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# The Many Possibilities of Music in Early Childhood

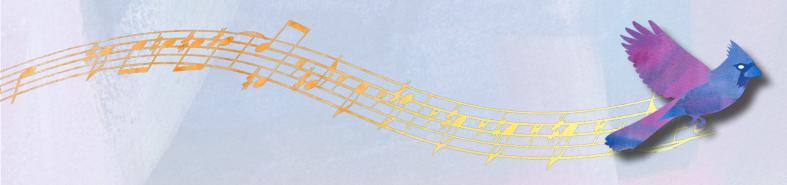
In a city parking garage, the exit lane is backed up 12 cars deep. At the back of the line, a father is trying to calm his restless toddler in the seat behind him. As the line stalls, the toddler begins crying louder and louder. The parking attendant waves and smiles at the toddler, but the crying gets louder. The attendant turns the ticket dispenser into a drum head, singing out, "I got a move and it goes like this," beating out a loud rhythm: "... 00..00!"

The toddler stops crying, interested. The attendant goes for louder and more complex rhythms: "I got more moves and they go like this!" The toddler watches, then claps and shouts, "More, more!" They go back and forth, with the dad watching in the rearview mirror. As he edges into traffic, he waves to the attendant/drummer and keeps the rhythms going on the dashboard, his family's world made better by music.



The traffic may have stalled, but that toddler notices what's happening around him, lets go of his frustration, and becomes interested, then enthusiastic. He connects with a stranger, joins in spontaneous music-making, picks up on patterns, learns the rudiments of call and response, and communicates his joy with clapping and calling out. He transfers that game to his father without a hitch, and they ease into traffic with a new way to negotiate what the world puts in their way.<sup>2</sup>

In the first three years of life, the brain grows from 10% of its eventual size to 80%.<sup>3</sup> Neural pathways that govern language, emotional regulation, attachment, and cognition coalesce. Lasting and deep relationships form. Children learn how to be with others; they learn the languages they will speak, and acquire the family and cultural resources they will draw on throughout their lives. Thus, early experiences build the architecture of lifelong assets.



### **Children Growing**

#### Building brains and bodies:

At one year, a baby's brain is 70 percent of adult size and already crisscrossed by the connections that make for human thought and communication.<sup>4</sup> Engaging with music strengthens neural pathways associated with memory, language, emotions, and problem-solving. Music is practically a gym for fine and gross motor control.

#### Becoming and staying close:

Young children form significant relationships with their families in their early years. Their smiling, walking, and talking thrill and reward their families' efforts and aspirations, sparking shared delight, creating a shared safe harbor from which to launch future explorations.

#### Being with others:

In their first five years, young children figure out how to navigate social interactions and relationships with others their age. They practice talking and listening, negotiating and persuading, taking turns, and cooperating. Through play, they experiment with rules, conflicts, and resolutions.

#### Communicating and imagining:

Infants, toddlers, and preschoolers acquire the sounds and words of the languages they hear around them. They learn how to express ideas, share emotions, and engage in conversations, long before they can fully speak. As early as their second year, children also begin to imagine and invent—pretending, joking, telling stories, and making up songs as they explore the world around them.

### Sharing and managing feelings:

Young children begin to recognize, express, and regulate their own emotions. At the same time, they develop an understanding of others' feelings—learning to interpret facial expressions, tone of voice, and body language to become in-tune with those around them.

#### • Belonging to a culture and community:

In these earliest years, children learn the languages and accents they hear at home. They absorb the songs and stories of their community and the beliefs and values illustrated in those songs and stories that will guide their thinking and actions.



### **Families Flourishing**

These same years also matter for caregivers. Raising a child is one of life's most challenging and potentially most rewarding undertakings. Through music, caregivers, whether parents, grandparents, or adults who step in to nurture young children, can experience:

#### Capability and accomplishment:

To be a caregiver is to problem-solve, everything from when to say "no," to whether to do the laundry or play outside, to how to cover the costs of childcare. These choices and strategies can be a source of feeling capable, wise, and satisfied, especially when others notice and acknowledge all the emotional labor caregivers do.

