Integrating Music into Home Visits & Group Socialization

Promoting Emotional, Physical, Linguistic, & Cognitive Development in Early Childhood

Maggie Gill, MM, BM

What We Will Cover Today

Making Music and Learning Together

Make sure to grab a packet and/or scan the QR code for a digital copy of handouts.

Overview

Why Music?

Learn and Sing 1

Social and Emotional Development

Communication and Linguistic Development

Learn and Sing 2

Cognitive Development

Physical Development

Learn and Sing 3

Why Music?

Music is an important part of the human experience.

This, like the other claims in my presentation and discussion, is supported by studies and peer reviewed research. I will cite many studies on my slides, and I provide a more comprehensive bibliography in your handouts. I encourage you to delve into the wonderful world of academic research regarding music and early development.

I will also share anecdotal evidence and experiences that support the findings of structured research.

If you have any questions following our session today, feel free to email me at maggie.e.gill@gmail.com.

All People Make Music and Dance

First, let's clarify what we are referring to when we say music.

Here we recognize all various cultures and expressions of music. The Oxford Handbook of Music Education cites several studies in support of this assertion:

> "In every human society there are ceremonies of song and dance–human bodies moving with grace and drama, intending to communicate (Blacking, 1976). Music is clearly not just an object to be acquired or studied, it is something we do to express and share our vitality. It is one of the "temporal arts" by which people celebrate rituals of their community (Dissanayake, 2009). Young children turn instinctively to music, making expressive responses that seek to imitate, enjoying the "companionship" that it offers (Custodero, 2009; Mazokopaki & Kugiumutzakis, 2009)."

All Cultures & All Ages

In every culture, music marks life events.

Working songs bring people together from field to loom to table. Songs for play define and provide the beat for rock-passing games, peekaboo, jumping rope and more. Funerals, weddings, birthdays, b'nai mitzvah, quinceañeras, proms, and countless other milestones feature music.

All ages respond to music.

Babies react to music. And elder folks with memory issues respond to music, even as cognitive abilities decline.

Music from Around the Globe

Varied musical exposures and experiences are recommended for children.

However, no culture's music-making is better than another.

The entire globe is filled with beautiful and vastly different musical systems, notations, and sounds. My particular education is in Western music, but in my teaching, I attempt to provide a rich variety to my students and families.

Fiddlesticks Music, Music Together®, & UAB Headstart

Since 2012, I have taught music for children through the international program: Music Together®.

They are committed to providing a well-rounded musical foundation in their curriculum.

As Director of the Fiddlesticks Music Together program, I was invited to work with families in the HeadStart program at University of Alabama Birmingham.

Our music today includes selections that have been curated in the Music Together curriculum.

Making Music Today

- Today we will sing in both major and modal (or minor) tonalities.
- We will move to beats and rhythms in groups of three and in groups of two.

The resources I encourage you to explore will have even more textures, rhythms, and tonalities to explore.

Today, let's blur the lines between music, singing, and dance.

Move your whole body to music today. Listen to the musical textures, and play your own instruments. Most of all, sing with your voice.

We will all play, move, and sing!

Don't worry about your self-perceived skill level!

Looking at the Research

Every Person is Musical

All Children are Musical

Every person has the right to make music, and every child is born with musical ability.

According to Edwin Gordon:

"Every child is born with at least some music aptitude. Like most other human traits, music aptitude is normally distributed among children at birth…. Be clear: Just as there are no children with no intelligence, there are no children without at least some music aptitude."

