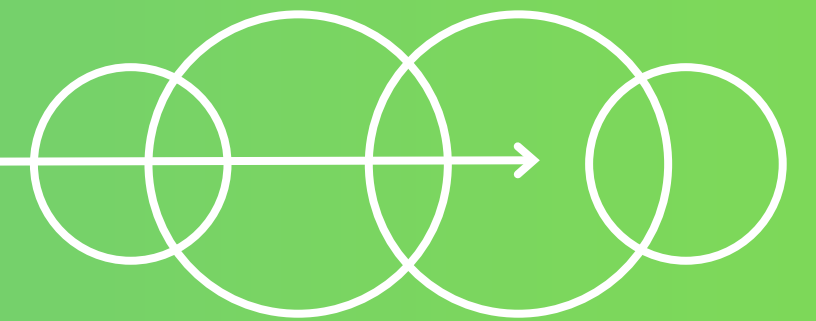




←

Family-Centered Early Intervention  
Deaf/Hard of Hearing  
FCEI-DHH

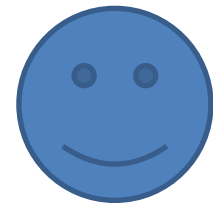
Guiding Values







2013



2024

Journal of Deaf Studies and Deaf Education

*Theory/Review*

**Best Practices in Family-Centered Early Intervention for Children Who Are Deaf or Hard of Hearing: An International Consensus Statement**

Mary Pat Moeller<sup>\*1</sup>, Gwen Carr<sup>2</sup>, Leanne Seaver<sup>3</sup>, Arlene Stredler-Brown<sup>4</sup>, Daniel Holzinger<sup>5,6</sup>