#### Claiming emotional well-being:

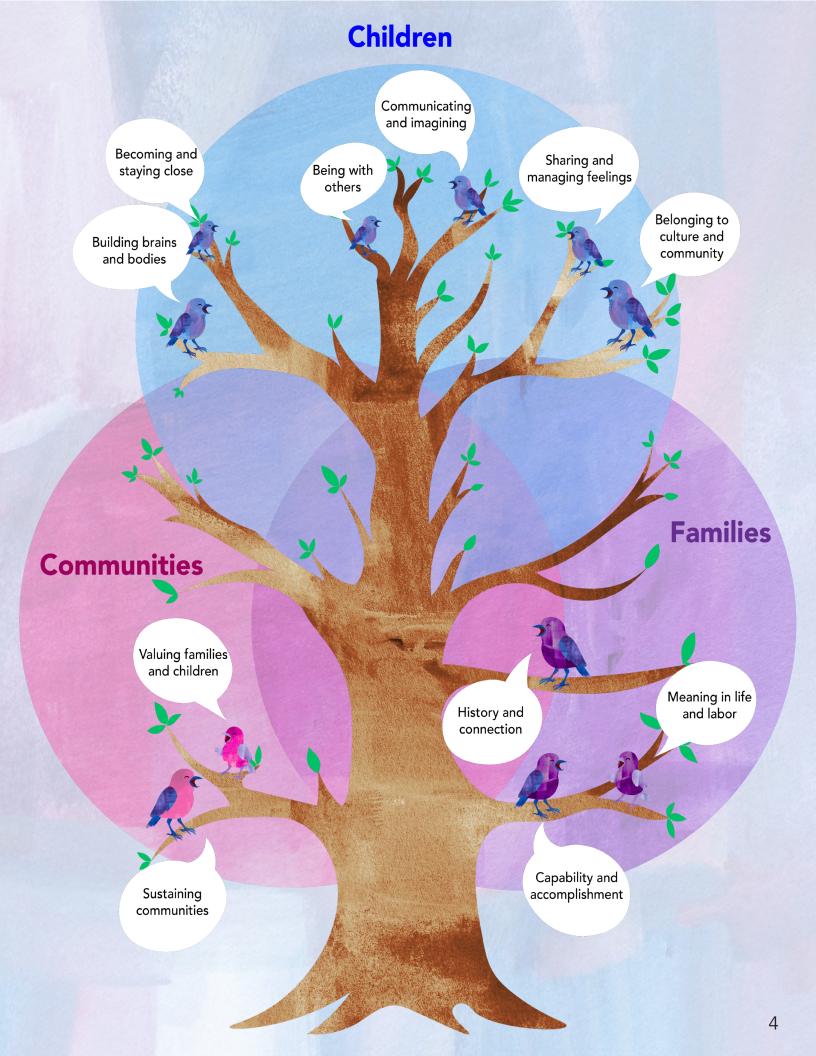
To raise a child is to decide every day what values, traditions, languages, and stories to teach and model. It is to ask, "Who do I want this small person to become? It is also to explore how this relationship can be fulfilling and a source of joy and well-being.

#### History and connection:

Music can call back or keep alive a network of memories, events, and languages, allowing them to be shared with the next generation.



Music can play a role in building and sustaining the communities where young families live. Community music can forge connections that break down isolation or build bonds for caregivers and children. It can build families' sense of sharing and caring for common spaces, be they libraries or a river running through their town. Music can also help communities grow into multi-cultural spaces where all are welcome. Finally, and perhaps most importantly, shared musical activities can build communities' capacity to support and value children and families.



