30 Million Word Gap

- High Income: 43 MILLION
- Working Class: 24 MILLION
- Low Income: 11 MILLION
Window of Opportunity

18 MONTHS: AGE AT WHICH DISPARITIES IN VOCABULARY BEGIN TO APPEAR
Synapse Formation

Developing Brain

- Higher cognitive function
- Receptive language area/speech production
- Seeing/hearing

Brain Architecture: Neurons
Brain Architecture: Pruning
Language Nutrition

- Increases neurological development
- Leads to the ability to read
- Leads to high school graduation
- Influences economic success

Increases neurological development
Still Face Experiment Video
Redefine infant and toddler wellness to include language acquisition and social-emotional health, so that by 2020, all children in Georgia will enter school thriving and ready to succeed.
## Population Based Approach

### From Universal Design to Targeted Interventions

#### All of Georgia’s Children

<table>
<thead>
<tr>
<th>Factor</th>
<th>System</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Factors</td>
<td></td>
<td></td>
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<tr>
<td>Trauma Factors</td>
<td></td>
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<tr>
<td>Developmental Factors</td>
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</tbody>
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GA WIC - Talk With Me Baby

- Random sample of children (18-24 months) assessed for language, speech, and communication patterns
- 900 Georgia WIC staff trained on language nutrition
- 199 WIC centers integrated language nutrition messages into their centers
- Nutritionists discuss modeling behaviors with clients, encouraging parents to talk with their
- DVDs play in waiting rooms
- Educational materials provided to clients
Language Development

**Infants who are deaf and hard of hearing**

- identified in the first six months of life
- provided with appropriate intervention services

**80%** of these infants/children are able to maintain age-appropriate language development in the first five years of life

Christine Yoshinaga-Itano, PhD
Professor • Speech, Language, and Hearing Sciences
The Institute of Cognitive Science
University of Colorado Boulder
100 Babies Program Goals

One month
• All infants receive newborn hearing screening

Three months
• Infants not passing screen receive a diagnostic evaluation

Six months
• Infants diagnosed as deaf or hard of hearing are enrolled in intervention
"The active ingredient in the environment that's having an influence on development is the quality of the relationships that children have with the important people in their lives. That's what it's all about."

Jack P. Shonkoff, M.D.
Brain Activity 8 Year Old Children

EEG of children never institutionalized

EEG of children in foster care before 24 months of age

Brain activity at 8 years old among children in institutional care

Brain activity of children in foster care after 24 months of age

Center on the Developing Child
Harvard University
Autism Screening and Early Detection

• The Marcus Autism Center, under the direction of Ami Klin is using eye-tracking research that detects signs of autism as early as infancy
• Earlier interventions when the brain is still able to adapt and change, we believe we can raise the prospects of significantly altering the natural course of ASD
Parental Involvement

Point to Pictures and Words

Talk to Your Baby Before She’s Born!

Speak Slowly and Exaggerate Your Words

Make Sure There Is a Book to Share

Talk Often and Keep It Simple!

Teach Babies New Words
Early Care and Learning
Involvement

The Cox Campus Online Learning Platform of the Atlanta Speech School will roll out two digitally-state-of-the-art courses for teachers of infants and toddlers.

• Roll out November 14
• Coalition of public and private partners including Governor Nathan Deal and First Lady Sandra Deal, Harvard University, DPH and the Georgia Department of Early Care and Learning
• Courses
  o Talk With Me Baby
  o Build My Brain
QUESTIONS?