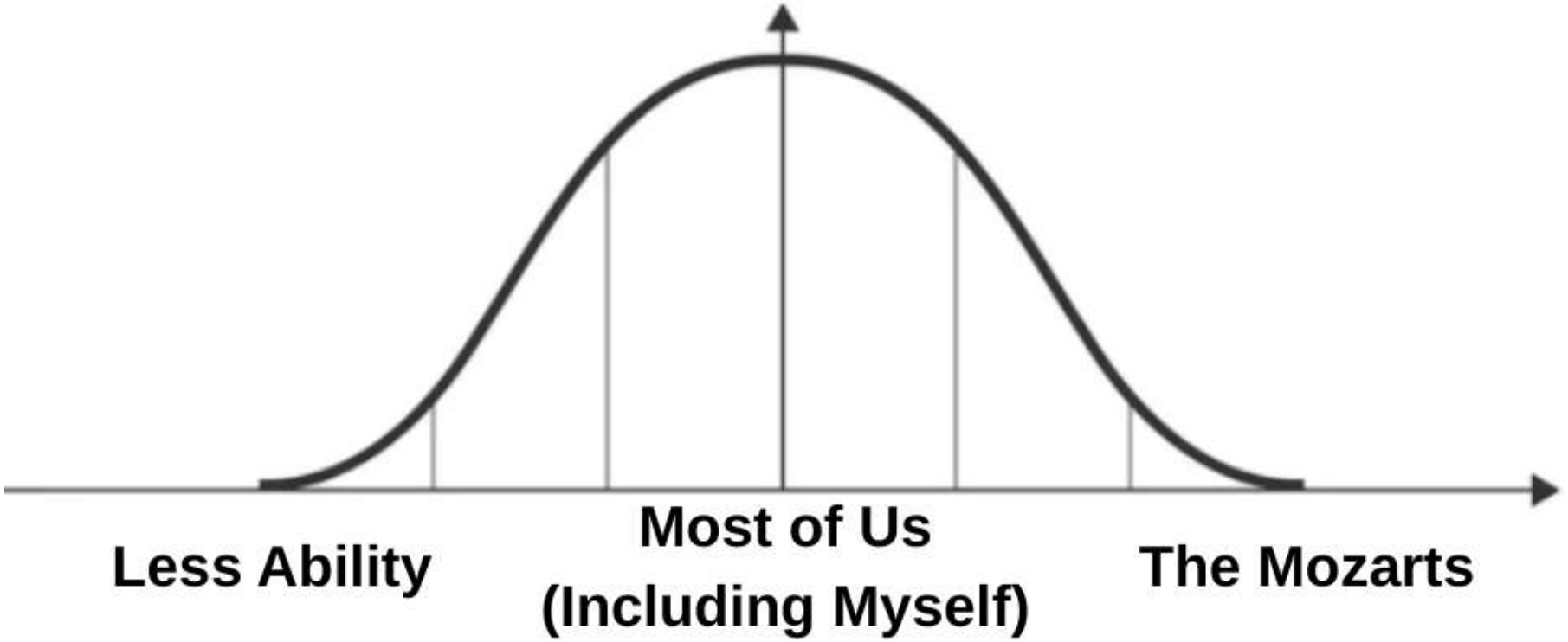
But What About Talent?

Since the dawn of recordings and radios, we have had countless resources to compare our ability to others' musical achievement.

But every one of us have a right to enjoy and make music.

By making music with children in the first few years of life, we have a chance to influence children and foster their ability, thus giving them chances at life-long musical engagement and achievement that may be impossible without early intervention.

You Can Think of it This Way:



Engaging with Music in Various Ways Supports Other Learning.

- It adds interest and play to repetition
- Singing and movement to music can bring delight and playful learning to both home visits and at-home practice of skills in all developmental domains
- It builds community and emotional skills

How to Approach Singing with Young Children

Pitching songs

- Children have higher voices than adults–check your starting pitch.

Using props or instruments

- Don't use props with every song.
- Avoid performative props like puppets.
- Egg shakers, rhythm sticks, and dancing scarves.

Feeling the beat

- Experiment with listening and moving!
- Try moving your head, hands, core, and feet on the beat.
- Try different levels of beat.

Using recordings

- Use recordings when you start out if you want! Make sure you sing along.
- Sing without a recording.

Think of Musical Learning as a Spiral

This is a repeated process.

Remember

Even when we focus on a specific action or skill, music inherently engages multi-domain, integrated actions.

Learn and Sing 1

Song	3 Points of Interest	Starting Pitch
One Little Owl	In a minor key. Works well for collaborative storytelling. Easy full-body movement with lyrics.	D
Spin and Stop	Can be sung in parts. Beats in groups of three. Movements on repeated patterns.	D

Add more "points of interest" in your notes as we sing and talk!

Social & Emotional

—

Communication & Language

Social & Emotional Development

We have only begun to understand the deep effects of music on our social and emotional well-being. Existing studies confirm that music impacts us deeply in both solo and social music-making.

Structured research and experience are incredibly meaningful as we examine this area, as they show results over time. So, I will give a speedy look at research, then some anecdotal findings.

Music & Emotional & Social Well-Being

- *Direct opportunity for engaged, responsive adult-child interaction*
  - We know that responsive adult/caregiver interaction with children can help reduce the effects of toxic stress. (Harvard Health Publishing, 2024) Singing together can give opportunities for deeply connected responsive interactions with adults.
- *Tools for self regulation and co-regulation*
  - Studies suggest that music itself may help in both self and co-regulation, but the lyrics chosen in our context can also help give children tools for processing, naming, understanding emotions, and regulating those emotions. (Cheong et al., 2023; Chong et al., 2024; Levy et al., 2024)

Well-being, continued…

- *Group bonding through act of music-making, shared language of songs, and shared experience*
  - The ways that people bond in groups through music is multi-layered and includes the act synchronous music-making itself, sharing in the values and ideas within song lyrics, and the memories of shared experiences. (Boer et al., 2011; Tarr et al., 2014; Suttie, 2015)
- *The release of oxytocin and "social flow" when people sing together.*
  - Synchronous musical interaction causes hormonal response in participants, helping to create social bonds. (Keeler et al., 2015)

Well-being, continued…

- *Choirs and singing groups have the ability to synchronize their heartbeats.*
  - Even the physical rhythm of our body reacts to the effect of synchronous musical creation. (Vickhoff et al., 2013)
- *Strengthened bond between babies and parents*
  - Singing to babies fosters enhanced bond between parent and child. (Gordon, 1997; Sharman et al., 2023)
- *Singing soothes babies longer than speech*
  - Babies respond to voices and are soothed significantly longer with singing than speech. (Corbeil, Trehub, and Peretz, 2016)