# Are These Possibilities at Risk?

Today in the U.S. and around the globe, these remarkable and fundamental human outcomes are at risk—for both young children and those who care for them. The lives of U.S. children, especially children living in poverty, are endangered. More than 13 million children, or one out of every six children, live without the resources they need, with the highest vulnerability occurring in the early childhood years when development is fastest and most plastic. Almost half (47 percent) of all children living in poverty live in severe or extreme poverty. This translates to nine million children facing hunger and food insecurity and four million children living without health insurance, which means no early screenings for vision and hearing delays, no dental check-ups, and no immunizations. This level of stress and deprivation in families translates to a child being abused or neglected every 54 seconds in America, or 1,599 children each day, with the highest proportion occurring in infancy more than double the rate than at any other age. Growing up under these circumstances compromises learning and social and emotional development in ways that have lifelong consequences.





# Children's early outcomes are closely linked to the well-being of their primary caregivers.

The well-being of those caregivers depends, in turn, on the extent to which they are housed, safe, nourished, and protected. When caregivers experience stress, depression, isolation, and danger, it is difficult to provide responsive care, establish strong bonds, or take action, no matter how fiercely they want the best for their children.

Supporting caregivers is not a separate issue from child development. It is at the very heart of it. But, like their children, caregivers face historically low and decreasing levels of support for the vital work they do.

Between 2019 and 2022, maternal mortality rose by nearly 28 percent, a surge driven in part by pandemic-era stressors but also reflecting long-standing systemic failures in the provision of family care.<sup>6</sup> One-third of these deaths now occurs six weeks to a year after childbirth, in an even more dangerous environment created by the loss of health insurance or support services after pregnancy. These dangers are ruthlessly correlated with status, with poor women, many of them Black or Brown, three times as vulnerable. Even in the face of this evidence, care deserts are expanding: 35.1 percent of U.S. counties lack any maternity care providers.<sup>7</sup>

In the absence of affordable care and social support, some caregivers are forced to manage caregiving with other demands, doing their best to avoid risks, rather than having adequate time and resources to provide the care that's needed. Perhaps they have to leave young children in the care of older children or leave them home alone. They may turn to devices like tablets and phones to fill in in the absence of others and to create breaks for the caregiver in the stream of demands they face. Phones and tablets may be used to substitute for human interactions and explorations of the physical world at a time when those activities are the most critical sources of forming social relationships and learning how to learn.

As young as 24 months, many toddlers watch over two hours per day on a device. These are two hours lost—critical time that could have been spent playing, interacting, and exploring.<sup>8</sup> Extended solo screen time can delay language development and the knowledge needed for social interactions and play.<sup>9</sup> Too often, this is not a simple caregiving choice. It is a failure of policies that provide few sources of respite and community—an issue that urgently calls for creative, compassionate solutions.



# Music as an Opportunity to Re-Imagine Care

Music alone cannot change hunger or homelessness. But what if music became an opportunity to re-imagine care? What if by threading music through everyday moments where caregiving unfolds, we affirmed the dignity of caregiving and invented daily ways to celebrate the first thousand days or five years of young families' lives?

For this to happen, we will all have to claim music as a remarkable, low-cost, high-impact, and scalable intervention that can benefit children, their caregivers, others in the community who care for children (for example, daycare teachers, public health nurses, clinical workers) and the communities in which they live.

This demands recognizing music-making as a universal activity that all people can access and have used over centuries, in all kinds of circumstances, to acknowledge, comfort, protect, and strengthen who they are as individuals and how they connect to others and society. We have to rethink music outside of concert halls and classrooms, celebrating its power to transform a crowded bus ride, tame a nightmare, recall a country left behind, or turn an empty room into a place of worship. And we will have to convince the wider world—not just musicians—to use its powers to make a difference.

It is increasingly clear that music is more than entertainment or enrichment. There is growing evidence that suggests that music's effects can run deep and wide. Musical rituals foster routine and resilience, promote caregivers' self-efficacy, and strengthen the child-caregiver relationship.<sup>11</sup>

Studies show that listening to music and music-making in particular, release protective neuro-chemical buffers against chronic stress, reducing anxiety in children and caregivers, and supporting emotional regulation and bonding.<sup>12</sup>

Music can serve important adaptive functions for parents, whose brain neurobiology, research shows, is altered with parenthood. <sup>13</sup>

So, at a moment when the fabric of maternalchild health is fraying, music could be a lifeline, one we can thread through the care systems, communities, and gathering spaces that shape early childhood and caregiving. If we underestimate music's potential impact, we ignore a resource we can't afford to waste.



