GUIDED CASE STUDIES

Bilingual Children with Hearing Loss
Who are we talking about?
Bilingual Children with Hearing Loss

(Douglas, 2011)

Simultaneous
Two or more languages before 2 or 3

Process

Sequential
Another language after 3
Limited Proficient in majority/minority language

Family

Monolingual Other Language
Language other than the majority is spoken at home and in the neighborhood

Bilingual
Both the majority and minority languages are spoken at home and in the neighborhood
Goal of Intervention

What can we do?
Intervention Model

(Moog & Stein, 2008)

(Genesee, 2008)
Designing Intervention

Review: How do we do this?
Facilitating Bilingual Development

Set up an Intervention Environment!

Facilitate Simultaneous or Sequential Learning

via

Professional or Compensatory Support

(Douglas, 2014, McConkey Robbins, 2007; Rhoades, 2008)
## Intervention Environments
*(Douglas, 2014)*

<table>
<thead>
<tr>
<th></th>
<th>Bilingual – Majority and Minority Language Speaking Families</th>
<th>Monolingual Minority Language Speaking Families</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home</strong></td>
<td>Mutual strategizing for home intervention – <em>(minority lang. use @ hm.)</em></td>
<td>Minority language is spoken at home and in the neighborhood</td>
</tr>
<tr>
<td><strong>Therapy</strong></td>
<td>Individual therapy in the majority language with active parent participation – parent uses the strategies in the minority language at home.</td>
<td>Individual therapy is provided in the minority language (with bilingual therapist/assistant or monolingual therapist and an interpreter).</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td>Maj. language practice through an auditory-oral or mainstream preschool.</td>
<td>Maj. language practice through an auditory-oral preschool program.</td>
</tr>
<tr>
<td><strong>Extra-curricular</strong></td>
<td>Parent may enroll the child in additional, individualized minority language training.</td>
<td>Parent may enroll the child in additional, individualized majority language training.</td>
</tr>
</tbody>
</table>
Simultaneous Learning
Professional Support
(Gonzalez et al, 2005; Douglas, 2011)

- Bilingual Support Model
- Coordinated Service Model
- Integrated Bilingual model
- Combination: bilingual support, coordinated, integrated
Sequential Bilingual Learning Professional Support

First
Develop L1 for 3-4 years. (or more)

Second
Begin L2 & cont. with L1 training
Enlist the Family &/or Tutor

Third
Provide Combination of Integrated and Coordinated Services

(Douglas, 2014; Goldstein, 2012; Gonzales, 2005)
Ways to **Compensate** for Staff Shortages

**Bilingual Families**
- Tag Team Approach
- Parent-Centered Integrated Model
- Coordinate with Language Teacher

**Monolingual-other Language Families**
- Tag team with Interpreters
- Tag Team with Bilingual Resources
- Coordinate with Language Teacher

You don’t have to know the language. Just know what to do.

*(McConkey-Robbins, 2007; Douglas, 2014)*
Elementary School Age

MAINSTREAM OPTIONS
Mainstream Options

- **DLL Programs**
  - 90% Home Lang
  - 10% English
  - Changes to 50/50 by 3rd grade
  - Considered Additive

- **ELL Programs**
  - Full Immersion
  - Some Support
  - Considered Subtractive

- **Heritage Language Programs – Elem. + PK**

*Combine ELL with Heritage Programs
* Combine LSL programs with Heritage programs
Let’s try this

Case Studies
Case Studies

- Case Review
- Think, Pair, Chat
- Michael Thinks Out loud
- Share outcomes (video examples & raw data)
- Repeat for 5 cases
- Questions and Panel Discussion
Case 1

- 16 month old girl
- Cause of HL – unknown
- Bimodal CI + HA, just activated
- Parents speak Spanish Only. HS education
- Normal Health, Normal Cognition, Gregarious
- Dad is a farmer (“knows some English”),
- mom stays at home (Spanish speaking only)
- Family has been in the US for three years
- There are no plans to go back to their home country
Audiogram – Right CI
Case 1: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
Meet Selena

<table>
<thead>
<tr>
<th>Language</th>
<th>Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>86</td>
</tr>
<tr>
<td>Spanish</td>
<td>96</td>
</tr>
</tbody>
</table>

When Selena was 5 years old, she spoke English and Spanish and scored 86 and 96, respectively, on the CELF-P Core Language test.
Case 2

- 12 year old girl, recent immigrant to US
- Cause of HL – unknown
- Bilateral HA. PTA 55
- Parents speak English and Arabic
- Child speaks Arabic only, AVT graduate, relies on lip reading
- Normal Health, Normal Cognition, Gregarious
- Dad works in the oil business, mom stays at home
- Three older siblings with normal hearing in college
- Parents ask if she can learn English or if she should continue private tutoring in Arabic only.
Case 2

Speech & Language Report

Audiogram
Case 2: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
Cochlear Implant Audiogram