**Volume 29, Issue S1  
February 2024**



# Introduction

Supporting optimal outcomes for children who are deaf or hard of hearing

Promoting positive family well-being

Advancing and incorporating current understanding to be evidence-informed

# Writing Tea



Mary Pat Moeller



Amy Szarkowski

m



Sheila Moodie



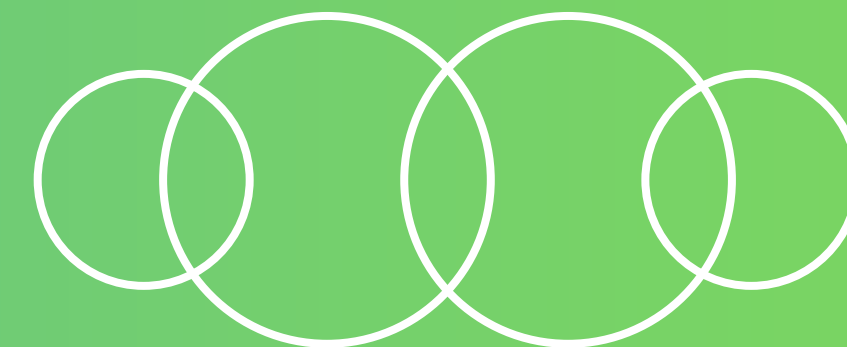
Trudy Smith



Elaine Gale



Bianca Birdsey





# FCEI-DHH Special Issue












*Journal of Deaf Studies and Deaf Education*, 2024, 29, SI8–SI26

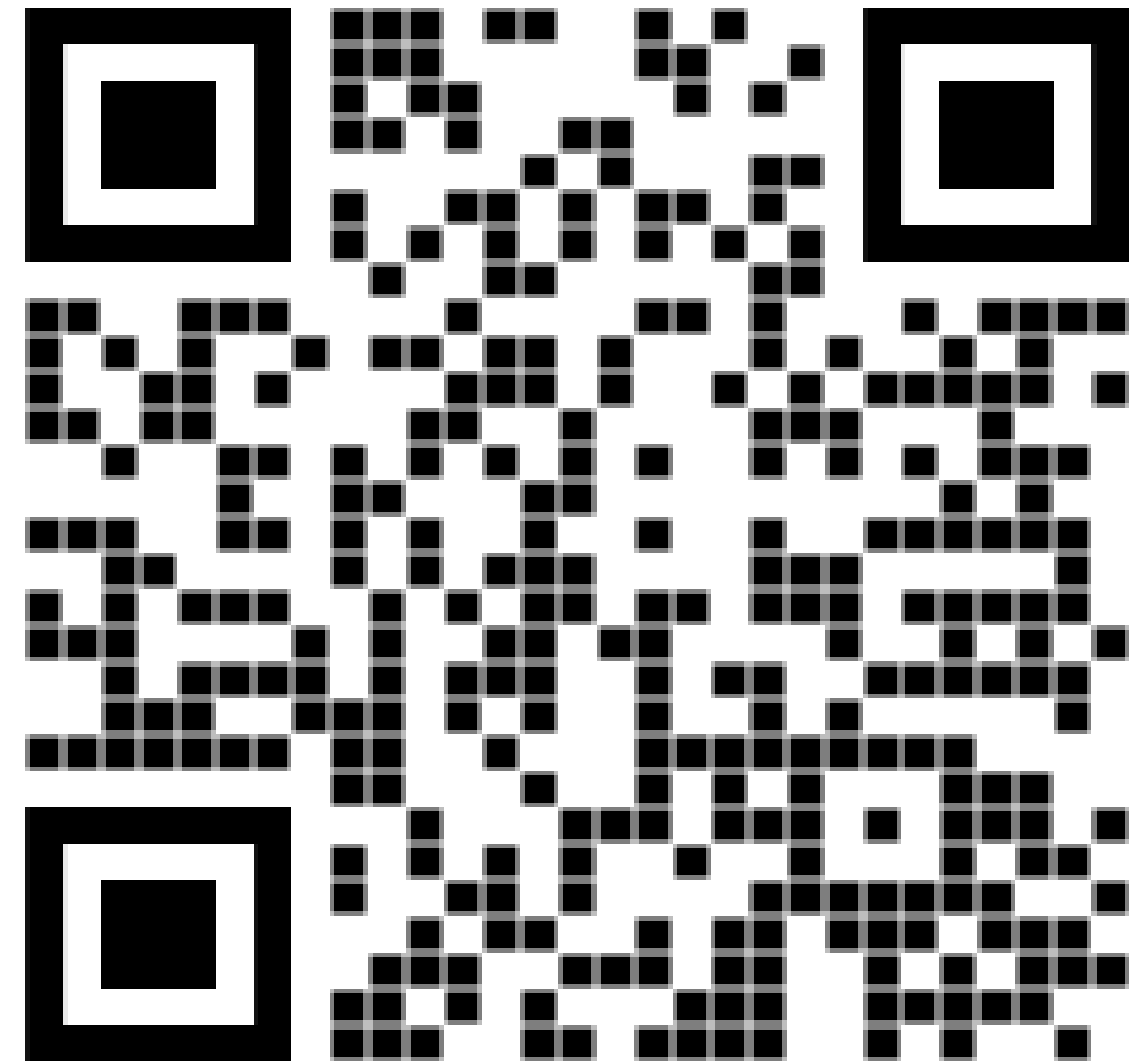
<https://doi.org/10.1093/deafed/enad038>

