

Starting Early to Close the Achievement Gap

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Our public schools have struggled for decades to reduce an achievement gap that persists between students raised in poverty and their more affluent peers. Scientific evidence shows that this gap in academic performance is rooted in the years long before children enter kindergarten.

The achievement gap is really a gap in school readiness. Unfortunately, policies that dictate how we invest public dollars in education have not kept up with what the science tells us. The result is too many children who start school already behind; most of these children will never catch up.

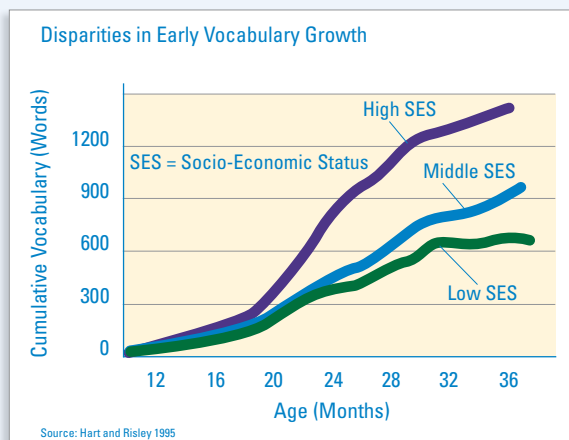
The achievement gap is wide and deep

- Nationally, in 2000, young adults living in families in the lowest income quintile were **6 times** as likely to drop out of school as those in families in the highest income quintile.¹
- In Illinois, only 40% of Black males graduated high school with their 2005/06 class, compared to 82% of their White non-Hispanic classmates.²
- In 2007, less than one-third of 11th-grade Hispanic Chicago Public School students passed the state reading test while more than twice that percentage of White students passed the test.³
- There are great disparities between levels in education attainment for young adults across Illinois. One-quarter to one-half of 18- to 24-year-olds in rural and inner city areas of the state have no high school diploma, compared to 2% to 11% of those living in many Chicago suburbs and pockets of downstate Illinois.⁴

The Achievement Gap is a Gap in School Readiness

Young children need both academic and social skills to enter school with the confidence, motivation and curiosity to be successful learners.

FACT: Early language and literacy development is a key component of preparing children for school, yet **differences in vocabulary growth between children in low-income families and high-income families begin to appear as early as 18 months.**⁶ By age 3, the average child in a low-income household knows fewer than half as many words as a child in a high-income household.



Illinois has one of the worst achievement gaps in the nation – only 7 states have a greater disparity in educational attainment.⁵

FACT: The social-emotional skills a child acquires before age 5 – the capacity to control one's behavior, get along with peers, and ask for and accept help – are as important as academic skills in preparing a child for school. Children who arrive at kindergarten unable to sit still, follow directions, take turns, control their emotions, and use language to communicate their ideas and needs enter school already behind. Yet **young children are being expelled from preschool settings for behavioral and social interaction problems at more than 3 times the rate of their peers in kindergarten through 12th grade.**⁷

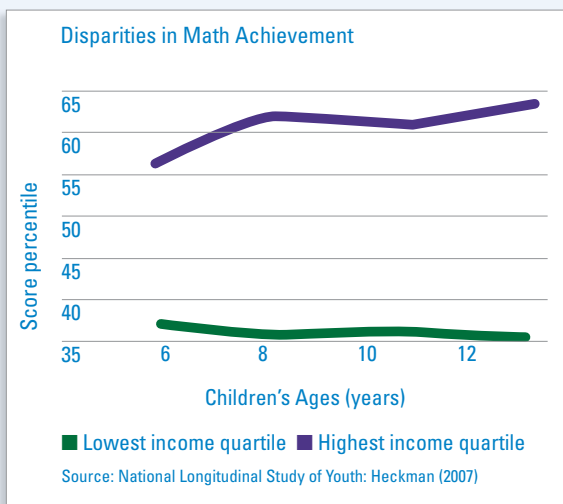




Children Who Start Behind Often Stay Behind

Gaps in school readiness skills set children off on a trajectory of failure.

