Georgia Pathway to Language and Literacy

Reading Activity in the Brain

- Inferior Frontal Gyrus = Vocalization, Articulation
- Parieto-Temporal = Word Analysis
- Occipito-Temporal = Word Recognition, Automaticity

Source: Shaywitz, 2004

Texas Statewide Conference on Education of the Deaf (SWCED)
Presented by Stacey Tucci, PhD
July – 2018
Introduction – Stacey Tucci, PhD

• Parent of a Deaf adult
• Teacher of Deaf and Hard of Hearing Students
• Research Teacher – Georgia State University (GSU)
• Published Research Scientist
• Curriculum Co-Author – *Foundations for Literacy*
• National Trainer – *Foundations for Literacy*
• Director – Georgia Pathway to Language and Literacy
Georgia Pathway to Language and Literacy

- State-wide coalition that is working to improve language acquisition and literacy outcome of children who are DHH
- Dept of Public Health, Dept of Education, Dept of Early Care and Learning, medical professionals (ENTs, audiologists, pediatricians), teachers, universities, early interventionists, parents, adults who are DHH, and various community partners
Goal of Pathway

• All Georgia children who are Deaf and hard of hearing will be on a path to grade level reading proficiency in 3rd grade by 2020.
Getting Started

The Collective Impact Framework

Collective Impact is a framework to tackle deeply entrenched and complex social problems. It is an innovative and structured approach to making collaboration work across government, business, philanthropy, non-profit organisations and citizens to achieve significant and lasting social change.

Related Links
- Article: The original article on Collective Impact
- Video: What is Collective Impact?
- Video: Collective Impact - a new approach for social change
- Article: Channeling change
- Workbook: Putting Collective Impact in to action

http://www.collaborationforimpact.com/collective-impact/
Five Elements of Collective Impact

Common Agenda

• All participants have a common agenda for change including a shared understanding of the problem and a joint approach to solving it through agreed upon actions.

• This is where reframing the conversation so that we are talking about literacy (instead of fighting about modality) comes in to play.
Paradigm Shift – Reframing the Language Wars

• Language is language is language. The brain doesn’t discriminate...spoken or signed...it just needs language.

• Language is a necessary foundation for literacy.

• So can step away from the language wars...

• By reframing the conversation in terms of literacy...which is a common goal for us all. Instead of talking/fighting over modality, let’s talk about how each decision we make is or isn’t in the service of literacy.
Goal of Pathway

• All Georgia children who are Deaf and hard of hearing will be on a path to grade level reading proficiency in 3\textsuperscript{rd} grade by 2020.
### Birth to Literacy Plan

**Ensuring a Pathway to Literacy for Every Georgia Child Who is Deaf or Hard of Hearing**

<table>
<thead>
<tr>
<th>General Knowledge</th>
<th>Prenatal</th>
<th>Birth</th>
<th>1 month</th>
<th>3 months</th>
<th>6 months</th>
<th>1 year</th>
<th>2 years</th>
<th>3 years</th>
<th>4 years</th>
<th>5 - 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Trained in TWMH curriculum - Provided ongoing professional development in TWMH specific content - Understanding the importance of 5th grade reading proficiency and its impact on adult outcomes (e.g., high school graduation, college enrollment, adult employment and incarceration rates)</td>
<td>- Educate caregivers about: - Language nutrition strategies - Hearing screenings and implications of &quot;did not pass&quot; - Importance of &quot;medical home&quot; - Medical nutrition application process</td>
<td>- Complete newborn hearing screening - Share results and discuss importance of timely referral - Model and language nutrition strategies</td>
<td>- Stress importance of timely referral</td>
<td>- Complete referral for intervention services</td>
<td>- Monitor our health and developmental milestones - Provide necessary referrals for therapy</td>
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<tr>
<td>- Able to identify typical vs. atypical developmental milestones - Understand connection between brain development and access to language - Understand the importance of 5th grade reading proficiency and its impact on adult outcomes</td>
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<td>- Complete rereading - Schedule diagnostic testing appointment</td>
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<tr>
<td>- Educate family caregivers</td>
<td>- Use language nutrition strategies (e.g., 25-33 hrs/week) - Baby signs process for Medicaid application (if necessary)</td>
<td>- Complete hearing evaluation - Learn advocacy skills necessary for age-appropriate child development</td>
<td>- Enroll and actively participate in IEP Services</td>
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<tr>
<td>- Educate early intervention specialists</td>
<td>- Child Care Providers</td>
<td>Implement language nutrition strategies with children in their care</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Early intervention / early childhood</td>
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</tbody>
</table>

**1 GA PIPs, Council on Deaf Children, American Speech-Language-Hearing Association, NASD, Early Childhood and Family Education**

- Address progress utilizing the communication, language, and literacy (ELL) standards of the Georgia Early Learning and Development Standards (ELDS)
- Develop a plan in the GA child is developing age-appropriate language and on a path to grade-level reading by 3rd grade
- Implement plan for age-appropriate language and grade-level reading by 3rd grade
- Assess student progress using age-appropriate language measures
- Transfer capacity of self-advocacy for communication (and hearing) to student
- Engage parents in decision-making about their child and build parent capacity to use ASL (if necessary)
- Expect student to use self-advocacy for clear communication (and hearing)
What’s the Problem?