Well-being, continued…

- *Singing to babies improves mood*
  - Singing can help calm emotional distress and crying. (Backman, 2025)
- *Enhanced Inhibitory control when engaging in private speech and singing*
  - Children can use music to help with inhibitory control, even when they are alone. (Winsler et al., 2011)
- *Emotional processing both as an individual and as a part of a group*
  - Whether singing in a choir, listening to songs that help process grief, or singing lyrics that name, express, and define emotions, music can help with emotional processing. (Fancourt et al., 2019; DiMaio and Economos, 2017)

Communication and Linguistic Development

Music itself can be beneficial in encouraging language development, and the lyrics and vocal sounds chosen can also impact linguistic development.

Let's look at how communication works, some anecdotal findings, and I'll take you through another research "speed run."

How we make the sounds of speech and song

Coordinated oral movement and the sounds created there

- The shape of our entire oral space determines the vowels and consonants we produce. This has to do with the resonant shape of our oral and nasal cavity.
- We also use air and the manipulation of parts of the oral cavity to produce many sounds with or without using our vocal folds (fricative consonants, plosive consonants, and many more sounds.).

How we make the sounds of speech and song, cont.

Voiced phonation

- Here I am referring to the use of our vocal folds. We use our vocal folds to produce the main sound of our voice in vowels and voiced consonants. This is also the part of speech and song that determines pitch.

Use of Breath

- Using our breath in a coordinated, specific way is important for speech and song.

How we communicate ideas through speech and song

Sounds of language

Vocabulary

Structured language

This has to do with how we use words in an organized, specific way. The following terms are used to describe some of these areas more deeply.

A Few Useful Terms for Linguistics:

Phonetics, regarding speech sounds & their acoustics/production

Phonology, regarding sound systems & language/communication sounds

Morphology, regarding word structure

Syntax, regarding word order and sentence structure

Semantics, regarding the meaning of words, phrases, & larger units of language

Pragmatics, regarding language in context (implied meanings, intentions, etc.)

Other Means of Communication

Facial expressions and body posture

- These provide the visual cues to what we mean when we are communicating, whether we are speaking or not.

Non-lexical communicative sounds

- These are the parts of audible communication that are not based on vocabulary. I am using this broad category to encompass everything from snapping fingers at a dog, a teenager saying “huh?,” to a baby crying when hungry.

