

LENATM

RESEARCH FOUNDATION





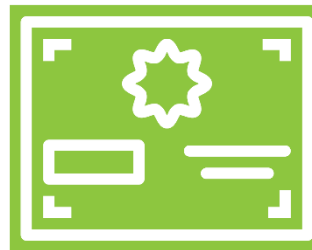
Global standard for measuring
talk in early childhood



300+ research partners
50+ LENA program communities



80+ peer-reviewed articles



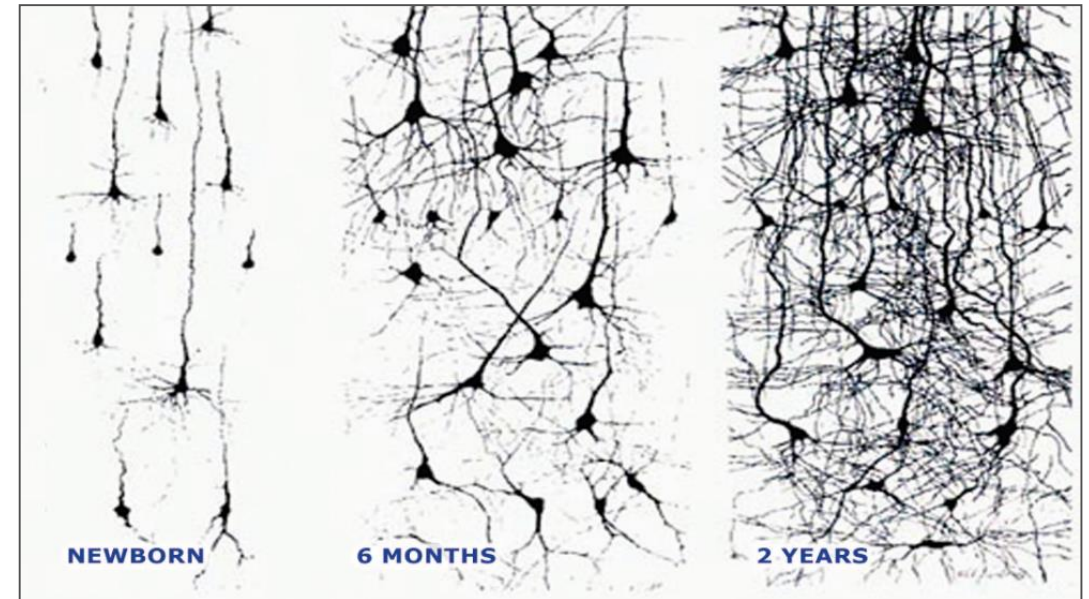
19 patents, 4 pending

Early language leads to opportunity



Early brain development

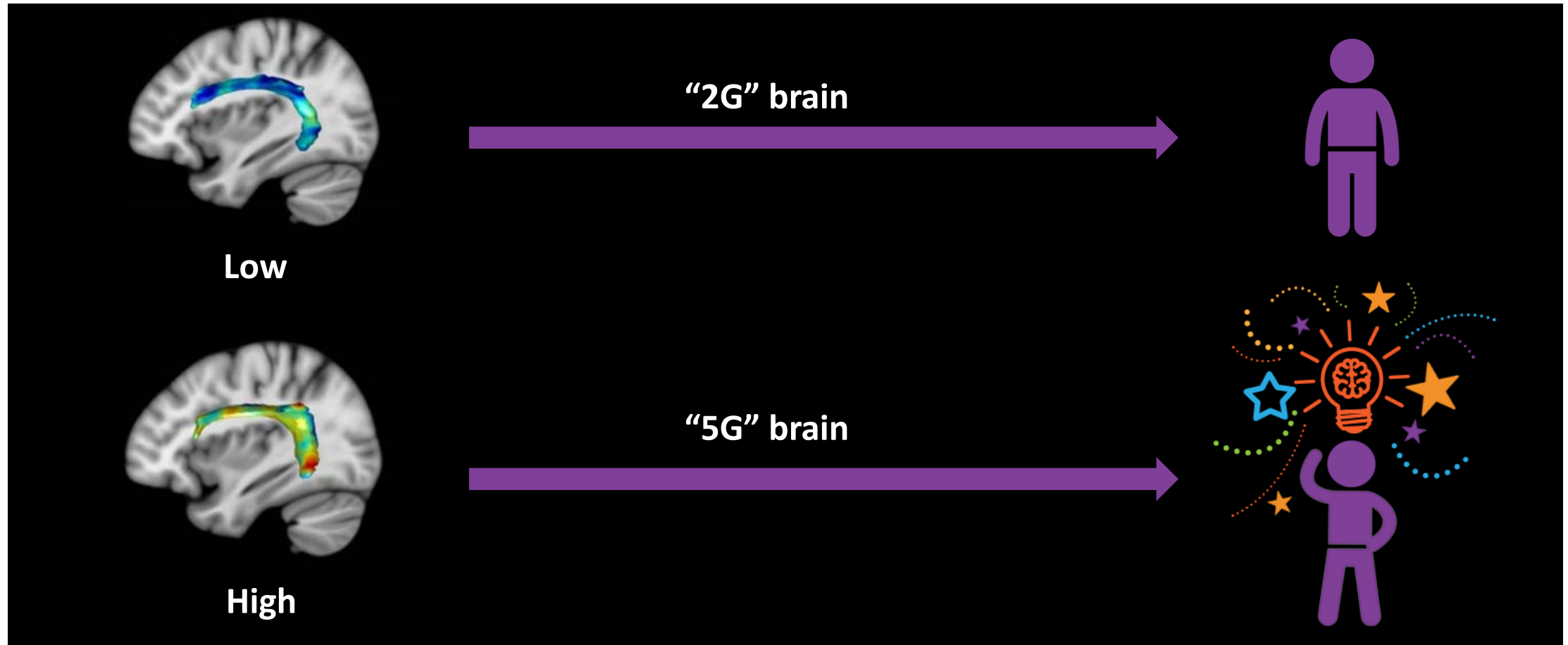
- A baby's brain grows to 80% of adult size in the first 3 years.
