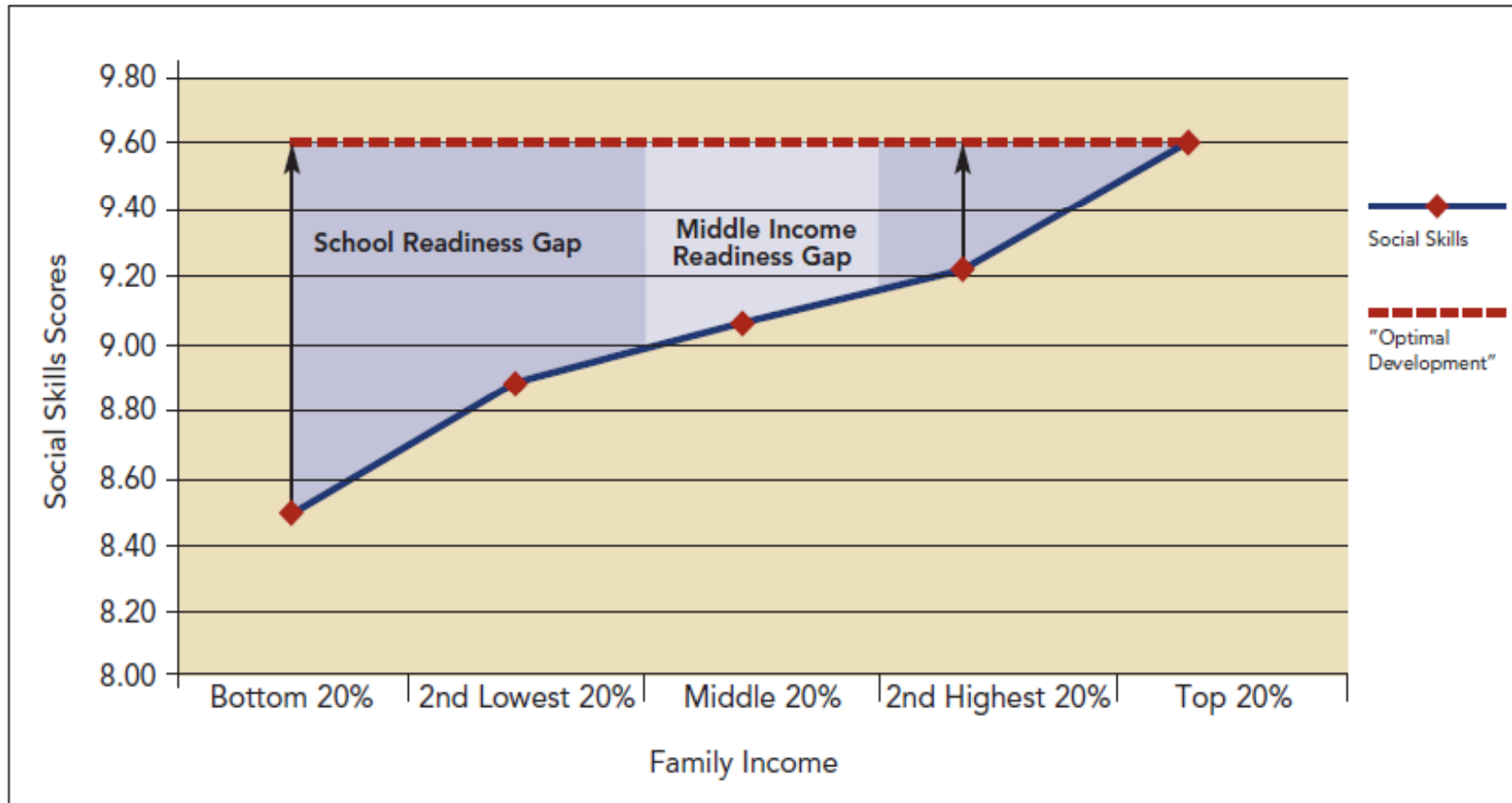
Figure 1. Academic Abilities of Entering Kindergartners by Family Income



Source: Schulman & Barnett (2005)



Figure 2. Social Skills of Entering Kindergartners by Family Income



Source: Schulman & Barnett (2005)



The Case for Universal

- Sizeable return on investment from making sure all children are prepared for school
- Means-testing:
 - Can create stigma and other unintended consequences
 - Is costly
 - May miss low-income children
- Disadvantaged children perform better in classrooms with advantaged children
- Universal programs gain stronger political support

