

Tackling the "Vocabulary Gap" Between Rich and Poor Children

Children from lower income homes may hear 30 million fewer words by age three.

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In recent years there has been growing concern about the “vocabulary gap” widening between children from different socioeconomic groups. By age three, it is believed that children growing up in poor neighborhoods or from lower-income families may hear up to 30 million fewer words than their more privileged counterparts.

There are a broad range of advocates, organizations, and researchers tackling the vocabulary gap between rich and poor children. In this blog post I will discuss the latest research and provide links to some of the various resources parents and caregivers can access if you are interested in expanding your child's vocabulary and shrinking the 'word gap.'

Anne Fernald is a psychology professor at Stanford University who has discovered that the language gap between rich and poor children emerges during infancy.

On February 14, 2014, at the annual American Association for the Advancement of Science (AAAS) conference held at the University of Chicago, Dr. Fernald presented a lecture titled **"How Talking to Children Nurtures Language Development across SES and Culture."** The presentation brought together over fifty years of research confirming that the children of lower-income parents typically enter school with poorer language skills than their more affluent peers.

According to Fernald, five-year-old children of lower socioeconomic status (SES) score two years behind on standardized language development tests by the time they enter school. In fact, a March 2013 study by Fernald and colleagues titled, **"SES Differences in Language processing Skill and Vocabulary Are Evident at 18 Months,"** reported that signs of the vocabulary gap are evident before a child is even two-years-old.

The two factors that most explain the income-related gaps in school readiness are parenting styles and home learning environments. This is actually good news because it means that if we can better equip parents with the knowledge and tools to succeed as their children's first teachers—and mobilize them to act on that knowledge and use those tools—we could see a significant decline in both the vocabulary and school readiness gap.

In October 2013, Ms. Hillary Clinton, who is dedicated to closing the vocabulary gap, wrote,

"Studies have found that by age four, children in middle and upper class families hear 15 million more words than children in working-class families, and 30 million more words than children in families on welfare. This disparity in hearing words from parents and caregivers translates directly into a disparity in learning words. And that puts our children born with the fewest advantages even further behind."

Among those born in 2001, only 58 percent of poor children started school ready to learn, compared to 75 percent of children from middle-income families.

Researchers believe that low-income parents may underestimate by as much as 50 percent the impact that they can have on improving their child's vocabulary and cognitive development. This is why it's so important to get this message out there and to offer simple ways that parents from every socioeconomic background can strive to shrink the vocabulary gap. [That is what I mean when I say Imagine Toddlers in each and every Zip code without a Vocabulary Gap.VM]

When parents understand the long-term benefits of investing time in a child's vocabulary, the more time they invest... which is the most effective way to close the word gap.

The Vocabulary Gap Between Rich and Poor Is Often Established Before Age Two

Dr. Fernald's research has shown that significant differences in both vocabulary and real-time language processing efficiency were already evident at age 18 months in English-learning infants from higher- and lower-SES families. By age 24 months, there was already a six-month gap between SES groups in processing skills critical to language development.

Fernald and her colleagues at The Center for Infant Studies at Stanford used special technology to make all-day recordings of low-SES Spanish-learning children in their home environments. The researchers found striking variability in how much parents talked to their children.

Fernald suggests that slower processing rates are partly responsible for slower vocabulary growth in the early years. Fernald says that toddlers learn new vocabulary from context, and the faster a child can get at the words he or she knows, the more able the child is to figure out the next word in the sentence and to learn any new words that follow. This is one reason that unplugging the television and reading to young children is so important.

Infants who heard more child-directed speech developed greater efficiency in language processing and learned new words more quickly. The results indicate that exposure to child-directed speech—as opposed to overheard speech—sharpen infants' language processing skills, which create an upward spiral for learning vocabulary.

The Three T's: Tune In. Talk More. Take Turns.

Dr. Dana Suskind is a Professor of Surgery at the University of Chicago and the Founder and Director of the Thirty Million Words Initiative. Thirty Million Words helps parents enhance their home language environment in order to optimize their child's brain development and, therefore, his or her ability to learn.