- Builds over one million neural connections/sec.
- Processes speech at 1/5 speed of adults



Synaptic growth in the brain over time

Source: Dr. Kimberly Noble

A tale of two brains:



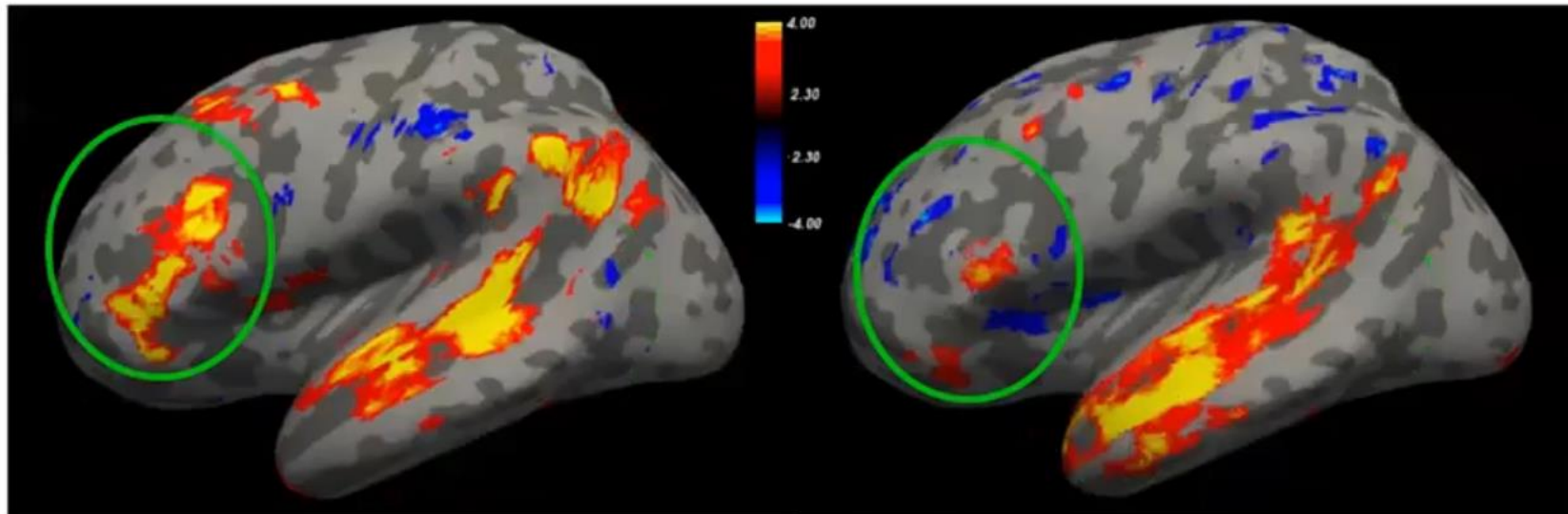
Romeo et al., 2018

It's Conversational Turns that matter

fMRIs from two female children
(Families' Backgrounds: high-school education + \$50K total family income)

