



Core Issues: Early Childhood Experiences and Academic Performance

Early Childhood Experiences Matter to Classroom Success

Children's earliest experiences in life can have the most profound effect on their readiness to succeed in the classroom and beyond. Scientific and educational data demonstrates that children who enjoy the benefits of safe, stimulating and language-rich experiences and relationships during the first five years are cognitively, emotionally and socially more prepared to progress through the K-12 school system.

This is crucial for children who have the odds stacked against their academic success because they begin life subject to risk factors that threaten healthy early development. Low-income families in particular struggle to provide the kinds of early experiences that naturally foster curiosity, self-confidence, problem solving and communication skills in young children - all qualities essential to achievement in the classroom and beyond.

When children of low-income families are also subject to additional factors such as chronic stress, low parental education and non-English-speaking households, the challenges to these children magnify rapidly.

The Social, Emotional and Cognitive Gap Begins Early

Educators have long recognized that children who enter the K-12 system behind their peers are likely to stay behind for the entire duration of their time in school. What is especially alarming is how quickly these disparities in cognitive, social and emotional development appear.

According to recent research, the gap between at-risk children and their peers can manifest itself as early as nine months of age.¹ Cognitive assessments of infants subject to common risk factors show a lag in their ability to explore objects, solve very simple problems, and babble expressively. By 24 months, the gap between children at risk widens even further, and continues to do so rapidly as they approach entry into the K-12 system.

The widening gap in language development alone is a predictor of later achievement in the classroom. A ground-breaking, decade-long study conducted by researchers at the University of Kansas measured disparities in the number of words and style of verbal interactions children of different socio-economic status were exposed to in the first three years. They found that children from low-income households with parents with lower educational levels exhibited **significantly lower language skills, measured in terms of their amount of talk, vocabulary growth, and style of verbal interactions when compared to their peers at age 3.**

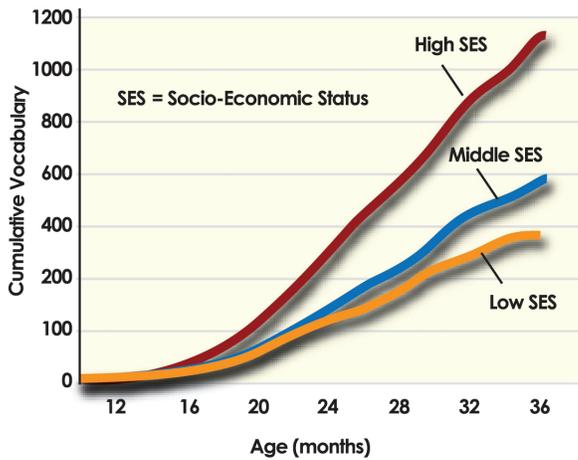
Just as importantly, the study indicated that this gap in language skill persisted in the same children at 9 to 10 years of age, when elementary education is already well underway.²

The first five years of life represent a critical window of opportunity in the healthy development of young children.

During these few brief years, children learn with greater rapidity and ease than at any other time of life. It is far more efficient to provide a solid, early foundation for children's healthy development than compensate for deficiencies later in life.

Learn more about recent advances in our understanding of children's brain development at [Harvard University's Center on the Developing Child](http://developingchild.harvard.edu/).
<http://developingchild.harvard.edu/>

Children's success in the classroom is not simply a matter of IQ. It is built upon their ability to communicate with others, regulate their emotions and behaviors, and focus on tasks. These functions are informed by children's earliest experiences and relationships in life.



Source: Hart & Risley (1995)

Disparities in Early Vocabulary Growth

The development of language skills in early childhood is a known predictor of success in the classroom.

Research indicates that children from lowest socio-economic backgrounds show significantly limited vocabulary growth by 36 months of age when compared to children of working class or more highly educated parents.² It should be noted that this is not necessarily a reflection of poor parenting practice as much as it is an indicator of increased stressors and fewer material advantages in the lives of families at the lower end of the socio-economic spectrum. [Learn more about the study conducted by Betty Hart and Todd R. Risley by clicking here.](#)

Closing the Gap: Three Model Early Childhood Programs

The best evidence suggests that high quality early childhood environments can have a measurable effect on the performance of children in school and beyond. The following programs and studies are commonly recognized as models for effective early interventions. While the methodology and metrics for each program differs, they all confirm in their own ways the value and effectiveness of interventions that specifically target young, at-risk children.

Chicago Child-Parent Center Program³

At age 21, children who participated in the Chicago CPC preschool program showed the following gains compared to a control group of children who did not receive services.

- 29% higher rate of school completion
- 41% reduction in special education placement
- 40% reduction in the rate of grade retention

Abecedarian Program⁴

Participants in this program were assessed for cognitive function, academic skills, educational attainment, employment and other outcomes. At-risk children who received services through the program showed significant gains over the comparison group who participated in the study.

- Higher reading and math scores on standardized tests as young adults (1.8 grade years higher in reading and 1.3 years higher in math)
- Significantly greater likelihood of attending a higher education program (40% of children who received services vs. 20% of the control group)
- Significantly greater likelihood to graduate from or attend a 4-year-college program at age 21 (35% vs. 14%)

HighScope Perry Preschool Program⁵

This study's most recent findings derive from interviews and assessments of those who participated in the program at age 40 as either service recipients or control group children. Again, the program targeted children of low-income families with a high risk of failure at school.

- 77% of participating children who received services graduated from high school, compared to 60% of the control group.
- A significantly larger number of females graduated from high school compared to females in the control group: 88% vs. 46%
- Children who received services performed significantly higher on various intellectual and language, school achievement, and literacy tests between preschool and age 27.