Theory/Review Manuscript

## Family-Centered Early Intervention Deaf/Hard of Hearing (FCEI-DHH): Guiding Values

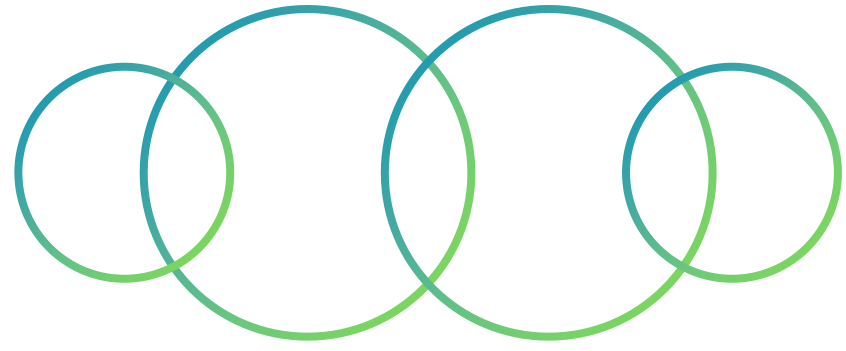
Mary Pat Moeller <sup>1†</sup>, Amy Szarkowski <sup>2,3†</sup>, Elaine Gale <sup>4</sup>, Trudy Smith <sup>5</sup>, Bianca C. Birdsey <sup>6</sup>, Sheila T.F. Moodie <sup>7</sup>,  
Gwen Carr <sup>8</sup>, Arlene Stredler-Brown<sup>9</sup>, Christine Yoshinaga-Itano <sup>10</sup>, FCEI-DHH International Consensus Panel<sup>‡</sup>,  
Daniel Holzinger <sup>11,12</sup>

# FCEI-DHH Special Issue



# FCEI-DHH Guiding Values





# Guiding Values

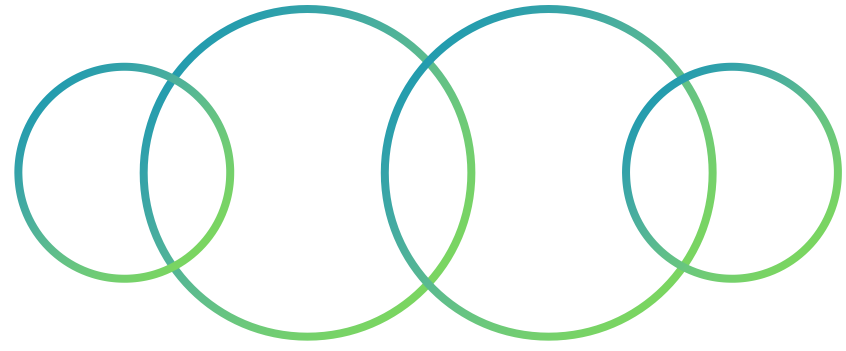


- 01 — Being Family-Centered
- 02 — Responding to Diversity
- 03 — Involving Invested Parties
- 04 — Supporting Holistic Child Development
- 05 — Ensuring Fundamental Human Rights



How is your current work or interactions with EI aligning?





# Guiding Values



- 01 — **Being Family - Centered**
- 02 — Responding to Diversity
- 03 — Involving Invested Parties
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- 05 — Ensuring Fundamental Human Rights



# Being Family-Centered

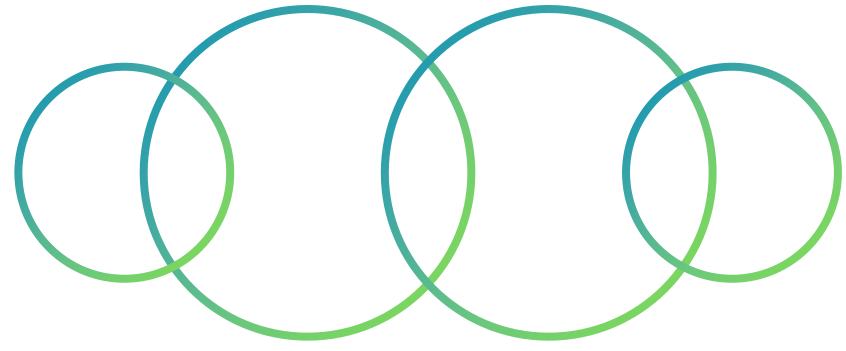


The family defines  
who is “family”

Strengths, desires,  
values, needs

Relationships &  
self-Efficacy





# Guiding Values



- 0 1 — Being Family-Centered
- 0 2 — **Responding to Diversity**
- 0 3 — Involving Invested Parties
- 0 4 — Supporting Holistic Child Development
- 0 5 — Ensuring Fundamental Human Rights

# — Responding To Diversity



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Diversity in Families  
& Family Systems