• Georgia Department of Education’s 2016 State Milestones Assessment indicates that a mere 3% of Georgia’s Children receiving special education who are Deaf/Hard of Hearing are proficient readers.

• Can’t locate SPED students with secondary and tertiary eligibility at DHH

• Can’t locate GenED DHH students
Shared Measurement

• Collecting data and measuring results consistently across all the participants ensures shared measurement for alignment and accountability.

• So we’ve decided on a common goal...how do we get there?
### Georgia Pathway to Language and Literacy – Indicator Map 2017

**All Georgia children who are deaf and hard of hearing will be on a path to 3rd grade reading proficiency by 2020.**

#### GET GEORGIA READING CAMPAIGN – 4 PILLARS

<table>
<thead>
<tr>
<th>CLIMATE</th>
<th>ACCESS LANGUAGE NUTRITION</th>
<th>ACCESS LANGUAGE NUTRITION</th>
<th>PROFESSIONAL DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Universal Principle</strong> Preventing Language and Literacy Disorders</td>
<td><strong>Indicator 1</strong> Access to Language and Engagement in Outcome-based Services</td>
<td><strong>Indicator 2</strong> Early Detection and Intervention</td>
<td><strong>Indicator 3</strong> Quality Professional Development</td>
</tr>
<tr>
<td><strong>What?</strong> 100% of the population (i.e., population, community, and individual levels) will benefit from their understanding that language contributes to brain development.</td>
<td><strong>Criteria</strong> All parents of DHH children will provide full access to (home) language (spoken or signed).</td>
<td><strong>Criteria</strong> All DHH children will receive follow-up screening by 1 month, diagnosis by 3 months, and intervention by 6 months.</td>
<td><strong>Criteria</strong> All medical professionals serving DHH children will use current evidence-based practices (EBPs) that ensure DHH students are making age-appropriate progress in language and social skills.</td>
</tr>
</tbody>
</table>
| **Measure** 1) # of nurses trained in TWMB 2) # of early care providers trained in TWMB 3) # of caregivers using TWMB (app analytics) | **Measure** 1) All parents of DHH children have access to (home) language. 2) All DHH children have access to medical and early intervention services and quality teachers and programs. 3) All DHH children will have access to appropriate medical services, early intervention services, and educational services regardless of geographic location, household income, and home language. | **Measure** 1) All DHH children will receive follow-up screening by 1 month, diagnosis by 3 months, and intervention by 6 months. 2) All DHH children will be continuously enrolled in intervention after 6 months. | **Measure** Medical Professionals 1) State Certification and Licensure Numbers 2) # of audiologists, ENTs, POs trained in CHOA |}

#### How? Action Projects IN PROGRESS

- Talk with Me Baby
  - 100 Babies Project
  - Medicaid Project
  - GA PINES Evaluation
  - Mobile Audiology Van
  - DHH Network Grant
  - Pathway Legislation Efforts
  - Smart and Secure Children
- Brain Trust for Babies
  - 100 Babies Project
  - Medicaid Project
  - GA PINES Evaluation
  - Mobile Audiology Van
  - DHH Network Grant
  - Pathway Legislation Efforts
- IN PROGRESS
  - GA PINES Evaluation and Review
  - Foundations for literacy curriculum: state-wide training and teacher implementation
  - DECA-funded PINES PA Training
  - GEDIS Training for PINES PAs
  - GA DOE Outreach Review
  - Pathway Legislation Efforts

#### Community Engagement – Coalition members will be representative of the children and families served throughout the state of Georgia.
Mutually Reinforcing Activities

• A plan of action that outlines and coordinates mutually reinforcing activities for each participant.