Consider how this musical moment contributes to a young child's life, his caregiver's sense of possibility, and the community of families who have come together:

It's a late afternoon music session, with children trooping in from a full day of Head Start. A boy enters who is on the edge of angry, with his grandmother urging him to calm down and sit.

His teaching artist introduces a huge stretchy band of fabric with an ocean song, "The waves roll in, the waves roll out," asking children to lean in and pull back just like the waves, using all their energy to change the shape. They go up and down, in and out, but he's still got energy to burn.

She invites him to take a turn. He yanks the band behind and high above his head, then drops it to his feet, faster and faster. He watches everyone following, speeding up, the singing getting louder. His energy becomes a resource, not a disruption. His grandmother—along with everyone else—sees the music convert his wildness to invention. She sits back to watch.

—Joanna Stamper, Teaching Artist, Musicopia-led Lullaby Project at Settlement Music School, Philadelphia



# **Evolving Work at Carnegie Hall**

With the goal of understanding what music can contribute to the lives of young families, Carnegie Hall has been re-imagining its programs and partnerships. This publication draws on Carnegie Hall's programs and outreach to young families in particular:

- Lullaby Projects, across the U.S. and internationally: Teaching artists and young families write and perform an original lullaby for the family's young child(ren).
- Big Note, Little Note: A ten-session music class for young families and their children in child-care settings and branch libraries, enhanced by free online video resources.
- Family Days: Festive gatherings welcoming young families into the Hall to explore performances, workshops, and how they can be together through music.
- Early Childhood Concerts: Original and interactive works designed to introduce the very youngest audiences to music, dance, and play.

In this work, Carnegie Hall has been partnering with organizations around the world that recognize and use the power of music to reach and support young families. Far from being limited to concert halls and music organizations, these partners include many organizations that also support young families in:

- Birthing centers
- Neonatal intensive care units
- Health clinics
- Drug recovery centers
- Family shelters
- Refugee camps

- Correctional facilities
- Public libraries
- Children's museums
- Schools and early childhood learning centers
- Veterans service centers

As this work has evolved, so has the definition of family music-making. Yes, of course it includes formal performances:

- The songs and chants families know from their congregations
- The familiar songs of music classes
- Performances especially designed for children and caregivers

And informal and private family music-making:

- A grandfather seated at a piano, with a four-year-old on his lap, sharing snatches of songs he remembers from growing up
- A five-year-old noodling on his dad's high school bass guitar as part of their shared Saturday
- A new mother singing to her baby at the laundromat, mixing the Spanish verses her grandmother sang to her with new ones she makes up on the spot

But it also includes improvised ways that people use rhythms and melodies to give meaning to their daily lives:

- A three-year-old singing herself to sleep as part of figuring out whether skeletons are scary or safe
- Two four-year-old girls getting to know each other by trading rhythms banged and tapped out on the metal poles in a playground
- A grandmother listening to a salsa station while cooking dinner, pausing now and then to scoop up the newest baby in the house for a dance
- A dad on the train rolling a stroller back and forth, humming and hoping for a nap

In response to this diversifying work and the widening circle of partnerships, this re-issue of Why Making Music Matters acknowledges the many ways in which music is not only a resource in young children's lives but also in the lives of their caregivers and communities. Its revised title, Why Making Music Matters Now, underscores the growing evidence about the power of music for well-being in the earliest years of a child's life, as well as the urgency of using it to ensure that young families and their communities thrive.