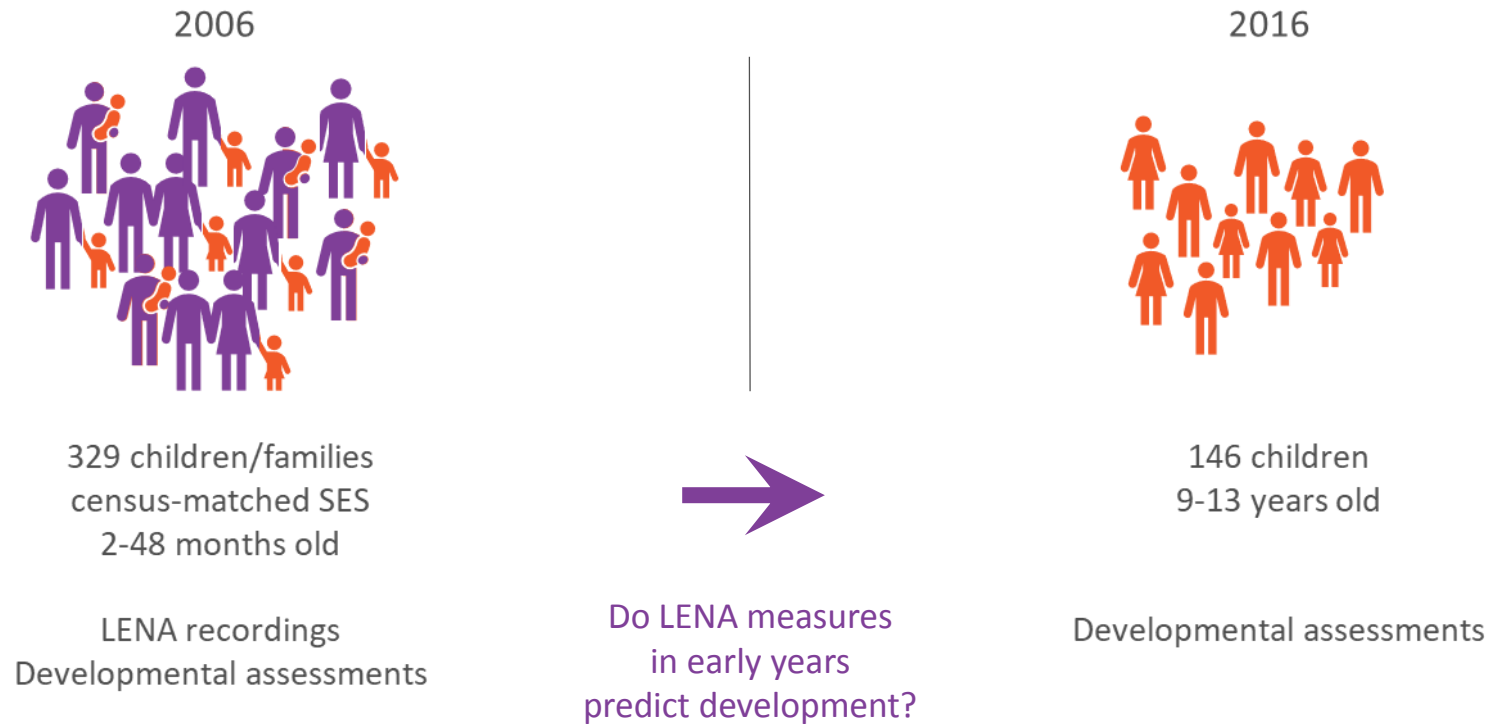
1,220 turns per day
Verbal score = 121

580 turns per day
Verbal score = 90



Romeo et al., Psychological Science, 2018