Learning Language Through Music

Listening, watching, observing

Modeling linguistic sounds

Modeling non-audible communication

Imitation of speech sounds & movements

Vocables

Baby Babbles

Pitch and Timbre

Pitch approximation to pitch matching

Audiation

Experimentation and repetition

Musical & linguistic repetition

Echoes

Trying out different pitches

Imagination and linguistic play

Story telling

Patterns

Flexible manipulation

Rhyming, alliteration

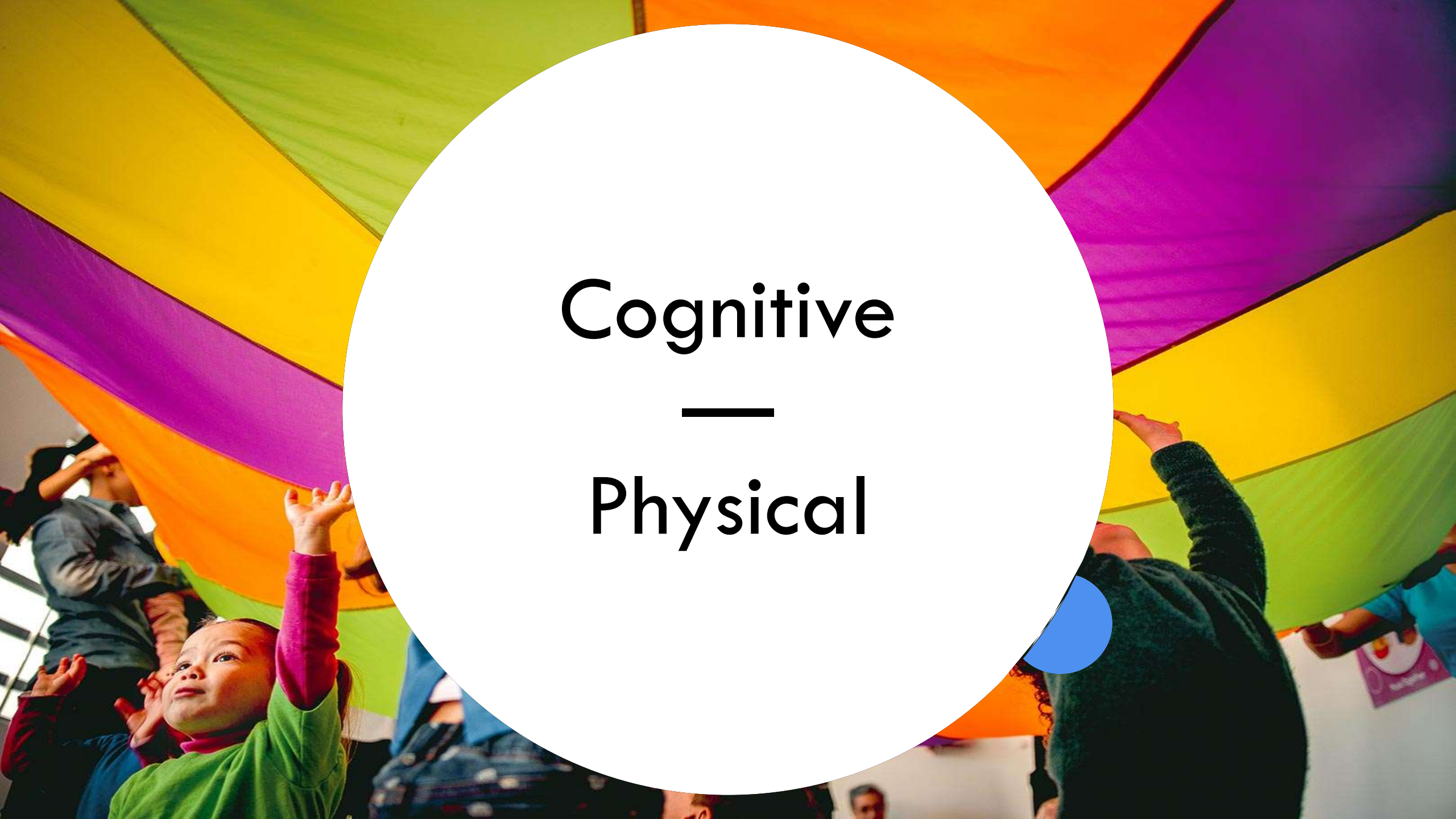
Syllables and rhythm

Substitutions

Learn and Sing 2

Song	3 Points of Interest	Starting Pitch
This Train	In a minor key. Works well for including people by name. Can be used to talk about emotions	D
Biddy Biddy	Great for practicing phonetic production. Works well with shakers. No words to learn; easy for anyone to sing	G

Add more "points of interest" in your notes as we sing and talk!


Cognitive
Physical

Cognitive Development

Music engages all cognitive skills and development in beautiful, unique ways. This is an incredibly complex, and even with this quick overview, we will only begin to see how music engages the mind. I am going to touch on areas of cognitive development and how music supports and works with each.

Cognitive Development

Initiative and Curiosity

- Music gives a framework for children to initiate or expand musical experiences.

The adult should give the child opportunities to provide substitutions, made up lyrics, or musical or dance-like replies

Planning

- Whether deciding what instrument to pick, how to move a scarf, or what to do with lyric manipulation, music requires planning.

Cause-and-Effect

- Call and response songs, instruments and the sounds they make, scarves as they move through space are all ways in which children can musically learn about cause and effect in real time.

Cognitive Development cont....

Delayed Gratification

- Waiting for "your part" or for the climax of a song allows for a stretch of waiting for payoff. This is related to impulse control, and perception of time and duration.

Spatial Relationships

- Dance, especially with other people, provides a full-body experience of moving through space. Whether in an organized or chaotic way, we learn to understand space, and our bodies moving in space.
- Moving scarves to music is excellent for this concept.

Imitation

- This is a two-way street in music and can give opportunities for endless reiteration and refinement of skills.

Imitate the child's sounds and movement. Encourage imitation from the child. (Note for further learning: Serve and Return Learning.)

Cognitive Development cont....

Logic and Problem Solving

- Lyrics provide excellent opportunities for logic, comedy, understanding of the patterns and stresses for in language, how language and music fit together.
- Deciding when and where to breathe while singing impacts the music we sing.
- Figuring out dance moves and how to play simple instruments gives 3-dimentional motor problems for children to solve.

The adult should model all these aspects of musical problem solving but remember to allow children to figure things themselves! whether with manipulation of movement, sound, or lyrics.

Cognitive Development cont....

Memory

- Working Memory
  - Singing songs and playing music inherently uses working memory. Call and response songs, singing echoes, using differing rhythmic patterns, and singing new changes/additions in lyrics, all add additional difficulty to that use of working memory.
- Long-term Memory
  - Memorization of music over time allows for a deeply connected use of long-term memory.

Cognitive Development cont....

Categorization, Sorting

- Music not only engages children in hearing musical phrases, notes, rhythms and sounds that can be arranged and used in different ways, lyrics and visual aids can facilitate sorting and understanding how animals, personal care, colors, etc. are categorized and sorted.

Symbolic and Imaginative Play and Storytelling

- Music lyrics are full of creative, flexible, and interactive storytelling. Songs without words can allow for imagination play through expressive movement and dance.

Attention

- The reward of lyrical or musical apex of a song can be enough to engage prolonged attention. And making creative, rewarding changes to musical or lyrical structure can also engage prolonged attention.