# Children Growing

**Building Brains and Bodies** 

**Becoming and Staying Close** 

Being with Others: Peers, Siblings, and New Friends

Communicating and Imagining

**Sharing and Managing Feelings** 

**Belonging to a Culture and Community** 

Finding Joy through Music

## **Building Brains and Bodies**

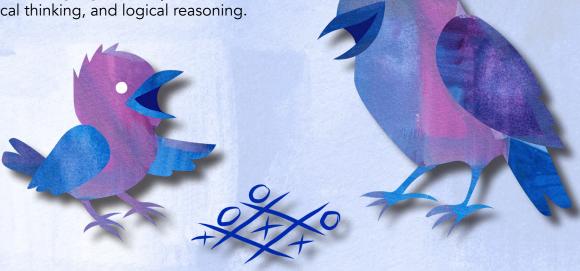
In a simple back-and-forth babbling game, a baby has to listen, watch her partner, take a turn at just the right moment—and maybe laugh and smile to keep her partner engaged. All this builds important connections across the many regions of her brain needed to carry out the complex actions and interactions that fuel human relationships.<sup>14</sup>

When a toddler plays a singing and clapping game with their grandmother, they use their eyes, ears, and hands in quick back-and-forth turns, timed with their grandmother's words and motions. As they clap, they use the corpus callosum, a structure in their brain that connects the left and right sides. They are practicing the coordination required for many two-handed activities (e.g., catching, throwing, playing an instrument, and working with tools).<sup>15</sup>

When a four-year-old invents a spur-of-themoment rhythm game, stomping up and down the stairs, he has to put those same sensory and motor skills to work, but he adds the skills of inventing, remembering, and playing with patterns. In this process, he is strengthening his ability to predict, sequence, and organize information. These pattern-recognition skills are essential for language development, mathematical thinking, and logical reasoning. In short, between 0 and 5 years, children pass major milestones in the development of their brains and bodies. For infants and toddlers, even simple games, songs, and back-and-forth play build brain and body coordination. If as older children they begin an instrument, these kinds of changes continue.<sup>16</sup>

When a child experiments with different sounds on a piano, she explores various harmonies and rhythms, finding combinations she enjoys and abandoning those that don't sound right. As she experiments, she is engaged in real-time problem-solving, learning how to make creative decisions and persist through challenges. This process helps strengthen her ability to focus, regulate her behavior, and approach challenges with flexibility—skills that are essential for navigating future learning and complex problem-solving situations. So, just as exercise builds physical fitness, music can "tone" young brains and bodies.<sup>17</sup>

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#### What Research Shows

Making music is one of the most intense, multisensory, and physically engaging activities in which young children participate. Even day-old infants can differentiate different patterns depending on whether they are listening to a lullaby or march, demonstrating an innate sensitivity to musical structure.<sup>18</sup>

Research shows that early musical experiences enhance both motor coordination and cognitive development. A study found that infants as young as six months-old who engaged in interactive musical play exhibited stronger neural responses to changes in auditory patterns, suggesting that active music-making strengthens the brain's ability to process and predict sound sequences—an essential skill for language and executive function.<sup>19</sup>

In one study, five-year-olds who received 12 weeks of rhythm-based music training showed significant improvements in fine motor control and auditory-motor synchronization compared to their peers who did not participate.<sup>20</sup> Similarly, young children who practice on keyboards

develop a stronger sense of rhythm and beat synchronization, skills that are linked to both language processing and mathematical reasoning. Children in a 15-month program of half-hour weekly keyboard lessons, compared to a control group, showed enhanced development in brain regions responsible for fine motor control (such as the primary motor cortex and cerebellum) and executive function (including the prefrontal cortex).<sup>21</sup> These changes mirrored the refined neural pathways observed in skilled adult musicians.

Learning to play an instrument enhances working memory and problem-solving skills. Young children who engaged in structured music training performed better on spatial reasoning tasks and demonstrated greater cognitive flexibility, abilities that are crucial for mathematical thinking and logical problem-solving.<sup>22</sup>

Clearly, the brains of young children are highly "plastic," and music helps them refine movement control, enhance pattern recognition, and strengthen executive function, providing a strong foundation for lifelong learning.

