## Your child's brain needs talk!



The research is clear, and it's reassuring: Talk builds babies' brains, but it's not something you have to do nonstop. Download the full report at **LENA.org/inside-early-talk**.

# Make time for talk

Try to find 25-minute blocks during the day when you can focus on talking with your child.



Talk about what you're doing and thinking.
Turn daily routines and activities into opportunities for talk.



Avoid too much screen time when your child isn't interacting with anyone, or use TV time as an opportunity to talk about what's happening in the story they're watching.



# Build more back-and-forth

Double down: each time you get one back-andforth exchange with your child, try to make it two!





Tune in and respond to what they look at, do, and say. Notice what your child is interested in and engage with them on that topic.

Avoid interrupting or appearing disinterested when your child tries to talk back to you or to get your attention.





Early talk shapes a child's life. LENA shapes early talk.

# Why early talk matters



## What's the early talk gap?

Research shows that the amount of conversation child during the first few years of life varies widely, creating an early talk gap.

Early language exposure, in particular interactive talk, is one of the strongest predictors of brain development.



A baby's brain develops rapidly between the ages of 0-3, building more than one million neural connections per second!

Within the same first grade classroom, children with vocabularies of fewer than 2,500 words may be learning alongside children with vocabularies of 10,000 words.



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Vocabulary at age 3 drives language and reading skills at ages 9-10, which strongly predict high school graduation.

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What can we do?

## Invest Early

Every dollar invested in high-quality, birth-to-5 early childhood education delivers a 13% return on investment.



## Train Teachers

When teachers are trained how to increase conversation, the classroom makes measurable gains on CLASS scores.



## Support Parents

Caregivers who receive regular feedback and coaching on the early language environment increase interactive talk and their child's language ability.



Gilkerson, Richards, & Topping, 201



Visit www.LENA.org to learn more about closing the early talk gap.

## Research-on-conversational turns: 🔉

What studies published in 2018 can tell us about better brain development

#### What is a conversational turn?

A conversational turn occurs when a child vocalizes and an adult responds, or an adult speaks and a child responds.



### Why look at conversational turns?

Conversational turns have been linked to brain structure and function as well as to long-term outcomes for language skills, socioemotional development, and intelligence.



## Effects --- conversational turns...

In the brain:

Over time:

#### **Brain function**

Two studies conducted by Harvard and MIT researchers found that conversational turns were linked to both brain activity and structure in four- to six-year-olds. One study discovered that turns were strongly correlated with brain activation in areas associated with language, such as Wernicke's and Broca's areas.



### **Brain structure**

Another study focused on linking conversational turns to white matter connectivity between two regions in the brain critical for language. By using diffusion MRI, researchers were able to see the activation of neural pathways in children's brains as the children responded to interactive talk. In fact, the evidence suggests that conversational turns may strengthen these "information highways," allowing parts of the brain to work together more effectively.



## ···· How LENA can help · · · · · ·

Our programs use objective measurement and focused coaching to support parents and teachers in increasing conversational turns with children. By providing feedback and training, we want to help every parent, caregiver, and teacher harness talk to make a difference in the lives of children.



In 2006, LENA researchers recruited more than 300 families with young children to complete daylong audio recordings monthly for six months. These recordings measured adult words, back-and-forth conversation, and other language metrics. Researchers hoped to see how verbal interaction influenced cognitive development over time.



## Ages nine to 14

Ten years later, researchers conducted the second phase of the study, inviting the original participants, now in early adolescence, for follow-up language and cognitive assessments. Researchers found that the conversational turns experienced early in life were predictive of children's IQ, verbal comprehension, vocabulary, and other language skills in adolescence.

## For more on interactive talk:

View our on-demand webinar featuring Dr. Jill Gilkerson and Dr. Rachel Romeo, lead researchers on the studies above. Sign up at:

info.lena.org/webinars