LENA 10-year longitudinal study



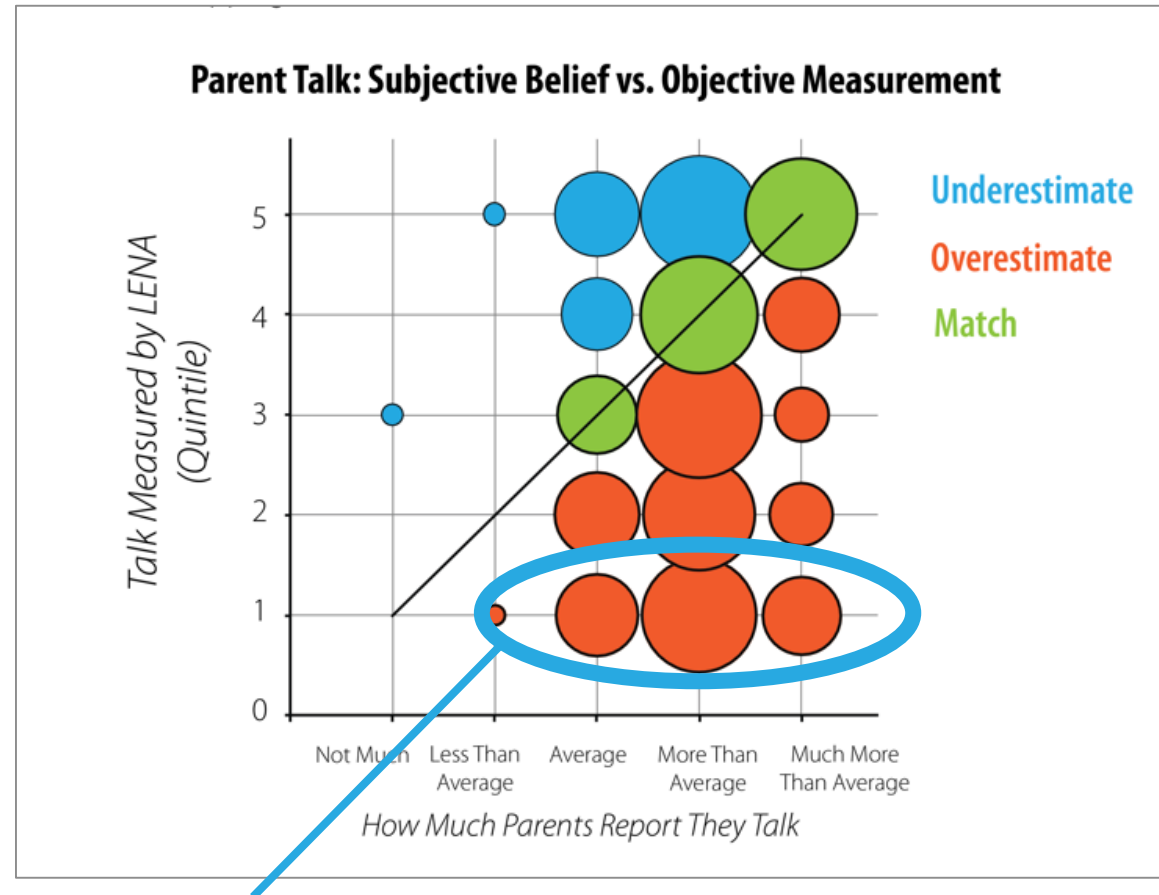
Yes, and turns are the most powerful predictor!

Gilkerson et al., *J. Pediatrics* 2018

Why can't we just talk more?