- A study of a 1998-99 kindergarten cohort found that gaps in achievement for children who entered kindergarten with lower mean achievement scores in reading and math were wider still by the end of 3rd grade.⁸
- Data from the National Longitudinal Study of Youth show that the gap in math skills is strikingly evident at age 6.⁹

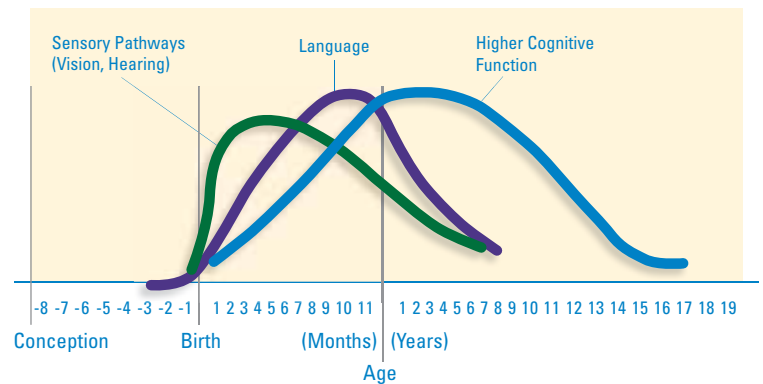


- Kindergarten teachers tell us that the primary reason for recommending kindergarten grade retention is a child's lack of social-emotional skills. Unfortunately, children who repeat even one grade are 35% more likely to drop out of school.¹⁰

Why The Early Years Matter

FACT: Significant brain "architecture" is built in the first few years of life.

Human Brain Development Synapse Formation Dependent on Early Experiences



Secure early attachments provide the base for all learning, beginning at birth. Babies thrive when they are securely attached to the adults who care for them.

A securely attached child demonstrates attributes critical to school readiness:

- Curiosity
- Willingness to explore
- Persistence
- Enthusiasm
- Pleasure in learning
- Independence

Emotion → Attention → Learning

- ▶ A securely attached infant is able to learn how to regulate her emotions.
- ▶ A child able to regulate her emotions can focus attention on learning about the world around her.
- ▶ A child focused on learning is set for achievement, academically and in life.



Poverty and the Achievement Gap Are Closely Linked

Parents' level of education, non-English speaking home environments, and a young child's exposure to chronic and intense stress all correlate with the school readiness gap of so many children. Underlying all of these is the persistent thread of poverty and financial instability.



In Illinois, 17% of children under age 6 live in families with incomes below the federal poverty level. This puts 186,971 of the state's youngest citizens at risk of entering school unprepared to learn to their fullest abilities.¹¹

FACT: Socio-economic status accounts for more of the differences in language, vocabulary, and other academic skills than any other factor by far, including race and ethnicity. **Before even entering kindergarten, children in the highest income level score more than two-thirds higher on standardized measures of language and early literacy skills than children in the lowest income group.** Further exacerbating these inequalities, low-income children are much more likely than their more advantaged peers to enter lower-quality schools.¹²

FACT: The effect of poverty persists: 9-year-olds in low-income areas are, on average, 3 grade levels below 9-year-olds in high-income areas in math and reading ability, and are 7 times less likely to graduate from college than children in high-income areas.¹³

The achievement gap is in essence a gap in opportunity, a gap that begins in the earliest years.



Quality Early Learning Programs Prepare Children for School and Life

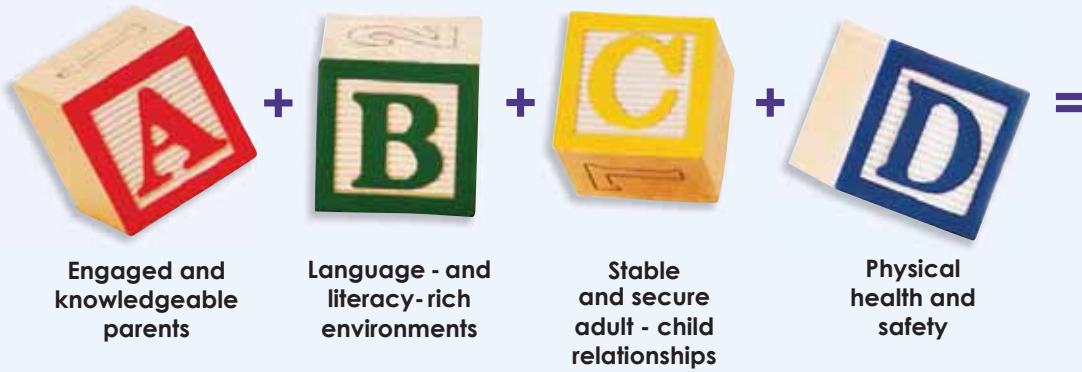
Fortunately, we know that high-quality early childhood programs can make a difference to the school and life outcomes of low-income children.

