

Brain Building Through Music & Singing

Barb Meyers M.A., Ed. CED
St. Joseph Hearing + Speech
Alexandria Puckett M.S. CCC-SLP
Maryville University

EHDI Conference 2025



Learning Objectives:



- 1. Participants will recognize the positive relationships between singing, music, enhanced brain plasticity, and relevance to the development of auditory processing and spoken language.
- 2. Participants will examine the sequential progression of a child's development through participation in music and singing experiences.
- 3. Participants will apply music and singing opportunities demonstrated and incorporate listening and spoken language strategies when planning music and singing experiences for daily routines.

Daniel Ling



"Music and singing have been an important part of human experience since the dawn of recorded time. Our own experience confirms that stories and verse learned in songs can usually be remembered and repeated word for word many years later."



Benefits of Music & Singing

- Right and Left-Brain Engagement (Thurman & Welsh, 2005)
- Evidence supports the use of songs as an intervention to support vocabulary development. (Grissom, A., & Finke, E.H. 2024)
- Build emergent literacy skills in infants and toddlers through music. (Hoope 2023)
- Music and singing increase a child's ability in spatial reasoning, which can enhance a child's mathematical and scientific abilities (Hughes)
- Social part of the brain is activated when singing with others (Kieber, Veit, Birbaumer & Lotz 2007)





More Benefits...

- Language Development-increasing communication skills
- Auditory memory
- Speech development-suprasegmentals-pitch, rhythm, intonation, & duration & provides opportunities for practicing sounds, words, phrases and word order
- Social Skills-invites children to become active participants-builds confidence
- Cognitive Development
- Exploring and regulating emotions
- Creativity
- Can be used to cue routines and make for smoother transitions
- Cultural Music-allows for personal identity & group affiliation





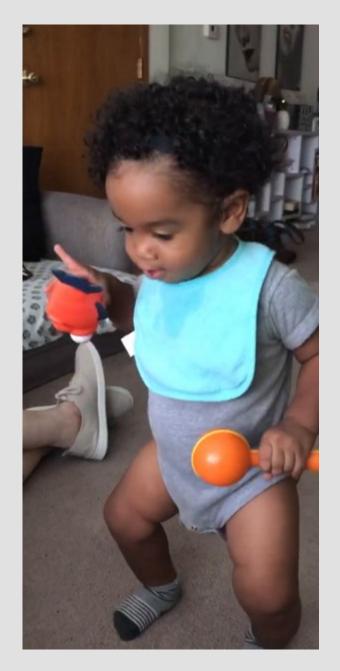
Listening & Spoken Language Strategies

- Auditory First
- Modeling/imitation
- Broadcaster
- Auditory Sandwich
- Sabotage
- Auditory Closure
- Acoustic Highlighting
- Expansion
- Wait Time
- Expectant Look
- Auditory Bombardment



Signs of Listening

- Change in facial expression
- Alert or calm to music
- Become quiet or stop an activity
- Turn to find the source of sound
- Increase body movements
- Coo, blow raspberries, or babble
- Points to ear





Look for the Signs



Setting the Stage...

- Sing or use a sing-song voice
- Repeat favorite songs over and over
- Use of rhythmic motions— rocking, bouncing, swaying
- Play music while sitting together/move to the music
- Provide music boxes, mobiles, musical toys, musical instruments, or use Alexa
- Incorporate music throughout the day
- Create songs about typical daily routines