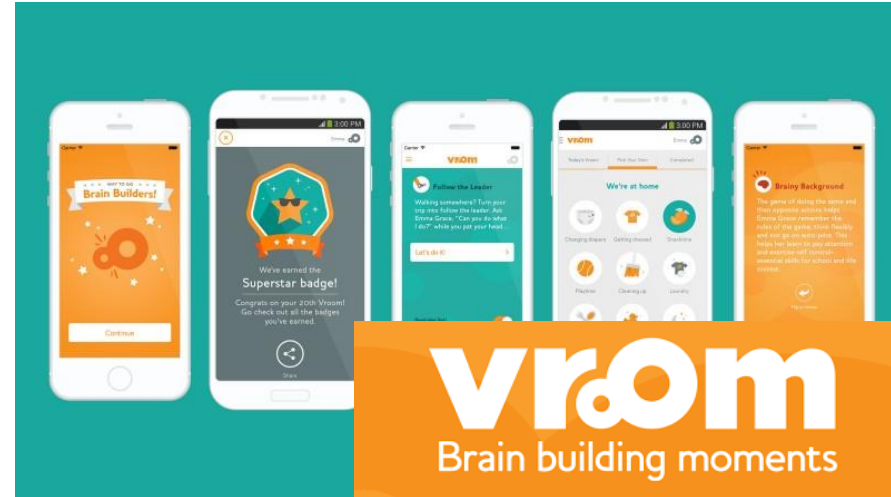
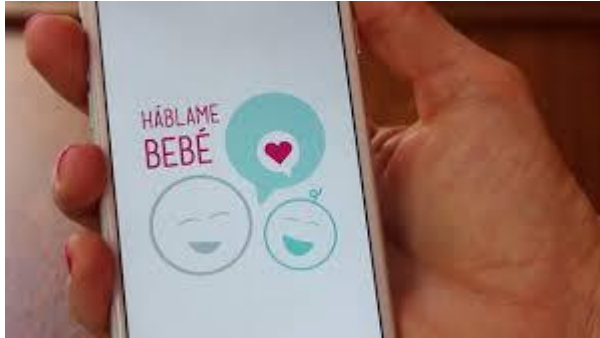
We talk less than we think we do



**Those of us that talk the least
overestimate the most**

Richards, et al., *JEI* (2017)

Isn't there an app for that?

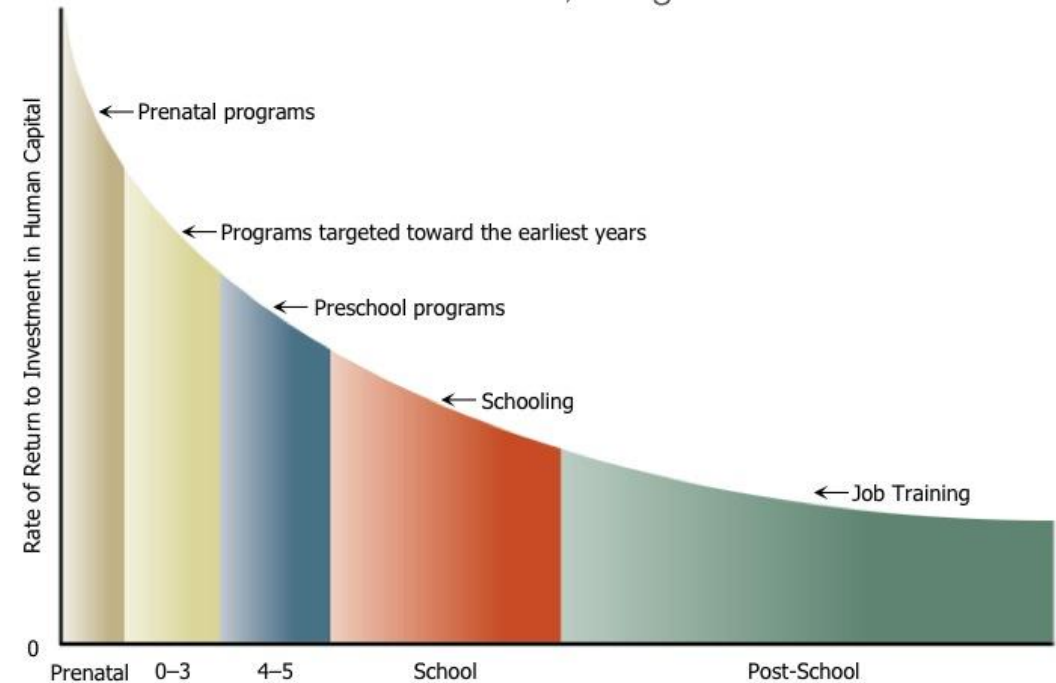


The Opportunity We Face



EARLY CHILDHOOD DEVELOPMENT IS A SMART INVESTMENT

The earlier the investment, the greater the return



Three “truths”