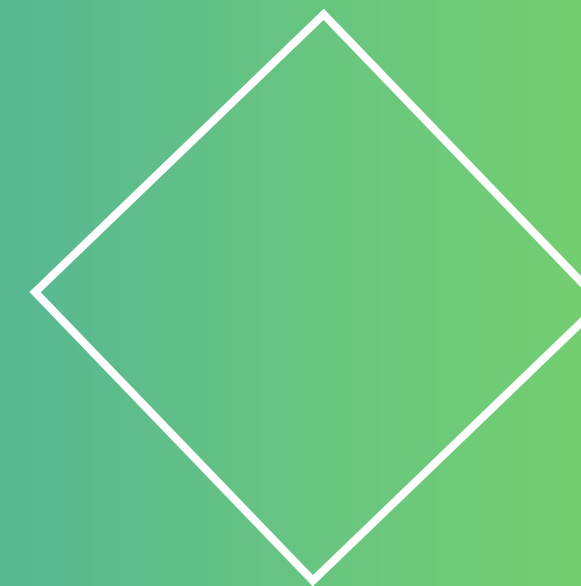
Global  
Families

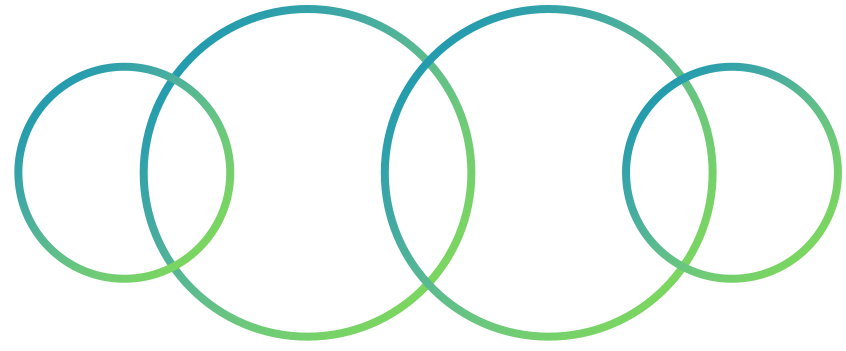


Child & Family  
Characteristics



Cultural  
Perceptions of  
Being DHH





# Guiding Values

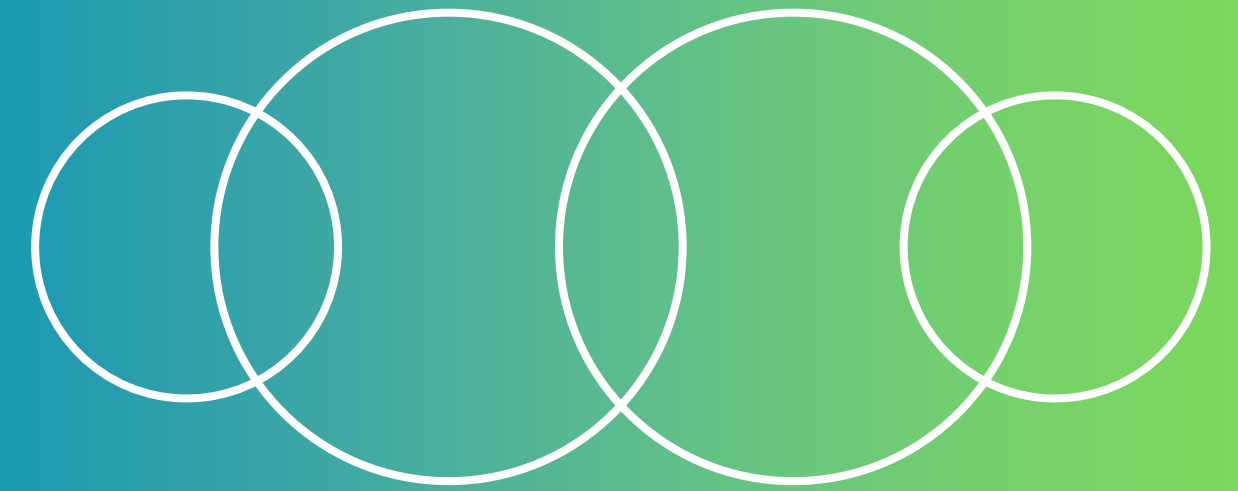


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# Involving

# Family Leaders

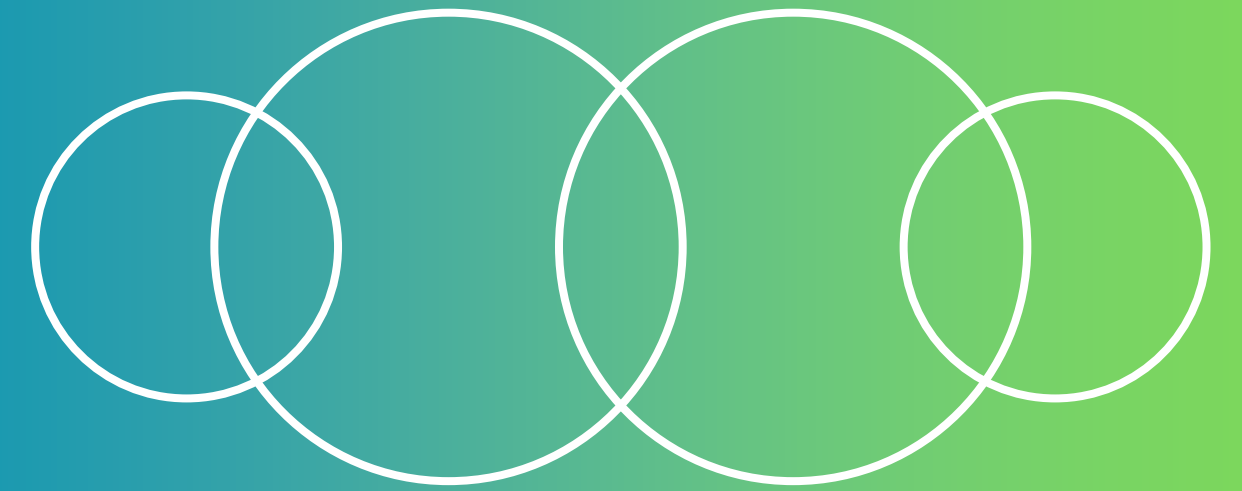


Family -to -Family Support

- Well-being
- Knowledge
- Empowerment
- Coping
- Advocacy
- Accessing resources
- Increasing investment
- "We are not alone"

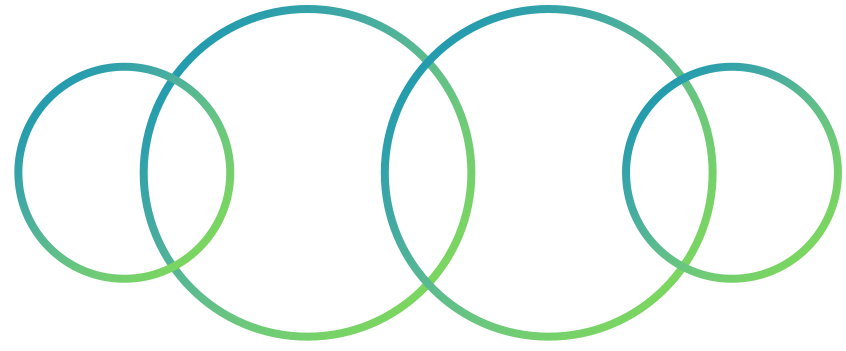
# Involving DHH Leaders

DEAF LEADERSHIP  
INTERNATIONAL ALLIANCE  
'MEET DEAF ADULTS' VIDEO PROJECT



## DHH Adult -to-Family Support

- ‘What it means to be DHH’
- Increase sense of competence in family
- Diversity of experiences
- Positive perceptions of being DHH
- Support child development
- Emphasize visual info
- Variety of roles



# Guiding Values



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# Supporting

# Holistic Child Development

## Approaches to Learning

Cognitive, emotional & behavioral self-regulation

Shift attention/Executive Function

Joint attention & contingent lang  
(If \_\_\_\_, then \_\_\_\_; First \_\_\_\_, next \_\_\_\_)