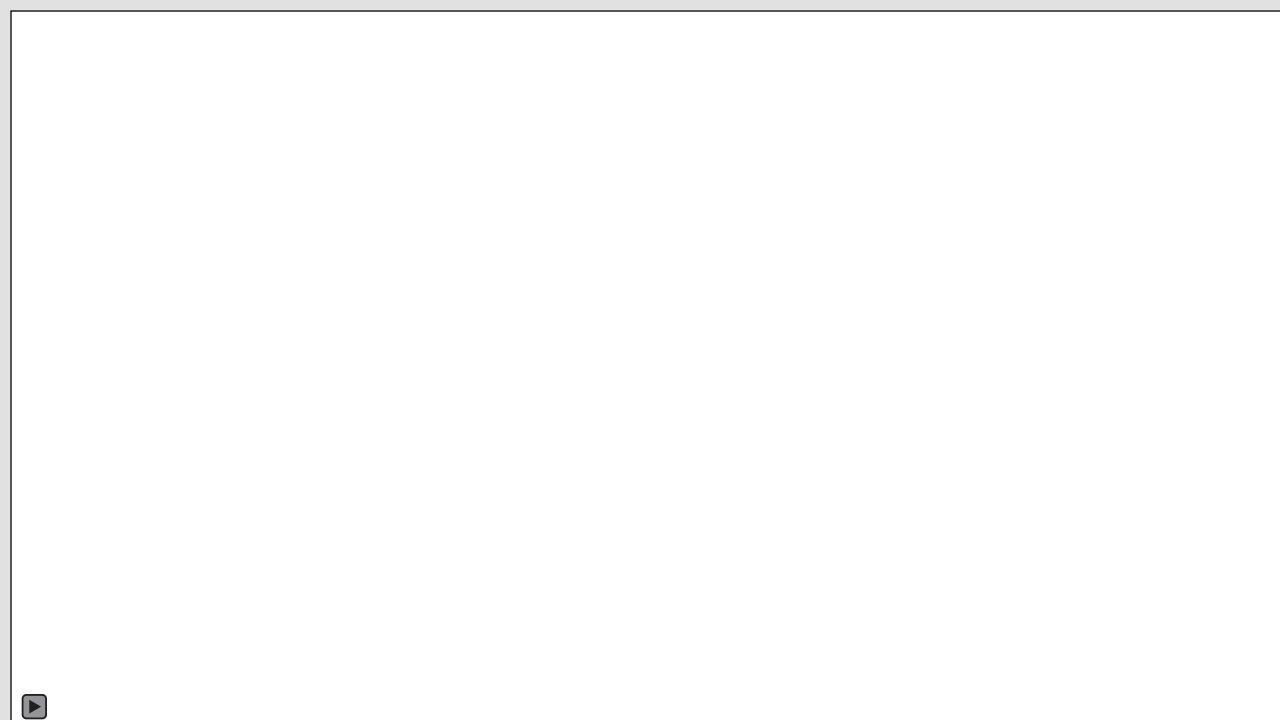




"Become Your Own Muse"



- Choose a familiar tune or make one up
- Use a variety of tunes
- Sing about the here and now
- Keep it short and simple
- Be sure to consider the child's language needs
- Repeat the same sounds, words, phrases
- Incorporate actions and props
- Use expectant pause to allow the child the opportunity to take a turn



"Oldies But Goodies"

Wheels on the Bus

Twinkle Twinkle

Old MacDonald

Itsy Bitsy Spider

Teddy Bear Song

Hi Ho the Derry Oh

Hokey Pokey

Five Little Monkeys

Any Pop Song

Ants Go Marching

Mary Had a Little Lamb

Farmer in the Dell

The More We Get Together

Ring Around the Rosie

I'm a Little Teapot

London Bridges

Around the Mulberry Bush

Cultural Songs





Roll Over



"The Dress Rehearsal"

The child becomes a more active participant through...

- -imitation
- -recognition
- -discrimination





"Emerging Singer"

- The child is beginning to use his/her own singing voice to fill in parts of a song
- Repeatedly singing simple songs builds vocabulary and targeted language structures