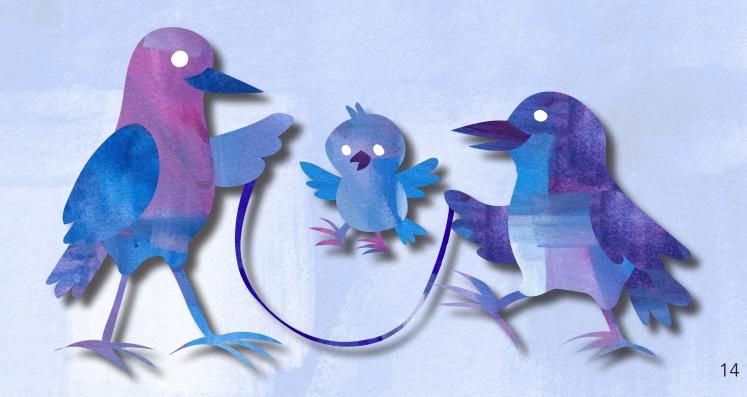
#### Music at Work

Big Note, Little Note is a free early childhood music program designed for families with infants and young toddlers, in partnership with local community centers and organizations. This 10-week music class offers a mix of activities where families can bond with their babies through musical play, singing, listening, songwriting, and instrumental exploration. Focused on building musical communities, the program not only supports family well-being and early child development, but also strengthens the parent-child connection and creates peer support among parents and caregivers.

A father and his recently turned one-year-old join a circle of families. The child grabs his father's knees to stay up. As the music heats up, the child bounces and grabs the next knee over. Soon he is cruising the circle, knee-by-knee. When the song ends, he looks up, startled to see a face that is not his dad's. He is puzzled, then a little frightened. But his dad swoops in to scoop him up and he waves his arms and laughs. Other families applaud, celebrating his walking boldly into the world.

– Big Note, Little Note class at the Children's Storefront, Harlem, NY<sup>23</sup>

Music engages this toddler's body (standing, teetering, weaving his way from knee to knee) as well as his brain (planning, executing, taking stock) - as well as his emotions (bravery, surprise, and delight).



## **Becoming and Staying Close**

Young children build some of the most important relationships in their lives as infants and toddlers. If they are lucky enough to have caring and responsive caregivers, they develop a sense of security, a feeling that they will be followed, cared for, and protected, even as they explore new activities, take risks, make mistakes, and recover.<sup>24</sup>

Music can support these intimate exchanges. Lullabies provide an excellent example: as parents soothe their children to sleep, they share the sounds of their first languages and the kinds of rocking and talking that calms a wakeful infant in the intimate moment at the border of sleeping and waking.

Shared musical experiences further strengthen these bonds by creating opportunities for families to engage with each other. Whether it's singing, dancing, or humming together, these moments foster positive emotional exchanges and allow children to express their feelings in a safe space. During these interactions, children absorb the gestures, accents, and ways of being together that are common within their families, literally becoming a part of a shared and close-knit world.

In fact, there is increasing evidence that a responsive partner (father, mother, grandparent, older brother or sister) is "the best toy in the store." If that person responds to a young child's cues, the pair can jump-start backand-forth exchanges, anytime, anywhere. They can create a world of their own even in noisy, crowded, or confusing settings.

"A lot of other times when
I'm parenting K., I'm the mom and
she's the daughter, and there's very clear
boundaries around that. But when we're
singing together, being creative and making
music together, we're a team and we're on the
same level and we can really connect in ways that
aren't quite there when we're parent and child.
So I highly, highly recommend to use music as a
way to connect with your child."

"You can try learning a new instrument together, or you could just sing and dance in your own living room. It really doesn't matter. It's just more about the bond that you feel through music when you can connect on the same level with your child in a new way that you probably wouldn't have imagined before."