## Social-Emotional

Compromise, sharing, cooperation & acceptance of others

Recognizing, expressing, managing emotions

Understanding of social context

## Language & Lit.

Use of language for diverse purposes (verbs, question words)

Parent-child interaction lays foundation (turn-taking, responsiveness)

Social communication

## Cognitive

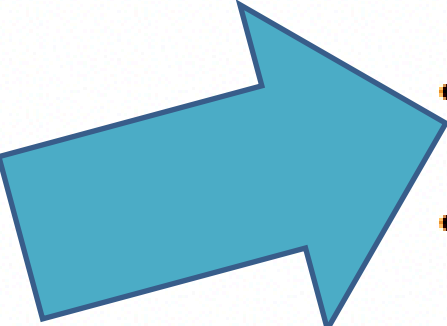
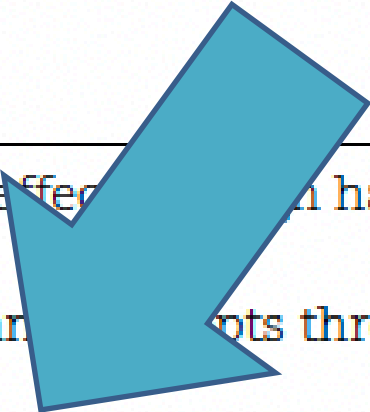
Explore environment

Multiple uses of objects, cognitive flexibility

Play

**Table 1.** Domains of development and holistic early intervention for children who are DHH.

Domains of development	Implications particularly relevant for young children who are DHH (Note that many of these apply to children with typical hearing as well)
Approaches to learning	<ul style="list-style-type: none"> <li>• Learn through observation and exploration of their environments, including understanding cause-effect relationships through hands-on exploration (Waismeyer &amp; Meltzoff, 2017)</li> <li>• Benefit from playful interactions, which provide a rich context for learning language, social skills, and problem-solving through discovery, problem-solving, and joyful exchanges (Slot et al., 2017)</li> <li>• Benefit from following the gaze of caregivers and building “referential meaning” which may have implications for social-cognitive development (Brooks et al., 2020)</li> </ul>
Social and emotional development	<ul style="list-style-type: none"> <li>• Benefit from exposure to others’ demonstration and explanation of emotions (made understandable to the child) to both build understanding of emotions and possibly foster empathy (Tsou et al., 2021)</li> <li>• Need opportunities to build communication abilities to express own thoughts and emotions, and to understand others’ thoughts and emotions (Netten et al., 2015)</li> <li>• Need regular access to language/communication and social experiences or they may be at-risk for having difficulty understanding and navigating emotional experiences (Sidera et al., 2017)</li> <li>• Benefit from explicit instruction related to emotion words/signs to enhance their ability to convey their feelings, wants, and needs (Sidera et al., 2017)</li> <li>• Benefit from others’ discussing how they control themselves to bolster self-regulation skills (Lind-Combs &amp; Holt, 2022)</li> <li>• Benefit from learning to use signs as infants to help with emotional regulation (whether they will use signs or spoken language, or both, as they grow; Karsten et al., 2017; Spencer &amp; Koester, 2016)</li> <li>• Learn about caregivers’ emotional availability through caregiver use of touch; touch can serve many purposes, including helping children who are DHH to understand and regulate emotions (Paradis &amp; Koester, 2015)</li> </ul>
Language and literacy	<ul style="list-style-type: none"> <li>• Benefit from family members’ actions to draw child’s attention to communication and to important information in the environment, including tactile strategies (such as touching to gain attention or placing objects on the child’s skin; Beatrijs et al., 2019)</li> <li>• Benefit from having family members read and share books in ways that can promote DHH infants’ early literacy (Brown &amp; Watson, 2017)</li> </ul>



# Supporting Perceptual Development

## Motor & Physical

Some etiologies have implications for motor development

Visual-motor integration influences language dev (signed & spoken)