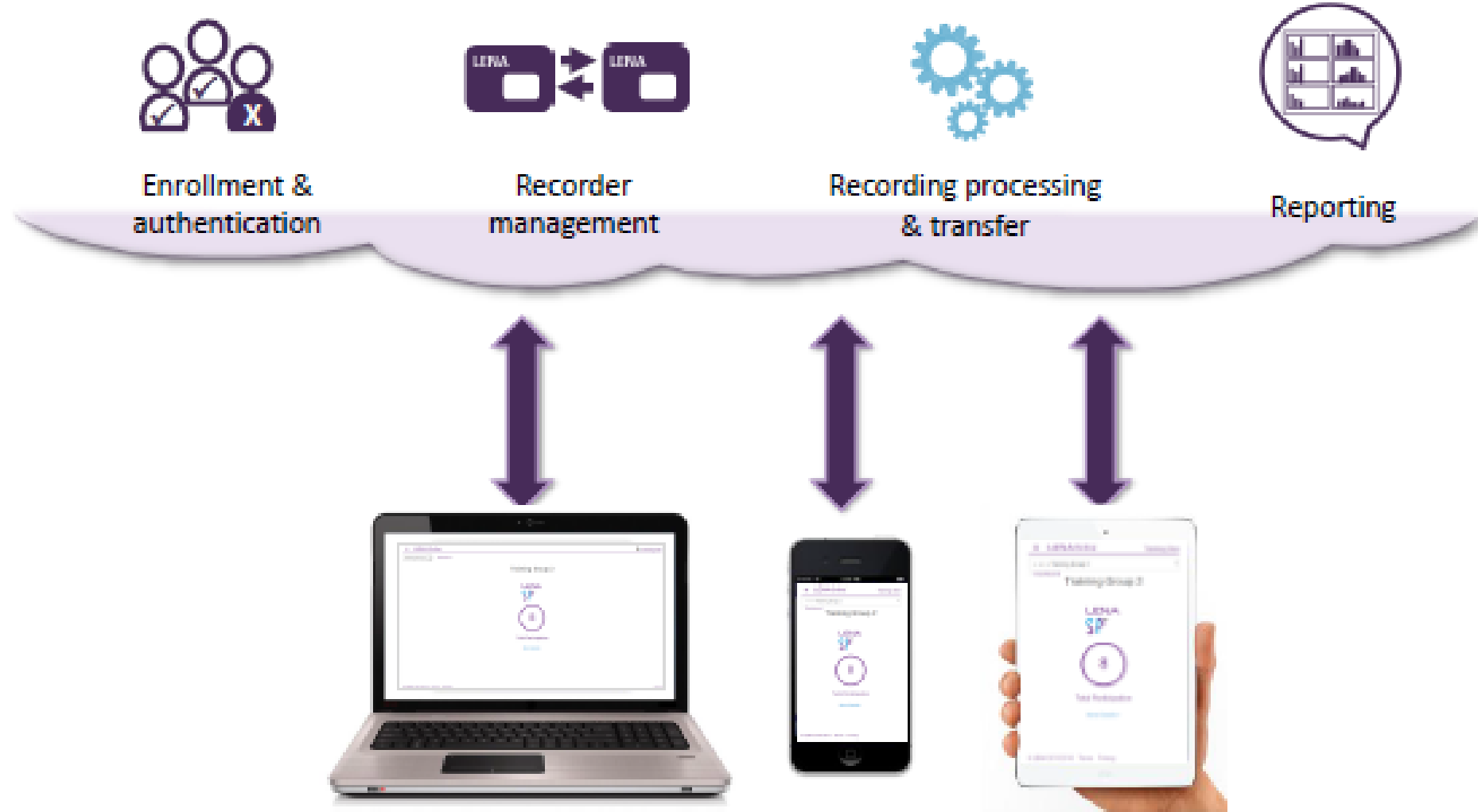
1. Early talk is the key.
2. Parents and caregivers are the secret sauce.
3. You can't improve what you don't measure.