Cognitive Development cont....

Perception of Time and Duration

- Music can give a definitive, perceivable length of time for children. This is especially important for time specific activities like washing hands, potty training, learning to wait, counting seconds, etc.

Number Sense & Patterns: Recognition, Comprehension, Manipulation

- Music allows for auditory processing of patterns. This is an incredibly valuable skill for language as well as multi-sensory information gathering. Lyrics can provide counting practice. Fitting lyrics into music hones language manipulation. Improvisation encourages mastery of tonality, lyrics, rhythm, and beat.

Processing Multi-Sensory Input

- Music engages visual, auditory, multi-layered physical, and cognitive input. It is an organized, swirling mix of using all this internal and external input in an intentional way.

A Note about Executive Function

Executive Function encompasses several cognitive and emotional components. Music is an excellent tool for exercising all executive function skills, but there is not room here to explore that fully.

For further learning, I highly recommend the webinar by Lili M. Levinowitz, Ph.D, "Support Preschoolers' Executive Function and Self-Regulation Skills with Music."

Physical Development

Music is movement! Singing engages the whole body, and playing music uses motor skills of all kinds.

Let's see how moving with music can directly impact our coordination and lead to repeated practice of physical skills.

Fine Motor Skills & Music.

Fine Motor Skills

We will review some fine motor practice in our final learn and sing. Here's how fine motor can be exercised with musical play:

- Manipulation of props and instruments.
- Using motions or signs with the lyrics.
- Tapping and using precise interpretive motions on the beat.

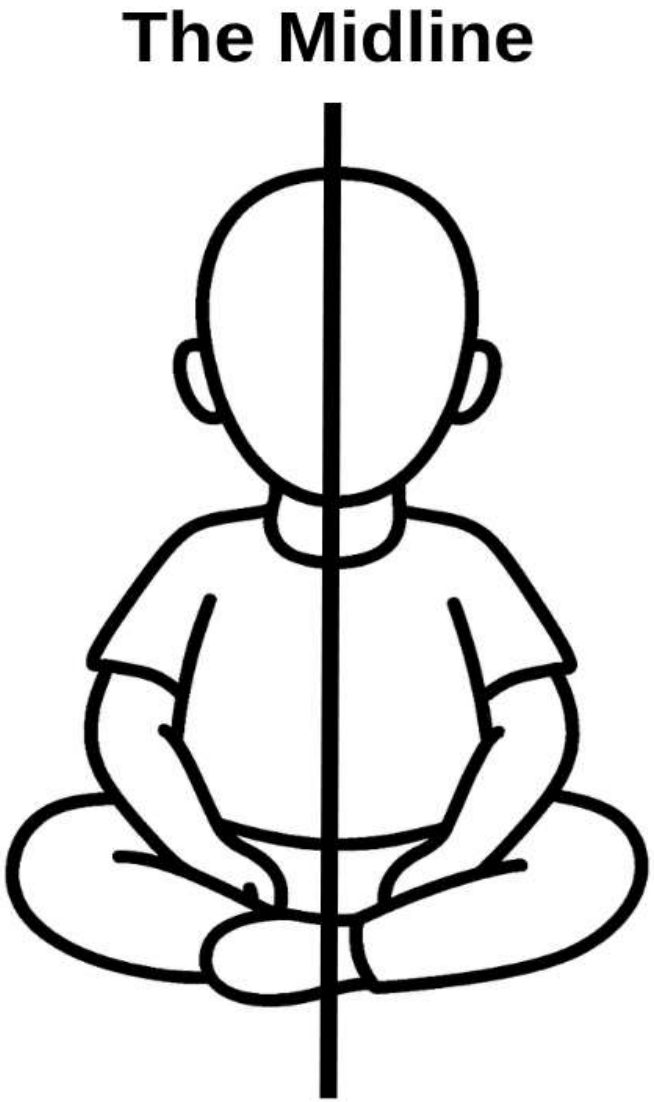
Gross Motor Skills & Music

Over the next few slides, we will look at some specific areas of gross motor coordination and how music can help with development and practice of those skills.

