



# Using Music to Enhance Interaction and Imitation

ASHA Convention, November 15, 2013

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# Disclosure

- **Rachel Arntson is owner and creator of all Talk It Rock It products (formerly known as Kids' Express Train) and receives compensation for products sold including music CDs, the WE CAN TALK book, and the Push-Pull Puzzle.**

**Although this seminar is intended to teach others the treatment strategies used daily by Rachel in an early intervention program, materials are occasionally used as demonstrations ONLY for the purpose of showing others how to create their own materials in their work. No techniques taught during this session require any purchased materials to implement.**

- **To talk to Rachel about her company and products, visit booth 2410.**



## So Much to Say So Little Time, 😊

- References and brief mention of researchers contributing to the world of music and the brain.
- Components of a song for speech and language therapy.
- Songs for Interaction.
- Songs for Imitation.



# What is happening in the brain?

*“Musical activity involves nearly every region of the brain that we know about, and nearly every neural subsystem.”*

Daniel Levitin

*“Far more than language, music taps into primitive brain structures involved with motivation, reward, and emotion.*

Daniel Levitin



# Why would music benefit speech and language?

- Patel hypothesizes that musicians have neural plasticity with these conditions: OPERA
  - Overlap – Brain networks where speech and music are processed similarly such as how we perceive sound.
  - Precision – Music precision places high demands on brain networks.
  - Emotion – Music creates positive emotion.
  - Repetition – Music creates extensive repetition.
  - Attention – Music creates focused attention.



# Why would music benefit speech and language?

- Musical training leads to changes in the auditory system. (Nina Kraus)
- The pattern of beats in music and the ability to read are closely linked. (Goswami, Huss, et al.)

*“Music is a pleasurable boot camp for auditory processing.”* Aniruddh D. Patel



If there is any reason  
to use music in our work,  
**EMOTION** is it!

- Music moves us emotionally.
  - Music is a euphoric-inducing stimulant.
  - Memory is enhanced by how much we CARE about something
  - Caring leads to attention, alertness, mood, and neurochemical changes

*For arousing feelings and emotions, music is better than language. The combination of the two – as best exemplified in a love song – is the best courtship display of all.* Daniel Levitin



# Components of a verbally enticing song

*“Sing a simple song that I can simply sing!”*

- Think about the speech and language techniques embedded within a song.
- Frequent repetition.
  - Chains of three (Baby Blowing Bubbles)
  - Interludes of CV practice and sound effects
  - Focused language stimulation – Repeat and high interest
  - Sing them over and over and over
- Exaggerated and extended sounds and words. (Milk and Juice)
- Language or sounds within a child’s verbal ability.
- Slower rate – higher pitch.



# Components of a verbally enticing song

*“Sing a simple song that I can simply sing!”*

- Songs that invite participation.
- Universal chant/ rhythm. (also “Shave and a Hair cut rhythm)
- Songs have a distinct beginning, middle, and end. This is crucial for children with autism.
- Analyze the gross motor components related to speech components of a song.
- Using visuals and props can enhance but can also detract from speech practice.



# Songs for Interaction

- It's all about the connection. What do the parents already do? Add to that. (N and Z with parent)
  - Implement “Ready, set, go” or “1-2-3 go” when possible.
  - Wiggle, wiggle, wiggle. Wiggle, wiggle, wiggle.  
Wiggle, wiggle, wiggle. Push! (Child lying down.)
  - Horsie, horsie go to town. Horsie, horsie don't fall down.  
(Child sits on parent's lap.)
  - Swinging, swinging, swinging, Whee! (Child is lying down in a blanket.)



# Songs for Interaction

- Here comes the mousie, living in the housie, gonna get you! (Creep fingers up on child's arm.)
- Creepy mouse, creepy mouse from the barn into the house.
- Bumble bee, bumblebee in the barn. Gonna get \_\_\_\_\_ under the arm. (Circle finger on child's hand.)
- Row, row, row your boat, fishie swim. Row, row, row your boat, We fall in! (Hold hands as you row.)



# Songs for Increasing Interaction during Daily Routines

- Children with interaction disorders benefit from a predictable routine. A song can help that.
  - I brush my teeth on the bottom. I brush my teeth on top. I brush and brush and brush and brush. I brush and then I stop. (BINGO)
  - I can put my jacket on. Jacket. Jacket. I can put my jacket on. Hey, hey, hey! Put my arm in here. Other arm in there. I can put my jacket on. Hey, hey, hey! (Camptown Races)
  - During diaper changing. My eyes, eyes, eyes. My nose, nose, nose. My hair, hair, hair. My toes, toes, toes. (Mexican Hat Dance)



# Songs for Gross Motor Imitation

*"Virtually every culture and civilization considers movement to be an integral part of music making and listening."* Daniel Levitin

- Roly poly, roly poly. Clap, clap, clap. Clap, clap, clap.  
Roly poly, roly poly. Up, up, up. Up, up, up.  
Roly poly, roly poly. Down, down, down. Down, down, down.  
Roly poly, roly poly. All around the town, town, town.
- Walking elephants, walking elephants.  
Raise your trunk. Raise your trunk.  
Flap your ears.  
Stomp your feet.  
Walking elephants sure are neat.
- Hippo song – A hip, a hip, a hippopotamus. He climbed. He climbed. He climbed into the bus. And all the children on the bus said, "You're squishing us."



