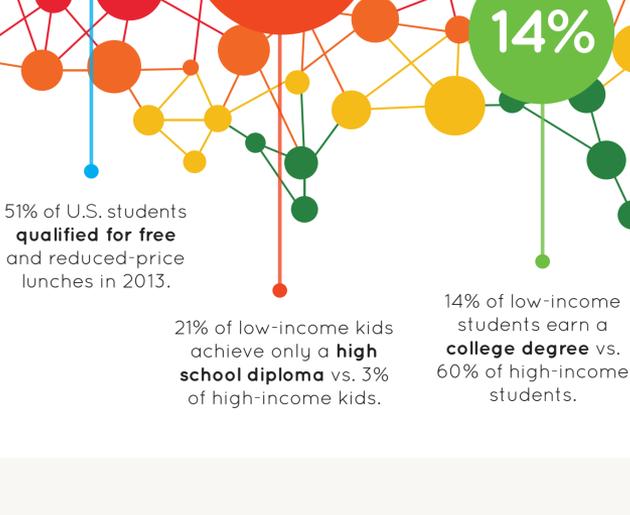


Why Learning Is Harder When You're Poor

The Truth About How Poverty Sets Kids Back at School & What We Can Do to Help

It's a Big Challenge



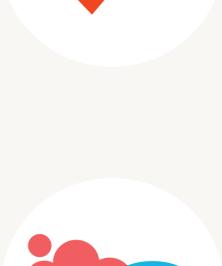
Poverty & the Brain

A child's family situation and socioeconomic status can cause real brain differences.



BABIES

born into poverty are more likely to be exposed to poor nutrition, environmental toxins and violence. These outside stressors can affect brain development and learning.



INCREASES

in parental education and family income are linked to increases in the surface area of numerous brain regions, including those used for language and executive function.



VOCABULARY

By age 4, children in poverty hear 13 million words spoken in the home. Those in working-class families hear 26 million and kids in a professional family hear 45 million words.



ONGOING TRAUMA

such as food insecurity and unstable housing can hurt the development of neural connections, which regulate emotion and impulse control.



IMPAIRED FLEXIBILITY

Being impoverished affects the development of the prefrontal and limbic systems of the brain, affecting the ability to switch gears, multitask and change strategies based on feedback.



LESS GRAY MATTER

Low-income kids showed 7% to 10% less gray matter in three key areas of the brain used for academics: the frontal lobe (executive memory), the temporal lobe (memory and language), and the hippocampus (long-term memory).



DYSLEXIC SIMILARITIES

Research shows that the brain structures of low-income children reflect many of the same patterns as those with dyslexia.

HOWEVER, BRAIN DEVELOPMENT IS NOT PREDETERMINED BY POVERTY.

TEACHERS

can play a huge role by being consistent, caring adults.

Areas of the brain affected by trauma remain **PLASTIC** through adulthood.

CONSISTENT PRACTICE and exposure to **vocabulary, critical thinking, and problem solving** can help to **nurture positive brain development.**



8 Things Teachers Can Do

PROVIDE ENCOURAGEMENT.

Break tasks into smaller steps and provide frequent feedback so kids can see progress and build confidence.

1

BUILD VOCABULARY

by reading and talking about books, creating word walls, fostering discussion, and offering practice through role-play and games.

2

RESEARCH

shows that consistent exposure to **PHONEMES** can help to nurture the necessary pathways to literacy in the brain.

3

USE

MEMORY EXERCISES to help foster neural connections and encourage executive functions.

4

BE FLEXIBLE

When students have trouble, look beyond the behavior and remember the possible trauma underlying their action. **ACCOMMODATE**, if necessary, to get them to accomplish the task.

5

ALLOW CHOICE.

Kids in poverty don't often feel a sense of control in their own lives. In the classroom, give options that let them build skills, set goals and increase their sense of agency.

6

EXPLAIN

PATHWAYS. Show the link between the task and the result. Give students an activity to try out before diving into the exercise or show them another student who has completed it.

7

EMBRACE

GROWTH. Create a positive emotional environment in the classroom and explain how all brains are capable of learning under the right conditions. Exude optimism, enthusiasm for learning and hope for their futures.

8

Sources: National Center for Education Statistics, Nature, AFT, JAMA, Center on the Developing Child at Harvard University, Teachers College at Columbia University, Noble



WE are TEACHERS

Fast ForWord®

Fast ForWord is a software program that works to counteract the effects of poverty on the brain by simultaneously building LITERACY SKILLS and COGNITIVE CAPACITY. Try Fast ForWord for a four-month free trial:

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