“Talk pedometer” technology



Online Functions

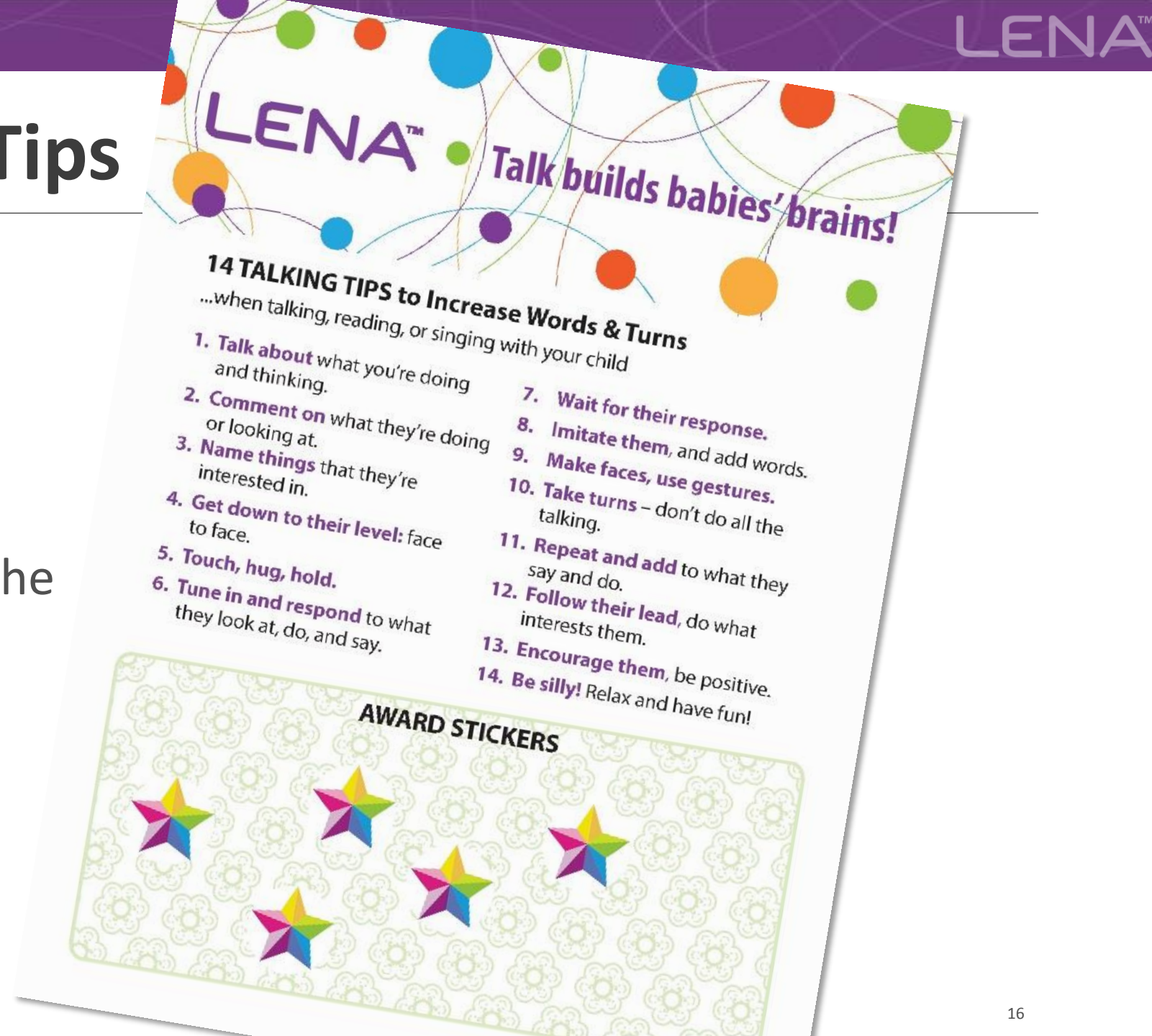


LENA Feedback



The 14 Talking Tips

- 14 easily-learned behaviors
- Used while talking, singing, reading with the child



LENA's Programs



Parent-group classes to strengthen community.



Professional development for early childhood educators.



Early-language focus for any home-visiting program.



In-depth data for language professionals.

Clear, actionable feedback

Reading minutes

Daily totals

Adult words

Turns

TV and Electronic Sound

Hourly breakouts



LENA START™ | LENA GROW™

10
Weeks

LENA Days

Feedback
Reports

Group
Sessions



Who uses LENA in a developing context?

A number of researchers use LENA around the world- from India and Tonga to South Africa, Senegal and Gambia.



Stanford University/Anne Fernald- working in Senegal about maternal beliefs and child development based on caregiver-child interactions

The aim of the project is to establish brain function-for-age curves of infants in both these settings, in order to gain an insight into the effects that malnutrition, social or environmental difficulties and increased risk of disease



Looking at child-caregiver interactions and the relationship with health of parent and child



Questions?

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