Academic benefits associated with high quality early care and learning experiences are just one aspect of potential gains made in the long term.

Model early childhood programs are linked to reductions in social and behavioral problems among participants. These include lower rates of juvenile arrest and chronic problems with the law.^{3,4,5}

Researchers noted long term gains in economic performance among children who received services through model early childhood programs.

Perry Preschool children were more likely to be employed at age 40, and had higher median annual earnings than their counterparts who did not receive high quality early childhood services.⁵

What is at Stake for Nebraska's Schools

As state budgets come under increased pressure from a wide variety of economic stressors, it is critically important to know that we are getting the most from the dollars we allocate to our public education system. A key strategy for doing so is by ensuring that more children enter the K-12 system socially, emotionally and cognitively prepared to learn.

Over 47,000 of Nebraska's youngest citizens between the ages of 0 and 5 are currently at risk of failing in school because they are subject to factors known to adversely effect classroom readiness, academic performance, and high school completion. While these children are located in every school district across the state, it is worth noting the correlation between Nebraska counties with the highest assessment of early childhood risk factors and those with the highest school dropout rates (see map below).

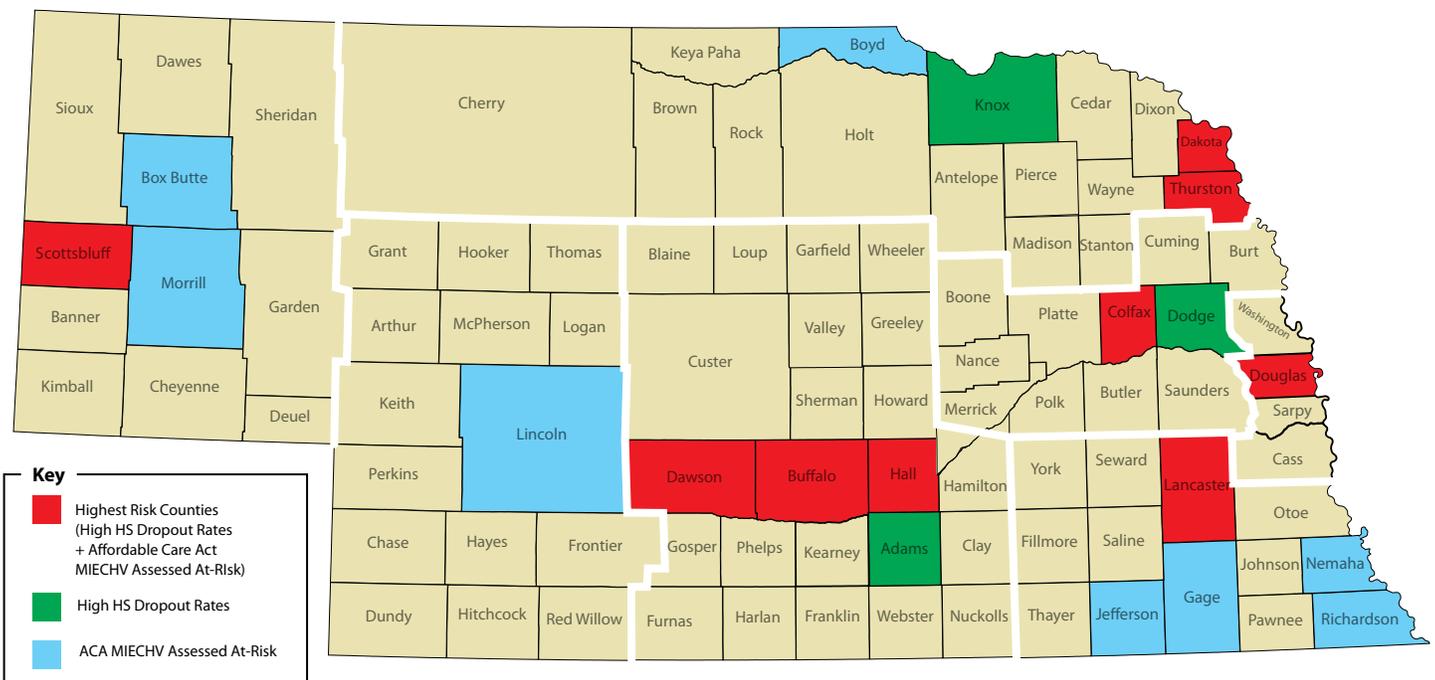
For a comprehensive, county-by-county snapshot of children at risk in Nebraska, [visit First Five Nebraska online.](#)

How Nebraska is Responding

Nebraska is investigating new ways to improve school readiness through research, practice and policies intended grow support for high quality early childhood experiences and make it easier for parents and educators to meet children's earliest developmental needs.

- **Sixpence Early Learning Fund** - An innovative public-private partnership representing a combined fund whose earnings are used to improve early childhood programs throughout the state. [Learn more.](#)
- **The Buffett Early Childhood Institute** - Established in 2011 at the University of Nebraska, this endeavor brings the resources and expertise of a major research and educational institution to the task of addressing the challenges facing at-risk children, developing best practices, improving the caliber of professionals working in the field of early childhood education, and influencing policy on the state and national levels. [Learn more.](#)
- **Nebraska Early Childhood Business Roundtable** - A group of approximately 35 business leaders focused on making early childhood education a state priority as an essential strategy for improving student achievement, workforce quality and economic development. Learn more by contacting us at info@firstfivenebraska.org.

Correlation Map: Counties with Strong Early Childhood Risk Factors and High School Dropout Rates



ACA MIECHV refers to the Affordable Care Act - Maternal, Infant and Early Childhood Home Visiting grant program designed to assess and respond to the needs of families and children at risk.

References

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