• Need to leverage your stakeholders’ expertise
Mutually Reinforcing Activities

- Medicaid Policy Changes
- Pathway Legislative Efforts (HB 844)
- GA PINES Early Intervention Evaluation
- Regional Programming Report- Shared Services
- DHH Network Planning Grant
- Foundations for Literacy Teacher Training
- Grady Baby Grant
- Talk With Me Baby
- ASTra Parent Advocacy Training
Early Intervention + School Services = Readers

• Early experiences can positively or negatively effect your students school readiness (essentially their ability to learn).
• Brain science tells us that a prevention model (intervening early) mitigates the effects of disability more effectively than a remediation model (waiting for a delay before providing services).
• Think about intervention from a “systems-level” perspective.
  – Continuous system of care - those in the beginning (birth) need to be aware of what is happening at the end (literacy), and those at the end need to know what is happening at the beginning.
• Caregivers = users of the system...how does their user experience inform changes to the system???
Continuous Communication

- Open and continuous communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.
Continuous Communication

• This is always a challenge...
  – Interpreters, CART, vlogs (language access)
  – Quarterly coalition meetings
  – Small, targeted work groups that meet regularly to advance efforts for specific projects
  – Email blasts
  – Facebook
  – Currently developing a new Pathway website and working to increase social media presence and remote meeting options for non-Metro coalition members
Backbone Organization

- A backbone organization(s) with staff and specific set of skills to serve the entire initiative and coordinate participating organizations and agencies.
Backbone Organization

• Pathway was established 8-9 years ago
  – Initially all positions volunteer
• Beginning May 2015, Oberkotter Grant funded a full-time director’s position for three years
  – Ends May 2018
  – Moving position to DOE for sustainability
• GA DOE funds the annual Pathway budget of $48,000 and all sign language interpreting
• Atlanta Speech School acts as fiscal agent for position
  – provides inkind donations for admin needs including printing, paper, mailing, laptop
Systems-Level Perspective

- Think about the system a child moves through from birth to the point of literacy.
- Who needs to be involved in the system?
  - Individuals
  - Agencies
- What work are they responsible for?
- When should the work happen?
- How do you ensure quality and timeliness?
- How do transitions happen?
- Where do parents/caregivers fit into the system?
For More Information...

• Dr. Stacey Tucci
• stacey2chi@gmail.com
A Randomized-Controlled Trial of 
Foundations for Literacy

Dr. Stacey Tucci –
Georgia Pathway
July 2018
Texas Statewide Conference on
Education of the Deaf (SWCED)

Foundations for Literacy

An Intervention for Young Children who are Deaf and Hard-of-Hearing

Funded by US Dept of Education Institute of Education Sciences two development awards (R324E06035 and R324A110101) and CLAD (R24C120001) funded RCT
Framework for Foundations

Began with research on what works for hearing children

Adapted to the special needs of deaf children

Individualized to meet the needs of particular children
Adaptations to DHH children

• Language Delay
  – Explicit instruction of instructional language
  – Vocabulary used in PA from vocabulary instruction
  – Embed all instruction in language-rich context

• Weaker speech perception and phonological representation
  – Multi-modal representation
Foundations for Literacy

One hour a day for the school year

**Code-based**
- Spoken phonological awareness
- Alphabetic knowledge
- Word reading
- Letter-sound fluency

**Meaning-based**
- Vocabulary embedded in stories and language experiences
- Narrative
- Storybook (dialogic) reading
Foundations for Literacy

• *Foundations* follows the adventures and experiences of four major characters –
  – Three school-aged children
  – One afterschool caregiver

Pete  Kate  Sue  Miss Giggle
<table>
<thead>
<tr>
<th>Unit</th>
<th>Sound</th>
<th>Spellings</th>
<th>Primary Key Words</th>
<th>High Frequency Words</th>
<th>Reading Booklets</th>
<th>Phonological Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4</td>
<td>Foundational Language</td>
<td></td>
<td></td>
<td>Unit 1 - a and</td>
<td>Unit 1 - A School Unit 2 - A Wheel Unit 3 - A Farm Unit 4 - A Loud Farm</td>
<td>syllable segmentation blending/decoding initial sound rhyming word play</td>
</tr>
<tr>
<td>5</td>
<td>m, long e</td>
<td>m, e, ee, ea</td>
<td>me</td>
<td>look</td>
<td>A Park</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>b</td>
<td>b</td>
<td>bee</td>
<td>in</td>
<td>A Boy and a Bee</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>long o</td>
<td>o, ow, oa, oe</td>
<td>bow, mow</td>
<td></td>
<td>In a Park</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ñ</td>
<td>ñ</td>
<td>boat</td>
<td></td>
<td>A Bee</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>ü</td>
<td>ü</td>
<td>eat, tea, toe, tub</td>
<td>the</td>
<td>The Boy and the Girl</td>
<td></td>
</tr>
</tbody>
</table>