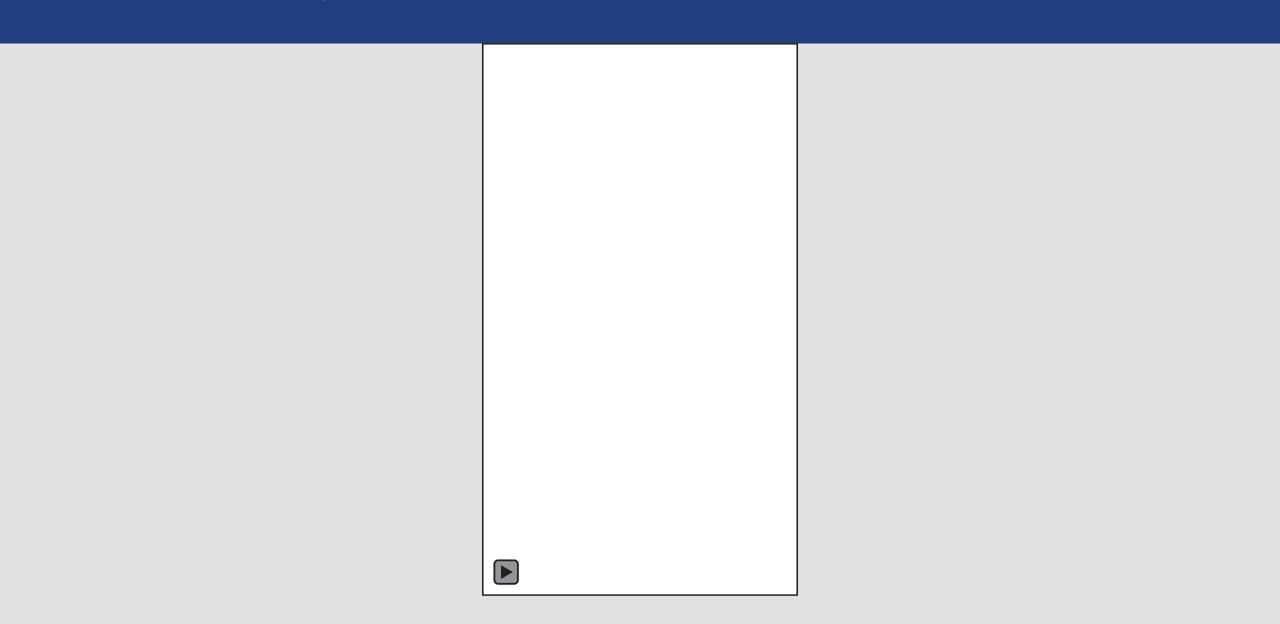
"On to the Grammys"

- The child is singing most of the melody and some or all of the words
- Move on to more complex language structures within songs as the child begins to sing more of the lyrics on their own
- The child may begin to make up their own songs





Five Little Superheroes



Questions



Contact Information

- Barb Meyers-- <u>bmeyers@sjid.org</u>
- Alexandria Puckett--<u>apuckett@maryville.edu</u>



Resources:

- Barton, C., McConkey Robbins, A.(2015) Jumpstarting Auditory Learning in Children with Cochlear Implants Through Music Experiences; Cochlear Implants International, https://dx.doi.org/10.1179/1467010015Z.00000000000267
- Trimble, M., Hesdorffer, D. (2017). Music & the Brain: The Neuroscience of Music & Musical Appreciation. *BJPsych International Cam bridge University Press*
- Gfeller, K., Driscoll, V., Kenworthy, M., & Van Voorst, T. (2011). Music therapy for preschool cochlear implant recipients. *Music Therapy Perspectives*, 29(1), 39-49. https://doi.org/10.1891/0734-6875.29.39
- Hoope, A. (2023). Sing and play your way to reading: Building emergent literacy skills in infants and toddlers through music. *The Reading Teacher*, 76(4), 451–488. https://doi.org/10.1002/trtr.2167
- Grissom, A., & Finke, E. H. (2024). Exploring interactive songs as a vocabulary input context. *American Journal of Speech-Language Pathology*, 33(3), 2636–2644. https://doi.org/10.1044/2024 AJSLP-24-00054



More resources:

- Jorgensen, E.J., Walker, E.A. (2019) Music Participation Among School-Aged Children Who Are Deaf or Hard of Hearing American Journal of Audiology
- Sarrazin, N. (2016). Music and the child. Pearson Publishing.
- Friedberg, J. (2020). Music with babies and young children: Activities to encourage bonding, communication, and Wellbeing. Jessica; *Kingsley Publishers*.
- Estabrooks, W., Morrison, H.M., Maclver-Lux, K.; (2020) Auditory-Verbal Therapy Science, Research, & Practice *Plural Publishing*
- Barton, C. and Robbins, A.M. (2007) Tune-Ups: A music program designed to foster communication development. *Valencia, CA: Advanced Bionics, LLC.*