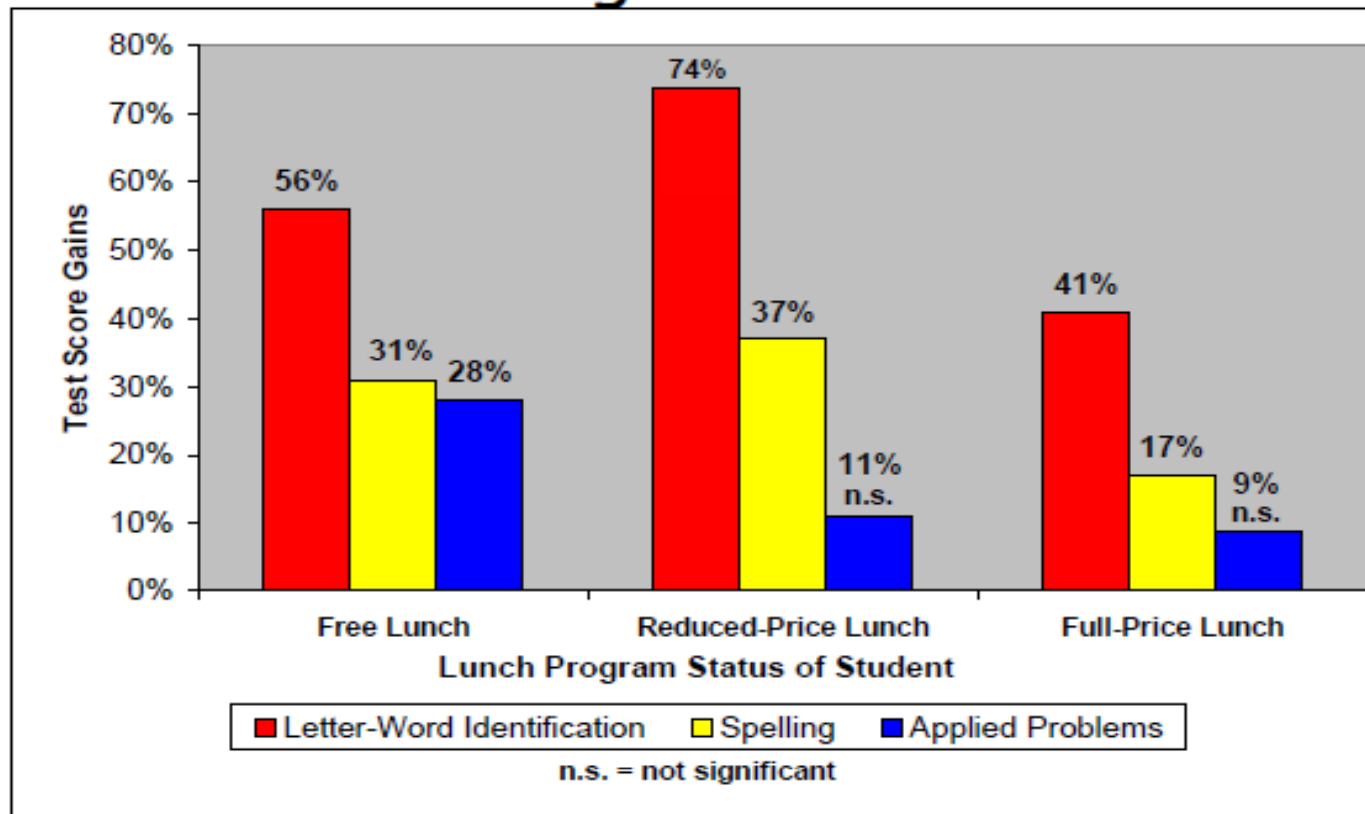


The Case for Targeted

- Return on investment should be evaluated on the per-child rate of return, not total net return
- Attempts to estimate economic impact for middle-income and high-income children based on studies of programs targeted to low-income children are subject to uncertainty



Effects of Tulsa Pre-K Program by Free Lunch Program Status of Student



Source: Gormley (2007)