Dr. Suskind's ultimate goal, and that of her team, is to help all children reach their full potentials and to close the ever-widening vocabulary and achievement gap. Dr. Suskind has developed a succinct way for parents and caregivers to expand a child's vocabulary based on the Three T's:

1. **Tune In by paying attention to what your child is focused on or communicating with you.**
2. **Talk More with your child using lots of descriptive words to build his or her vocabulary.**
3. **Take Turns with your child by engaging in his or her conversation.**

For more specifics on what you can do as a parent or caregiver please take a few minutes to listen to this NPR piece about practical ways to shrink the word gap.

Too Small to Fail

“Too Small to Fail” is a partnership with Next Generation and the Clinton Foundation that aims to help parents and businesses improve the health, well-being, and future opportunities for children ages zero to five. The mission of “Too Small to Fail” is to have American children from all walks of life and socioeconomic groups positioned to succeed in the 21st century.

As the father of a six-year-old, this is a mission that I am passionate about. I too am passionate about this being a life-long teacher for nearly half a century from my internship days in Madras Medical College and Govt General Hospital] and over the past 4 decades working diligently to mitigate the debilitating factors influencing the life and destiny of the children born and residing in specific zip codes and a strenuous promoter of the achievements of the Millennium Promises and Goals of the UN [VM]

The organization [Too Small to Fail] is working to promote new research on the science of children’s brain development, early learning and early health. They want to help parents, businesses and communities identify specific actions, consistent with new research, which they can utilize to improve the lives of young children. For an informative video on early child development, and the work that Too Small to Fail is doing, click here.

New brain research has shown that early adverse childhood experiences can harm the development of a child's brain. The prefrontal cortex of the brain—which is associated with the ability to pay attention, exhibit self-control, organize and plan—is particularly vulnerable during childhood development. [This is the part above the orbits-VM]

Too Small to Fail is building a public action campaign that will span the areas of early learning, early health, and family support. However, their immediate efforts are focused on closing the vocabulary gap.

The driving force of Too Small to Fail is founded on a belief that a 'poverty of vocabulary' should be discussed with the same passion as child hunger. When a child is deprived of food, there is public outrage because child hunger is correctly identified as a moral and economic issue that moves people to action. The vocabulary gap should be viewed with the same urgency as child malnutrition.

Conclusion: Childhood Socioeconomic Status Is Not Destiny [This is what I spoke about-VM]

Unfortunately, inequities that present themselves in early life can create a ripple effect throughout a person's life. According to researchers, most of the high school achievement gap between poor, middle-income and wealthy students is already visible by kindergarten and the children who have weak pre-

literacy and numeracy skills in kindergarten are, on average, **the same children with weak vocabulary and math skills in seventh grade.**

To combat this phenomenon, **Anne Fernald and colleagues at Stanford are now running a parent-education intervention study with low-income Spanish-speaking mothers in East San Jose, California, called ¡Habra conmigo! (Talk with Me!).** The study teaches Latina mothers how they can support their infants' early brain development and helps them learn new strategies for engaging verbally with their children.

Although they only have data from 32 families so far, the preliminary results are promising. **Mothers in the ¡Habra conmigo! Program are communicating more and using higher quality language with their 18-month-olds compared to mothers in a control group.**

"What's most exciting," said Fernald, "is that by 24 months the children of more engaged moms are developing bigger vocabularies and processing spoken language more efficiently. **Our goal is to help parents understand that by starting in infancy, they can play a role in changing their children's life trajectory.**"

In previous research on caregivers' speech to Spanish-learning children, **Fernald's group found big differences in levels of parental engagement even within a disadvantaged group of families.** Those **lower socioeconomic status kids who heard more child-directed talk got faster in processing and learned language more rapidly,** according to Fernald.

"It's clear that SES is not destiny," Fernald concludes. "The good news is that regardless of economic circumstances, parents who use more and richer language with their infants can help their child to learn more quickly." Just as SES is not destiny-Zip code is not destiny! [VM]