**Progress Monitoring/Practice Game Week**

| 10 | n | n | bone, no | The Girl and a Bee | Pete and Pup | |
| 11 | p | p | Pete, note, Pup | has | Pete and Pup | |
| 12 | long i | i, ie, igh, y | pie, I | A Bee in a Boat | Pie on Tie | |
| 13 | ã | ã | pat, bite | on | My Pie | |
| 14 | s | s | see, bus, my | | I Eat | |
| 15 | d | d | mud, soap | | | |
| 16 | long a, f | a, ai, ay, f | say, name, beat | | Pup | |
Includes: Teacher’s Manual, all necessary materials for teaching 32 weeks of instruction (progress monitoring, main lessons, practice lessons), flashdrive with all materials as well as ASL video materials, and access to teacher website with PD videos as well as an online community of practice.
Curriculum Materials

• 390 page manual with daily lesson plans & explanations of all instructional activities
• 900 pages of reusable material
• 26 reading booklets
• jump drive with pdfs printed material + directions on how to assemble + ASL videos
Overview – Activities

• Sequencing daily activities
• Miss Giggle story
• Language experience
  – Plan
  – Do the language experience
  – Recall
• Reading words of known letter-sounds
• Reading connected text
• Phonological awareness
• Storybook reading (dialogic reading)
Miss Giggle Makes Sundaes

One day, Miss Giggle said, “Let’s make sundaes.”

Kate said, “Mmmm! I love sundaes.”

Pete said, “Mmmm. Me, too!”

First, Miss Giggle put ice cream in the bowls with a scoop. Next, she put on the chocolate syrup and the whipped cream. Last, she put cherries on top. Pete and Kate ate their sundaes. Pete said, “Mmmm.” Kate said, “Mmmm.” Miss Giggle said, “The letter ‘m’ makes the m sound.” She wrote the letter ‘m’ on a card and stuck it on the box.
Language Activity - Do

• Captioned video
Sound Cards

**Mnemonic devices**

- Meaningful representation of sounds
- Represent association between sound and multiple spellings
- One-to-one correspondence to sounds

Large sound card

Small sound cards
Keyword cards

Three types of cards for each keyword

- Picture
- Print
- Small sound
Word play with sound cards

• Captioned video
Reading Activities Materials

• Connected text --- Simple phrases/sentences are created using:
  – High frequency words
  – Key Words
  – Rebus

• Reading Booklets

• Sentence of the Week
  The dog eats a bone and a bow.
Kindergarten Class
Reading Activities

• Captioned video
Phonological Awareness

Rhyming

Initial Phoneme Isolation

Syllable Segmentation

“apple”

“ā ple”
Storybook reading

- Dialogic reading techniques
  - Multiple readings of one book related to theme of the week
  - Language Elicitation
  - Recasts
  - Vocabulary (with picture support and definitions)
National Randomized Control Trial Study (2016-2017)

Recruitment
- Recruited preschool and pre-kindergarten classrooms across the country
- Classrooms serving DHH children where teachers used spoken language (with or without sign)

Participants
- 48 teachers
- 39 schools in 14 states
- Urban: Chicago, LA, Las Vegas, Tampa, Louisville
- Rural: FL, IL, MN, DE, CT
- Public, private oral, state schools
- full day and ½ day
Participants

N = 228 DHH children (52% intervention)
Mean age = 4 years 1 month (range 2.8 to 6.9 years old)
18% has severe additional disabilities

Ethnically diverse (30% white)
17% home language not English
67% identified 0-6 months; 50% entered intervention before 12 months
50% hearing aids; 42% cochlear implants
71% Spoken language only; 22% bimodal; 6% sign only
41% in class with hearing children
Professional development

• 2 day workshop in Atlanta-twice during the summer

• Coaching teachers
  – Video using SWIVL
  – Feedback via email
  – One-on-one as needed

• Teacher website with training videos
How to Receive Training

We ask teachers to attend one two-day workshop before implementing Foundations for Literacy.

We offer a two-day training workshop. Only teachers who attend training can purchase the curriculum.

Summer Training

Weekend training workshops in Atlanta will be offered on July 14-15, 2018 and August 11-12, 2018. Training is from 9:00 AM to 3:30 PM each day at the College of Education and Human Development, 30 Pryor Street, Georgia State University, Atlanta, GA. Costs are $200 per participant + travel expenses. Registration and the cost of Foundations is waived for Georgia teachers through a special funding initiative.

Register here.
Welcome to the Foundations for Literacy Teacher Website!

*Foundations for Literacy* is an early literacy intervention developed specifically for deaf and hard-of-hearing young children. Targeted learning objectives include: vocabulary, narrative skills, alphabetic knowledge, phonological awareness, and reading decodable words and short connected text. Each lesson includes fun, age-appropriate, integrated activities; instruction is differentiated based on children’s speech perception and language abilities.

**Teacher website:** [http://foundationsforliteracy.cehd.gsu.edu/](http://foundationsforliteracy.cehd.gsu.edu/)