—Quiana, New York Early Childhood Programs Participant, speaking on the podcast StrollerCoaster.<sup>25</sup>

To listen to what this mother and child created, use this QR code, and hear how their voices add to their song, starting at 16:50:



#### **What Research Shows**

Music can play a powerful role in strengthening the connection between parents and their children. When parents engage in musical activities, such as singing or rhythmically patting their babies to a beat, the rhythmic patterns can act as a calming influence, providing a sense of safety and security, especially in infants. Music offers "patterned, repetitive neural input," which helps regulate brain areas linked to early emotional development and attachment.<sup>26</sup>

But it's not just about soothing the child: musical interactions can improve self-regulation for both parties. For example, singing with a child or engaging in a musical rhythm can induce changes in affect and physiology, helping both the parent and child manage their emotions in healthier ways.<sup>27</sup> This emotional attunement supports a positive cycle of emotional development, where each partner tunes into the other's needs.

Furthermore, the quality of the parent-child relationship directly influences musical engagement within the family. Families with higher levels of intimacy and prosocial behavior are more likely to participate in musical activities together, reinforcing their emotional connection.<sup>28</sup> This suggests a reciprocal relationship where music not only strengthens bonds but is also more likely to be a part of a close-knit family's daily life.

Parents often prefer music-based interventions over other therapeutic options, such as behavioral therapy. These interventions can be more accessible and enjoyable, making parents more likely to engage consistently.<sup>29</sup> Greater parental engagement leads to stronger, more responsive relationships between parents and children. By incorporating music, programs create safe and emotionally rich environments where both caregivers and children can try out new social and emotional strategies.

These processes can be hugely important in families where a child or children are developing slowly or differently. Caregivers' mental health is especially vulnerable as they care for children with developmental disabilities. A study that explored the effects of music therapy on bonding between parents and young children (ages 0-3) with developmental disabilities found that home-based music therapy promotes parent-child interactions and synchrony. Parentchild interactions and synchrony were observed throughout six weekly home-based music therapy sessions with board-certified music therapists. Parent-child synchrony was assessed based on "the extent to which parent and child share the same focus of attention, exhibit matched affect, and engage in reciprocal and responsive exchanges." Following the six-week intervention, parents showed more positive physical and verbal responses to their children as well as strong parent-child synchrony: "The improvements of parent-child synchrony included promoted affect attunement, prolonged mutual engagement, increased behavioral reciprocity, and increased turn-taking."30







Consider this song written by a grandmother for her grandson, King, who came into her life without language, but who was willing to join her musically:

### **Just Be King**

Verse 1

I saw your first steps
And you did it
So very small
You went through so much
You are strong
You are strong
Even though you did not speak
You found ways to speak to me

Chorus

Just be King You are loved No matter what

Just be King (Repeat)

Verse 2

I love your goofy laugh
And you like to play melodies
The melodies sound perfect
Perfect for me
You are so bright
You are so bright
I love the glow in your face
I love the way you laugh with me

Chorus

Just be King You are loved No matter what

Just be King (Repeat)

—Ms. A, working with teaching artist, Allison Tartalia, Brightside Academy, Philadelphia



Case studies also show how "musical moments" can promote intimacy and give meaning to interactions between parents and hospitalized infants in the stressful setting of a NICU (neonatal intensive care unit). "Musical moments were perceived by these parents as physically intimate and exclusive and involving a rich emotional exchange with their baby that supported a sense of human connection."<sup>31</sup>

#### **Music at Work**

Carnegie Hall's Lullaby Project invites caregivers to explore how they can use music to express their hopes and dreams for their young children. In an early session, participants, working with project musicians, write a letter to their "little ones." This is a powerful experience for any parent, but it can be especially significant for caregivers who have stepped up for children whose immediate families are not present or able.

Here is a letter from a great aunt for whom the lullaby process was a rare chance to recognize, and be recognized for, the commitment and wisdom she wants to pass on.

### Write a Letter to Your Baby

Imagine your balay in the future, as a young adult. Your child finds a letter you wrote about your hopes and dreams for him or her. Imagine your child keeps this letter for inspiration and guidance throughout life. What would your letter say?