# Songs for Gross Motor Imitation

- Use musical instruments to encourage imitation.
  - Drumsticks – Have your own or share the drumstick.
  - Egg shakers.
  - Scarves
- Don't expect children to sing during these songs.
- Use the classic favorites. Tell parents the purpose to these songs.
  - Five Little Monkeys
  - The Wheels on the Bus



# Songs for Spontaneous Sound Blending

- Take pressure off the child by decreasing the request to imitate.
- Model spontaneous song during play or daily activities. Use chains of CVs and vowels for sound blending . Use easy tunes to help child move and verbalize simultaneously. (Spontaneous song with S)
  - Shortnin’ Bread
  - Twinkle Little Star
  - Use phrases with inflection such as “Where are you?” during play.
  - Sing ABCs and Happy Birthday to YOU! with zesto.



# Songs for Vowel Imitation

- **Vowel song - Pictures, cues, video modeling**  
Drop your jaw. Say ah, ah, ah. (Ah, ah, ah, ah, ah)  
Round your lips. Say oh, oh, oh. (Oh, oh, oh, oh, oh)  
Now smile like me. Say ee, ee, ee. (Ee, ee, ee, ee, ee)  
Pucker real tight. Say oo, oo, oo. (Oo, oo, oo, oo, oo)  
Ah, ah, oh, oh, oo, oo, ee. Now you can sing that with me.  
Ah, ah, oh, oh, oo, oo, ee. Great job, kids, singing with me.
- **Vowel song (tune Skip to my Lou)**  
Ah, ah. Ah ah ah. Oh, oh. Oh oh oh. Oo, oo. Oo oo oo.  
I can say them. You can, too.  
Ah, ah. Ah ah ah. Oh, oh. Oh oh oh. Ee, Ee. Ee ee ee.  
You can say them. Sing with me.

*Free vowel pictures on my website at [www.TalkItRockIt.com](http://www.TalkItRockIt.com)*



# Sound Imitation

- Animal Face Posters – Take turns
  - Who is the puppy today? (99 Bottles of Pop)
  - And what does the \_\_\_\_\_ say? (Woof, woof, woof)
- Noisy, Noisy, Noisy
  - Noisy, noisy, noisy. Someone's noisy. Is it you?
  - Noisy, noisy, noisy. Someone's noisy. Is it you?
  - Someone's sneezing. Is it you? Ah, ah, choo. (your turn.)



# Imitation of CV, Words, and Phrases

- CV song – Na, na, na (Rock and Roll)
- Focused language stimulation – Use songs that repeat the target words. Use visuals to enhance learning.
  - Baby blowing bubbles, bubbles, bubbles.  
Baby blowing bubbles. Up, up, up.
  - Puppy, puppy, puppy. Puppy won't you play with me.  
Puppy, puppy, puppy. I love my puppy.
  - What's that? It's a ball. What's that? It's a ball.  
What's that? It's a ball. Yes, it is a ball.
  - Hi and Bye songs – Teach the skill with a song and then focus on generalization.



# Imitation of CV, Words, and Phrases

- Chains of 3 combined with gestures
  - Toast in a toaster. 1-2-3.  
Who's gonna eat it? Me, Me, Me!  
Toast in a toaster. Pop, pop, pop.  
Take a bite and eat it up! Num, num, num.
- Open ended sentences that rhyme.
  - I love bubbles. I love rocks. I blankies. I love socks.  
I love pickles. I love cheese. I love orange freshly squeezed.



Never forget the potential of  
using music!

**Best wishes as you explore music –  
Rhythm and Rhyme  
Melody and Movement!**

Feel free to contact me! I love to hear how you  
use music in your work.

Rachel Arntson

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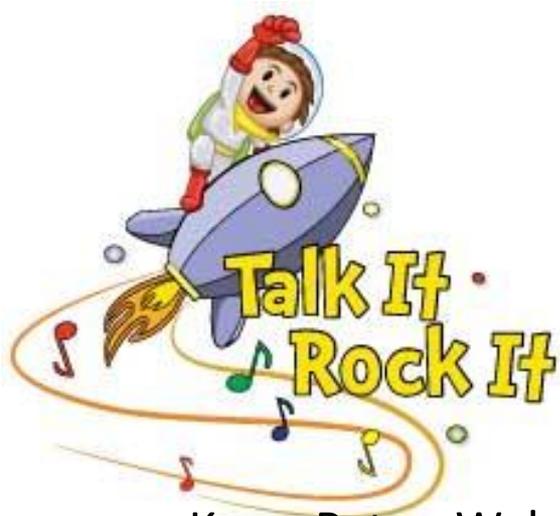
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