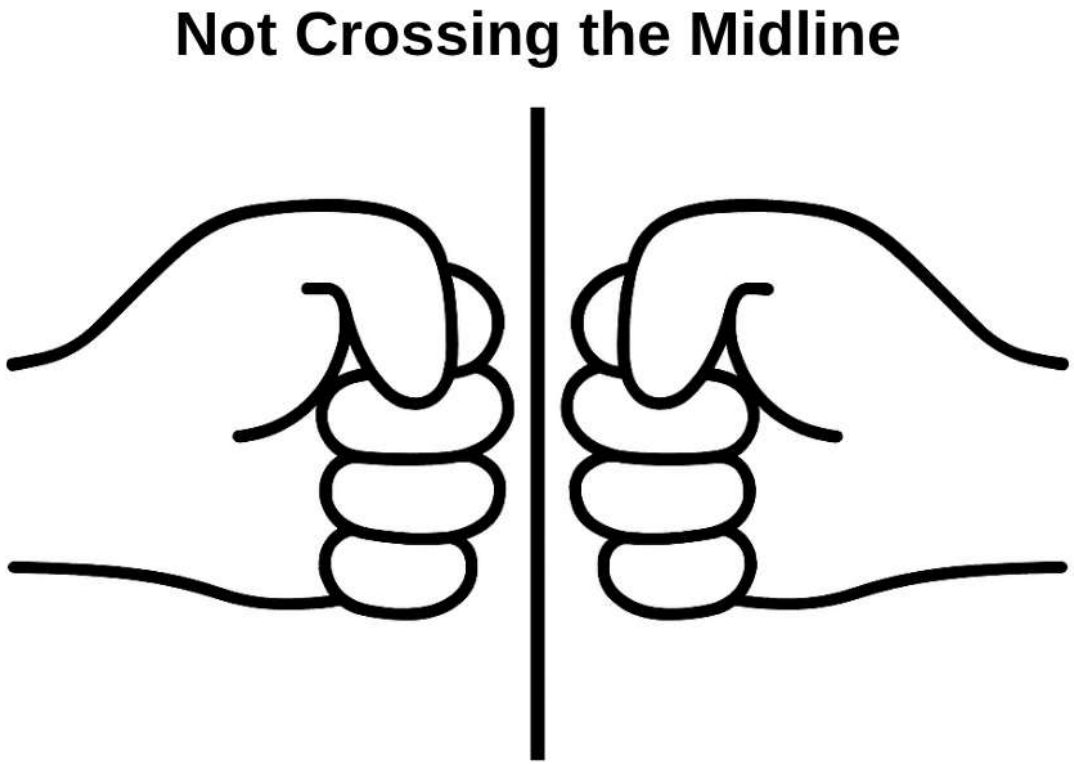
Crossing the midline

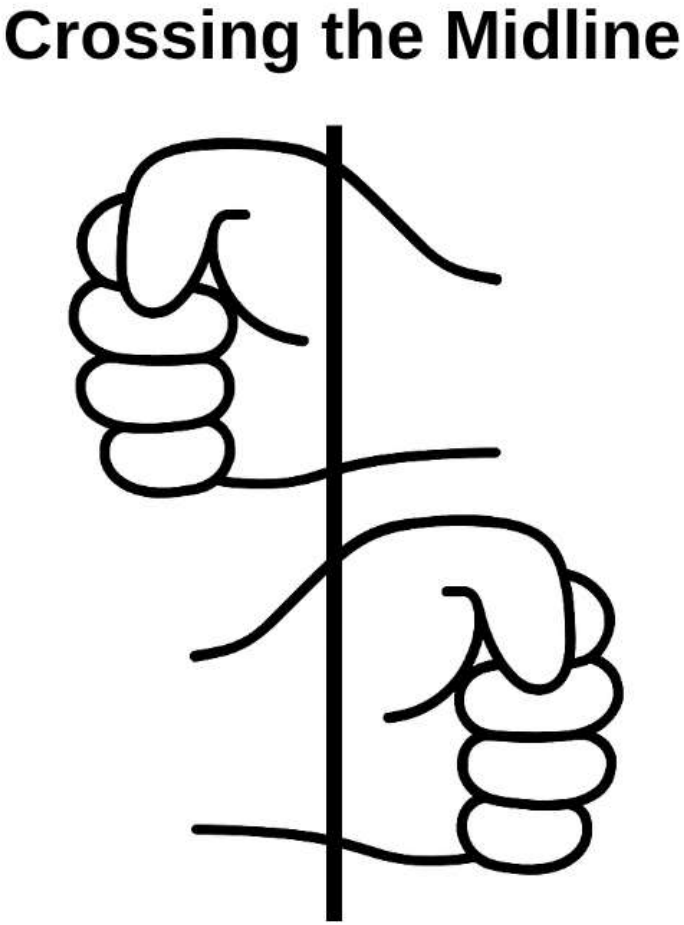
This invisible line separates the right and left side of the body in coordinated movement.

Children learn to coordinate movements to the midline and crossing this line.