Learned English with HAs for one year THEN CI Surgery
Meet Haneen

First
Develop L1 for 3-4 years. (or more)

Second
Begin L2 & cont. with L1 training
Enlist the Family &/or Tutor

Third
Provide Combination of Integrated and Coordinated Services

Standard Score 85
Case 3

- Female born in Hong Kong, Chinese native
- Parents Speak Cantonese and English
- HL suspected by parents at age 2, parents dismissed by the doctor
- Formally diagnosed and fit with BTE HA at age 5
- HL moderate-severe age 5, progressed to severe at age 7 and then fluctuated between that and profound (etiology EVA)
Case 3

- Government provides speech therapy until the age of 6
- Family of modest means – private speech therapy too expensive beyond age 6
- Cantonese is the language of the country
- English is the language of schools
- Mandarin introduced 35 min./day grade 3-9
Case 3: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
Meet Carol

“The person who says it cannot be done should interrupt the person doing it.”
Chinese Proverb
Case 4

- Female with Congenital Profound SNHL
- ID’d at 13 months
- Parents speak English and Armenian
- Unilateral CI at 2-11
- Unaided other ear – no measurable benefit
- Attended speech school learning English starting at age of 15 months – Age 5
- Parents felt speaking English disconnected them from her and they should speak Armenian at home
- At age 5, enrolled in mainstream ½ day English pre-K and ½ day Armenian Heritage Pre-K
Case 4 Audiogram
Case 4: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
Meet Knarr

<table>
<thead>
<tr>
<th>Age</th>
<th>SOLOM (Armenian)</th>
<th>OWLS Composite (English)</th>
</tr>
</thead>
</table>

Score:
Case 5

- 16 month male. Congenital, hereditary bilateral profound SNHL
- Both parents are deaf and primarily use sign language,
- Both Parents use written English,
- Parents have some speech reading skills but need a sign-language interpreter if written language is not used
- Child received Cochlear implants at 13 months
- Bilateral CI PTA 25
- No other medical or cognitive issues
- Family history of vision difficulties
- Parents want their son to have “better opportunities than they do”
Case 5: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
### Meet Kellan

<table>
<thead>
<tr>
<th>37 mths</th>
<th>Articulation (AAPS)</th>
<th>Language Quotient (TELD)</th>
<th>Exp. Vocab (EVT)</th>
<th>Recep. Vocab (PPVT)</th>
<th>Talking (TASL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Scores</td>
<td>93</td>
<td>86</td>
<td>101</td>
<td>91</td>
<td>Level 2</td>
</tr>
<tr>
<td>Signing Skills</td>
<td>Prefers to sign with certain people</td>
<td>Talks more than signs</td>
<td>Understands more than uses</td>
<td>Strings 2-3 Occasional 6 or more</td>
<td></td>
</tr>
</tbody>
</table>
Case 5

- 6 month old boy, Born in the US
- Marcus Gunn Yawning Syndrome on L eye
- Bilateral moderate hearing loss PTA 55dBHL
- Aided PTA 20 dB HL
- Educated parents
- Dad is German Consulate, Mom works at home
- Parents only speak German in the home
- Parents do not need a German interpreter
- Family plans to return to Germany... eventually, and not in the near future
Case 5 Audiogram

Unaided

Aided
Case 5: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
Meet Michael

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOLOM (German)</td>
<td>Intermediate Fluency Level (3rd of 4 levels)</td>
</tr>
<tr>
<td>PLS-4 (English)</td>
<td>Standard Score: 110 (85-115 = WNL).</td>
</tr>
</tbody>
</table>
Case 6

- 3 month old boy
- Severe SNHL
- Fit with HA 6 mths
- Parents from Mexico, educated and both work in the US
- Spanish only spoken at home
- Desire for child to be bilingual
- Plan to stay in the US and earn citizenship
- No other issues
Case 6 Audiograms
Case 6: Think/Pair/Share

- Bilingual or Monolingual other family?
- Is the child limited English/other proficient?
- Need to develop 2 languages? Why?
- How? Simultaneously or Sequentially?
- Language(s) of Intervention?
- By which process? Continuum of support? Sequential? Compensatory?
- What about in the mainstream?
## Meet Manuel

<table>
<thead>
<tr>
<th>Language</th>
<th>PLS-4 Aud. Comp.</th>
<th>PLS-4 Exp. Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Standard Score 106</td>
<td>Standard Score 105</td>
</tr>
<tr>
<td>Spanish</td>
<td>Standard Score 100</td>
<td>Standard Score 101</td>
</tr>
</tbody>
</table>
Final Point: Outcomes Management

N = 20

Age in months

- English
- Spanish
- Treatment Age

N = 20
Conclusions

- Success cannot be haphazard. 
  - MUST have a plan!
- Variety of models exist – what can you design?
- Can you extract elements of existing models?
- Supporting both languages has beneficial results
- DESIGN INTERVENTION TO MAKE IMPROVEMENTS IN BOTH LANGUAGES
Questions?