0-3: The Diagnostic Years for Communication and Language Development

Presented by:
Mari Hubig
0-3 Outreach Coordinator
Educational Resource Center on Deafness

The Brains of Babies

- By 5 months gestation, 80 billion neurons have been created
- At birth, infants have most, if not all, of the brain cells they will ever have
- During the first 8 months, new connections are formed more quickly than they are broken
- Development requires not only synaptic connections but also selective loss or “pruning”
Pruning the Brain

- Connections that are weaker, ineffective, or unused are removed by “pruning”
- Experiences determine which connections are pruned and which are strengthened
- After the first birthday, pruning occurs more quickly
- The pruning process allows the brain to adapt to its environment
- These adaptations allow the young child to continue to learn

Brain Neuroplasticity

- Neuroplasticity is the ability of the brain to change easily with learning
- The brains of young children receive many different inputs and their brains make connections
- The child’s “mental filing cabinet” is fluid and can take in large amounts of information with ease
- Pruning allows the brain to become more efficient
- As the brain ages, it becomes less “plastic” or easily modified
- Modifications continue through a person’s life
Plasticity and Critical Periods

- Critical periods in language development still considered 0-3
- Brain research shows critical periods do not “end”
- As plasticity reduces, brain can still make new connections
  - Requires more time for the connections to stick
  - Requires more effort on the part of the learner

Parent CHOICE

- 0-3 services are family oriented
- Parents have choices for communication and language
  - Choose a starting point
  - Parents & service providers have flexibility to revisit communication decisions regularly
- Consistency is a must regardless of changes
- We must empower parents to be advocates for the needs of their child
Following the Child’s Lead

- Audiograms and what they “tell” us
- Assumptions professionals make based on audiological information
- Do we really know what is “right” for others?
- Offering parents a buffet instead of a single serving
- Watching the child – what does she show us is working for her?

Challenges for Professionals

- We have seen the past
- We have seen the struggles and successes
- Fears of the child/family not having successful communication & language
- Critical period – YIKES!
- Mixing and changing modalities – but the critical period timeline ... DOUBLE YIKES!!
Making an Informed Choice

- Choices are personal and individual
- Every child and family is different – so each choice must match each family
- Deciphering your child
- No “formula” for communication choices
- Parents need personal investment in finding what works for their child
- Using multiple modes will not cause a deficiency in another mode (e.g., sign does not slow or limit speech production)

Revisiting Communication Choices

- Should occur during re-evaluation of communication/language development
  - Typically every 3-4 months
- What has worked? What is still a challenge?
- What are we seeing from the child
- Does the family want to consider adding or making changes to communication mode(s)
The Internet and the “Helpful” Outsider Opinion

- Parents are going to research information on the internet
  - Offer guidelines for vetting internet info
- Biased versus unbiased information
- It worked for us – it will work for you
- The doctor who “knows” it all

DHH with Additional Disabilities

- All parents want children to develop typically
- Some parents desire a communication mode that is inappropriate for the child
  - Parents want speech but child has trach and no Passy-muir valve
  - Parents want sign but child has significant motor challenges
- Unbiased and realistic information
Your Opinion as an “expert”

• Parents don’t know what they don’t know
• Many times will depend on ECI team & DHH teacher to “help” them decide
• Our opinions and experiences with other families are NOT relevant
  ◦ Remember: Each family and child is different and each choice is individual
  ◦ Our prior experiences can help parent trust our “expertise” – just remember outcomes will not be the same

Making a Choice

• Traditional choices include:
  ◦ Auditory/oral
  ◦ Simultaneous communication (also called Total Communication)
    • Typically uses Manually Coded English sign system (SEE)
  ◦ American Sign Language

• Additional choices can include:
  ◦ Object/real picture communication
  ◦ PECS (Picture Exchange Communication System)
  ◦ Buttons & switches
Cued Speech

- For our upcoming scenario, we will be discussing a speech support called “cued speech.” Cued speech uses 8 handshapes in 4 locations near the mouth to help DHH children see syllables that they may struggle to hear.
They Chose WHAT?

- Scenario: The DHH teacher gave a parent unbiased information about communication options. The child has a severe to profound hearing level and has hearing aids. With hearing aids the child has ability to hear speech, but will miss several sounds. The mother considers everything, and then decides she wants to focus on spoken language with cued speech as a support. She wants all service providers to use it. You do not know cued speech and really don’t know how it works. Your caseload is huge and you have limited time as it is. What do you tell this parent?

How Parents View Service Providers

- Need to trust that we are professionals and have the knowledge/experience to guide them
- Cannot be an unemotional experience for the PA
  - Occasional sharing of yourself can help parents feel more connected to you
  - Don’t overshare ... you are not a friend, you are a professional
ECI Service Providers

- Never assume anything – always have your DHH Parent Advisor on speed dial
- Don’t immediately offer things you read or that have been shared with you
  - Check with the DHH PA to ensure info is unbiased
- Early Intervention is a team event
  - None of us can work in isolation and expect success from the child/family
  - Need to ensure all team members are working to support all goals as much as possible

When are Communication Choice Changes Needed?

Anytime the chosen method(s) is not working or is no longer working for the child
IFSP becomes the IEP

• IFSP requires that:
  ◦ Parents make decisions and are part of the plan
  ◦ Parent decisions re: communication and language are respected and adhered to

• IEP:
  ◦ Focuses solely on the child
  ◦ Language/communication options may be limited by what deaf program offers
  ◦ Parent input is always solicited, but many ultimate decisions are out of parents hands

Achieving Balance

• Part of discussion for parents can include info about LEA’s offerings
• This is part of giving parents all information
• Potential impact of choices when child becomes school aged (including other districts that can support parent decision) should be discussed
• Parents should never feel pushed to accept communication mode of LEA
  ◦ Their decision making rights are not limited by school options
Realism

- Having hard conversations
  - Limited or lack of progress
  - The need to consider changes when the parent is “married” to the original choice
  - Your child has clearly chosen spoken language as his preferred communication mode even though the family is deaf
  - Consider moving from signed/spoken language to objects/pictures due to cognition

The Parent Ignores your Expertise

- Scenario: You have been working with a family for about 14 months. The parents chose auditory/oral communication for their child. The child was fit with hearing aids at 4 months. However, the child is now 18 months old and is only able to produce single syllable “ba” or “ma.” She cannot imitate other speech sounds and shows no interest in talking. She appears to be very visually oriented, and you think that adding sign could help her make better progress. The parent was told early on that signs will stop speech development, so the parent refuses to add hand gestures. How do you handle this situation knowing that this child is losing valuable language time every day?
Unbiased Information

- Here are some places that a family can find researched, unbiased information on DHH:
  - Boys Town
    [https://www.boystownhospital.org/hearingservices/childhoodDeafness/Pages/default.aspx](https://www.boystownhospital.org/hearingservices/childhoodDeafness/Pages/default.aspx)
  - Hands & Voices
    - National [http://www.handsandvoices.org](http://www.handsandvoices.org)
  - Education Service Center Region 11, Statewide DHH [http://www.esc11.net/domain/118](http://www.esc11.net/domain/118)
  - Educational Resource Center on Deafness (ERCOD) [http://www.texasdhhresources.org](http://www.texasdhhresources.org)
  - *The Book of Choice*, edited by Leeanne Seaver

Any Questions . . .

or Comments
Contact Info

Mari Hubig, M.Ed.
0-3 Outreach Coordinator
Educational Resource Center on Deafness
512-462-5413 (voice)
512-516-1647 (voice/text)
512-410-1638 (video phone)
mari.hubig@tsd.state.tx.us