The Case for Targeted

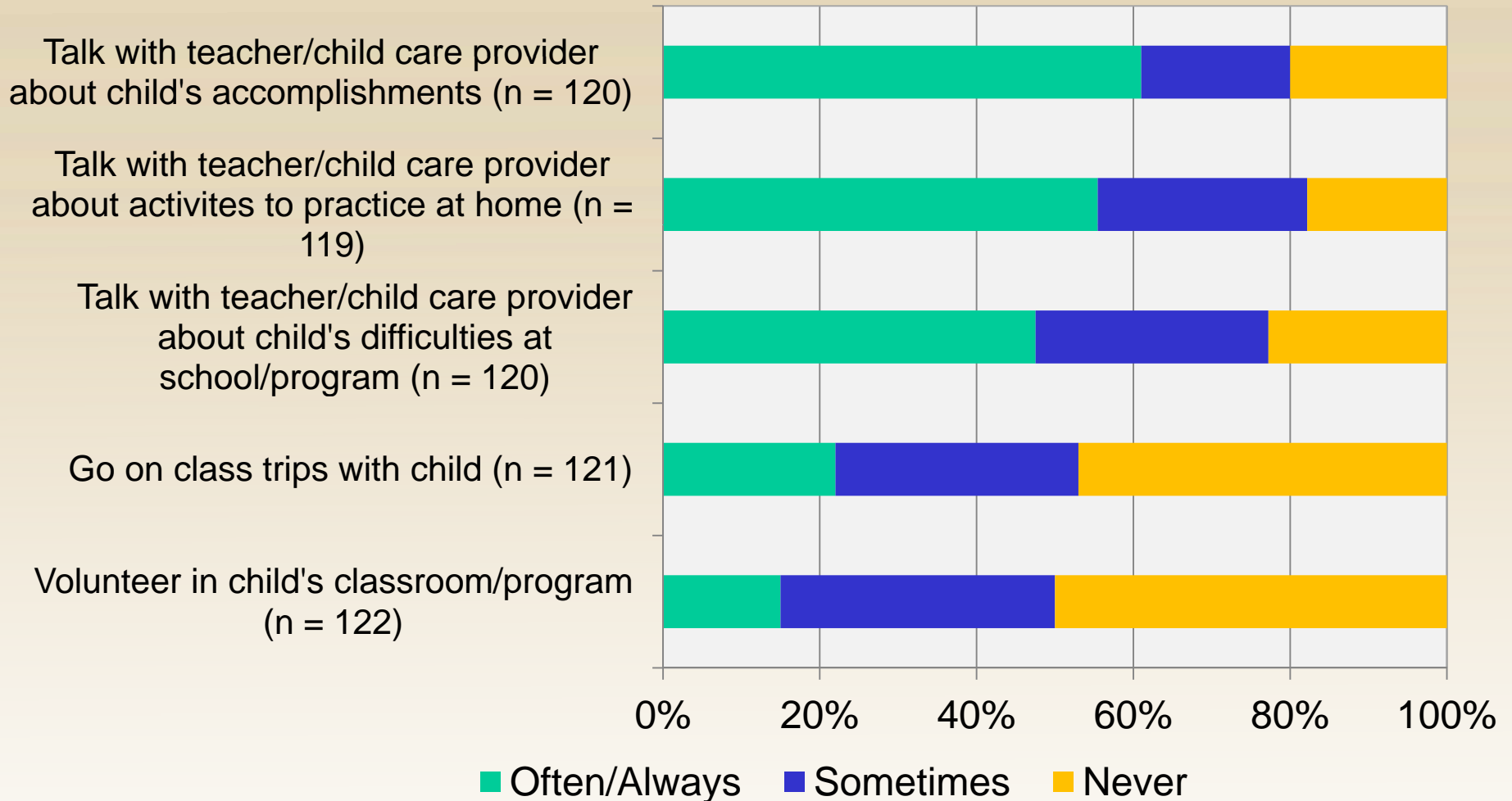
- Return on investment should be evaluated on the per-child rate of return, not total net return
- Attempts to estimate economic impact for middle-income and high-income children based on studies of programs targeted to low-income children are subject to uncertainty
- Cost of universal initiatives are much more expensive than targeted programs
- Universal initiatives tend to supplant resources that higher-income families already spend on supporting their children's educational experience



Scholarships are a more effective targeting strategy than directly funding early childhood programs

- Engage parents

Parents who received scholarships in St. Paul were engaged with their child's education



Source: Gaylor, Spiker, Williamson, & Ferguson (2011)

Scholarships are a more effective targeting strategy than directly funding early childhood programs



- Engage parents
- Provide an approach that allows for integrated classrooms
- Stronger political appeal than funding programs directly
- Keeps early childhood programs focused on recruiting families and child school readiness than lobbying legislature for funds

Sources



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