Crossing the midline

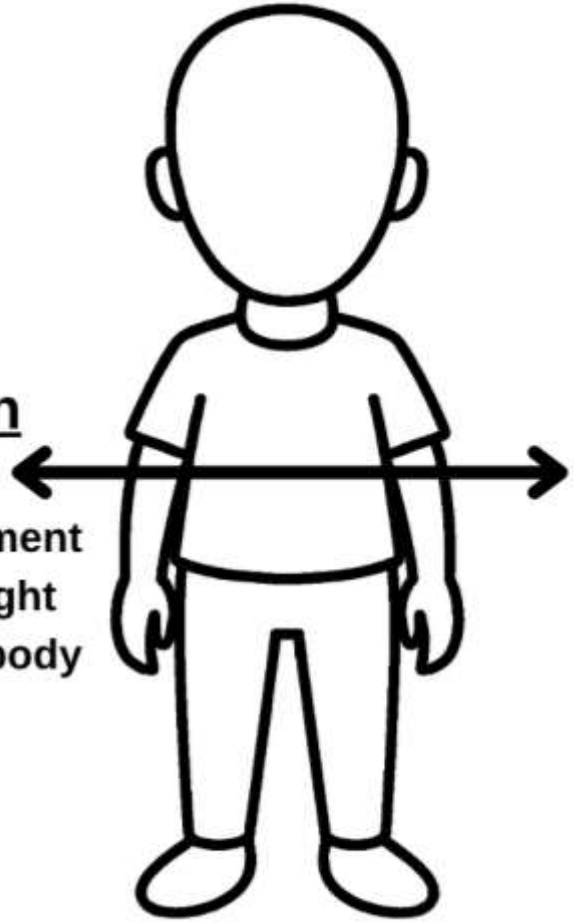




Bilateral & Quadrupedal Coordination

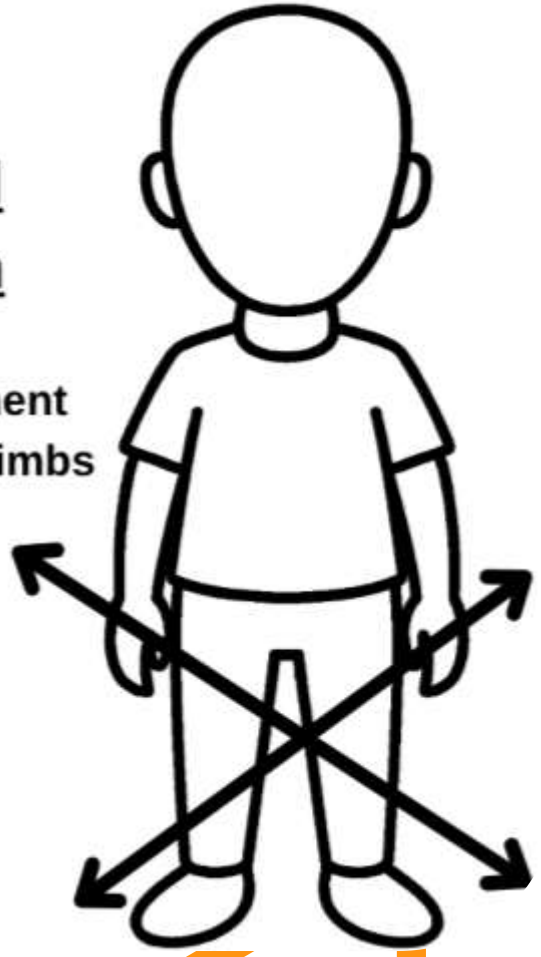
Bilateral Coordination

Coordinating movement with/between the right and left side of the body



Quadrupedal Coordination

Coordinating movement with/between all four limbs



Full Body Movement & Coordination

Full Body Coordination

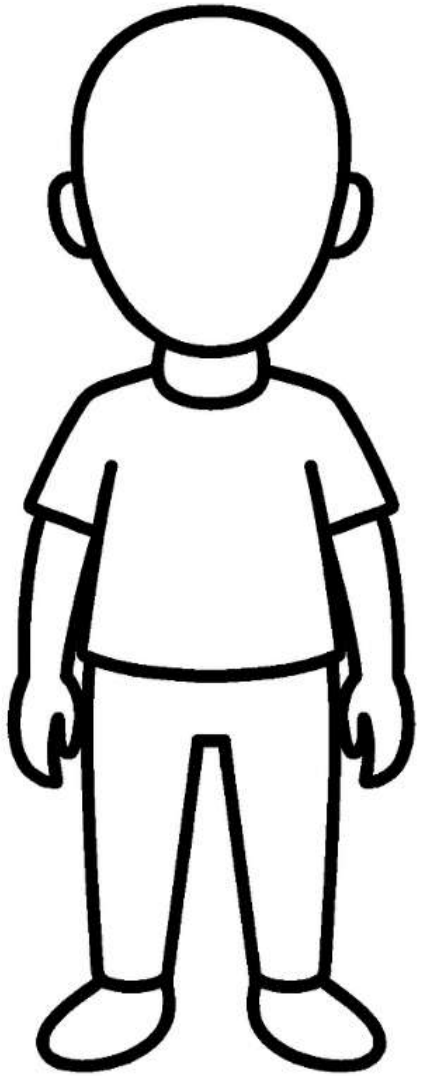
+

Core Strength

+

Balance and Stability

Full body working together for complex motion



To Motor Skills & Beyond!

I would like to take us a bit further. Knowing what are bodies are doing–beyond what we can see our body doing–is an important part of our physical skills.

There are two described senses that allow us to understand our bodies movements, input, and needs.