FACT: For at-risk children who enter school with the academic and social-emotional skills they need to succeed, positive academic performance can be as persistent an outcome as the increasingly poor performance of their ill-prepared peers.

- Nearly all low-income children enrolled in the birth-to-5 early learning program at the Ounce of Prevention Fund's Educare of Chicago enter kindergarten with early literacy skills that meet or exceed expected developmental ranges.¹⁴
- Research shows that 1st-grade reading ability is a strong predictor of 11th-grade reading comprehension, vocabulary, and general knowledge.¹⁵
- Low-income children who participated in 2 to 6 years of Chicago Parent-Child Center programs from ages 3 to 9 had significantly better outcomes than non-participants, including significantly outperforming non-participants, in reading and math through age 15. They had a one-third lower grade-retention rate, were less likely to be placed in special education by age 15, and had a 26% higher graduation rate.¹⁶



School Readiness: A Winning Formula for Closing the Gap



We know it is possible to provide all children and families with the opportunities they need to sidestep the achievement gap. Through a comprehensive, coordinated birth-to-5 system, resources and supports can be available to children wherever they spend their days.

An effective birth-to-5 early learning system includes:



Voluntary home-visiting programs

in which trained parent coaches develop trusting relationships with parents; provide child-development and parenting information; model positive and language-rich relationships with children; help parents create safe and stimulating home environments; bring books to the home and encourage reading every day; and connect families to needed medical, dental, mental-health, and nutrition services.



High-quality early learning environments

in which well-trained teachers provide nurturing and continuous care for infants, toddlers, and preschoolers; build trusting relationships with parents; emphasize verbal and non-verbal interactions as central to language and literacy development; and support language and literacy activities in the home. Comprehensive programs provide access to family-support, health, and mental-health services.

Redefining Education... Beginning at Birth

If the achievement gap is in reality a gap of opportunity for low-income and other at-risk children and their families, we need to build on what we know and increase opportunities that enable all children to reach their potential. The old education paradigm of beginning public education at kindergarten is insufficient for our country's most vulnerable children.

We envision instead a public education system that embraces the fact that learning begins at birth and eradicates the achievement gap via widely available, high-quality early learning environments.

FOOTNOTES

- 1 Research Talking Points on Dropout Statistics. (2006). Washington, DC: National Education Association.
- 2 *Given Half a Chance: The Schott 50 State Report on Public Education and Black Males, Executive Summary.* (2008). Cambridge, MA: Schott Foundation for Public Education.
- 3 School Report Card 2007: Achievement by Race and Income. (October 31, 2007). Chicago, IL: Chicago Sun Times.
- 4 Public Agenda for College and Career Success (2008) Springfield, IL: Public Agenda Task Force and Illinois Board of Higher Education.
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- 6 Hart, B. & Risley, T.R. (1995). *Meaningful Differences in the Everyday Experiences of Young American Children.* Baltimore, MD: Brooks Publishing Co.
- 7 Gilliam, W.S., (2005). *Pre-kindergartners Left Behind: Expulsion Rates in State Pre-kindergartens.* NY, NY: Foundation for Child Development.
- 8 *The Condition of Education 2004* (NCES 2004-077). Indicator 8. (2004) Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- 9 Heckman, J. "The Economic Case for Investing in Disadvantaged Young Children." (2008). Chicago, IL: University of Chicago.
- 10 Pacchiano, D. (July 2008). "Putting Developmental Science to Work." Chicago, IL: Ounce of Prevention Fund.
- 11 "Illinois Demographics of Young Poor Children." (October 8, 2008). New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
- 12 Lee, V. E., & Burkam, D. T., (2002). *Inequality at the Starting Gate: social background differences in achievement as children begin school.* Washington, D.C.: Economic Policy Institute.
- 13 National Center for Education Statistics (2001). Washington, DC: U.S. Department of Education.
- 14 Invernizzi, M., Sullivan, A., Meier, J., and Swank, L. (2004). *Phonological Awareness Literacy Screening Pre-School (PALS-Pre-K).* Charlottesville, VA: University of Virginia.
- 15 Cunningham, A.E. and Stanovich, K.E. (1997). "Early Reading Acquisition and Its Resolution in Reading Experience and Ability 10 Years Later." *Developmental Psychology*, Vol. 33 (6). November 934-945.
- 16 Chicago Longitudinal Study. *Newsletter*, No. 1.

Some things can wait. Investing in Illinois' youngest children can't.

the **Ounce**