## Auditory

Influence of auditory exposure/access

Importance of consistency of use for those who benefit & desire to use hearing technologies

## Visual

DHH infants do not have “better vision” but do process visual information differently

Sensitivity to visual cues – signed languages & gestures

## Vestibular

Balance, posture, muscle tone

Head control, visual tracking, bilateral coordination



Motor and physical development

- Benefit from monitoring of motor development; children who are DHH are not necessarily at greater risk of experiencing different or delayed motor development, although some may have etiologies or conditions that impact physical and motor functioning (Veiskarami & Roozbahani, 2020)
- Benefit from encouragement to use their motor abilities; physical activity can promote postural control and strength (Veiskarami & Roozbahani, 2020)
- Benefit from promoting fine motor development, shown to be a predictor of spoken and signed language performance (Guan & Smolen, 2022)

Auditory development

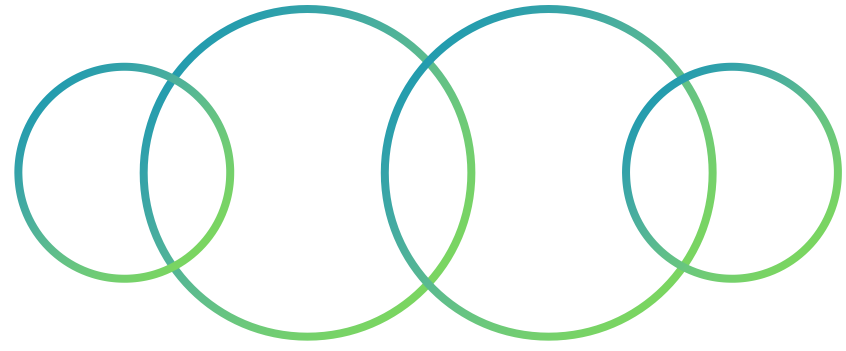
- Benefit from reduction of ambient noise in the environment (e.g., remote microphones, reducing distance from the talker, quieting noise sources). Noisy environments make it more difficult to learn meaning from sound(s) in their environment (McCreery et al., 2015)
- Benefit from family education about providing optimal listening environments and opportunities, whereas children benefit when these learned strategies are implemented with regularity (Suskind et al., 2016)
- Benefit from consistent access to multimodal cues, such as the visual aspects of speech and/or through the use of gesture and signed language (Esteve-Gibert & Guellaï, 2018)

Visual development

- Benefit from visual input to make sense of their world; do not have superior visual abilities, per se, although they often look at objects longer than children with typical hearing (Monroy et al., 2019)
- Benefit from jointly focusing visual attention on objects of interest to the child who is DHH and their caregivers (Lieberman et al., 2014)
- Benefit from on-going visual screenings during childhood and monitoring of visual tracking, as well as use of vision to explore the environment (Wiley et al., 2016)

Vestibular development

- Benefit from monitoring of vestibular development (e.g., posture, stance, gait, and coordination), as children who are DHH are at an increased risk of vestibular dysfunction (Nandi & Luxon, 2008); some etiologies that contribute to a child being DHH are known to directly influence the vestibular system (Maudoux et al., 2022)
- May be affected by even mild alterations in vestibular development in areas such as motor planning, motor coordination, and motor-speech abilities, which can have implications for children who are DHH, both with respect to how they move in space, and the development of their communication abilities whether they sign and/or speak (Inoue et al., 2013)
- May have vestibular dysfunction that manifests as imbalance, delayed attainment of or deterioration in demonstrating locomotor skills, and episodes of dizziness or vertigo (Inoue et al., 2013; Singh et al., 2021)
- Benefit from support from Occupational Therapists and Physical Therapists when these challenges arise (Maudoux et al., 2022)



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# HUMAN RIGHTS





# International Treaties



# Global Resources



Promoting Common  
Language & Understanding

Contextualizing  
FCEI-DHH as a  
fundamental  
human right



Commit to Incorporating  
FCEI-DHH  
Guiding Values

In our collective work



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