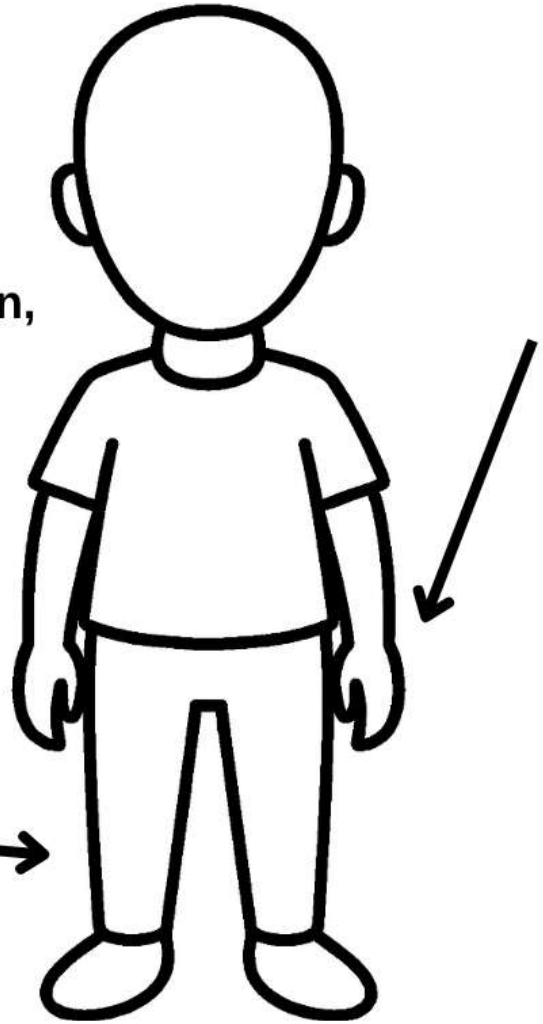
Both involve learned and practiced skills, and we can use both the music and lyrics in our songs to learn and reinforce those skills.

Proprioception & Interoception

Proprioception

Sense of movement, position, and force in the body.

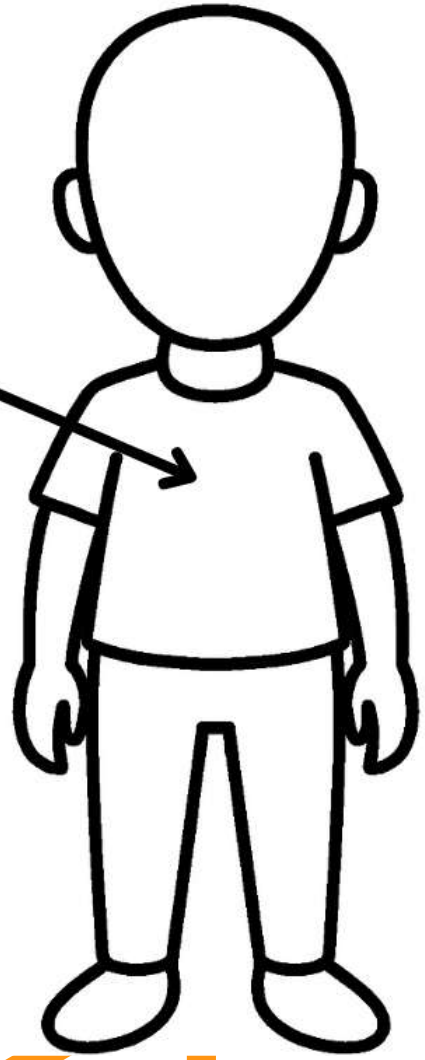
So you know where your limbs are, and can judge how to use them, without seeing or looking at that part of the body



Interoception

Sense and interpretation of signals from inside the body.

For example: hunger, thirst, pain, the need for toilet, changes in heartbeat, etc..



Using Music to Exercise Physical Skills

Instrument and prop play

- We can use those three basics for countless exercises in motor control (scarves, egg shakers. sticks). *Make notes about how we do so in our time singing together.*

Dance

- The entire exercise of dancing uses proprioception, gross motor control, integrated cognitive and physical skills, core strength, balance, and more.

Finger play songs

- Excellent fine motor practice.

Lyrics to songs

- Use/create lyrics for specific actions, and music to undergird any motor/physical skill that needs work.

Cognitive and Motor Integration

Music naturally sets the child up for this integration.

- **Cognitive:** lyrics, tonality, language, story, patterns, rhythm, and more
- **Motor**: movement on the beat, ability to create and replicate sounds, expression of lyrics through vocal sounds, dance/physical movement, creating sounds with body or instrument, and more

It is important that the adult remembers to move on the beat in an engaged, playful way, using the full body in various ways.

Learn and Sing 3

Song	3 Points of Interest	Starting Pitch
There's a Little Wheel	Singing about physical sensations inside the body. Crossing the midline. New lyrics/substitutions.	C
Ridin' in the Car	New lyrics/substitutions. Tonal patterns. Easy full-body movement with lyrics.	E

Add more "points of interest" in your notes as we sing and talk!

Thank you for making music with me today!

Maggie Gill
205.540.7551
maggie.e.gill@gmail.com

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