Dear

We had such a good morning today after
you stopped being such a sleepy head. You
stretched and squirmed and fought the
Start of the new day. Then you made your
Way up the stairs, had some bathroom time
and emerged as your happy, energetic self who
loves to have me smell her breath after
brushing your teeth. "Minty, huh?" You say.
So many days, mornings and moments
ahead of you. Sometimes you will feel like getting
up. Sometimes you won't. Sometimes you will
feel like starting and sometimes you won't. Remember
that it's ok to have a slow start. but start. Even if you
have to stretch it out. Get going... get moving, get
"minty" and Know that you have the breath that
you need for the day.

1

<sup>—</sup>Paulette, in Musicopia-led's Lullaby Project at Settlement Music School, Philadelphia

In later sessions, caregivers work with performers, composers, and arrangers to refine and record their lullaby. In closing sessions, caregivers listen to performances of the whole suite of lullabies and reflect on what the process has meant for them, their children, and how they see the work of caregiving. (Professionally recorded lullabies can be found online via SoundCloud, where they are available for parents to use and expand upon any time of the day or night. For a full description of the project and a short accompanying video, go to http://www.carnegiehall.org/Lullaby).



**Lullaby Project Soundcloud** 



**Full Description of the Project** 

Results from Lullaby Projects around the world demonstrate that creating and singing lullabies is as good for parents as it is for babies. As a result of taking part in the lullaby workshops, caregivers experience a growing sense of their own creativity and well-being. Despite what may be very difficult circumstances, by the conclusion, participants often see themselves, their children, and their communities with increased hope and sense of possibility.<sup>32</sup>

# Being with Others: Peers, Siblings, and New Friends

Music, with its tempo and rhythm, verses and choruses, provides clear structures that help children learn the rules and routines for being together. Think about a young child waiting to shout out "Pop goes the weasel" or a kindergartener watching and listening for her turn as she plays a percussion piece with her class, waiting for her cue to join in. This not only reinforces the importance of listening and timing but also creates a sense of shared purpose and teamwork. At home, music can be a fun way for siblings to get along and cooperate, each contributing what he or she brings.

These same musical opportunities build or even restore social interactions in children who are neuro-diverse, or who are struggling with histories of trauma. For good reason, teachers and therapists use improvisation, sound play, and instruments to respond to the sounds a child makes spontaneously. From there, they can work together, gradually creating a shared musical language through which to share experience, tolerate a wider range of emotions, and enjoy the surprises and pleasures of two-way communication.<sup>33</sup>

#### **What Research Shows**

Music can help children form a cohesive group, where differences are no obstacle to playing together. One study involved 12 children with moderate intellectual disabilities participating in an integrated early childhood music program with 15 typically developing peers. The children gathered once weekly for integrated music lessons, and the music therapist used specific strategies like turn-taking, leading and following, and role-playing to encourage interaction. The results showed increased interaction among the children after the music therapy intervention. Staff members reported that the program fostered peer interaction and encouraged acceptance of differences among the children.<sup>34</sup>

Similarly, 3rd and 4th graders who attended 10 months of group music lessons showed greater increases in sympathy and prosocial behavior compared to their peers. This effect was particularly strong in children who had lower prosocial skills before the lessons began.<sup>35</sup> These studies suggest that music can play a pivotal role in improving social interactions, building group cohesion, and fostering acceptance among children with diverse needs.

#### **Music at Work**

Music-making can be a perfect playground for learning how to be with others. Even the simplest interchanges can be occasions for learning to react to and be with others. One mother and her children show how this can unfold.

A mother of three sits down to begin a writing session in a Lullaby Project. She describes how music is at the center of her three children's lives and how it's fundamental to their family. Almost on cue, her phone rings and it is someone wanting to interview her for a job that she needs to make up for cuts in her shifts elsewhere. She turns to her oldest son, "You have to be with the others while I do this. Keep them going." He rounds up his siblings and they form a circle across the room to give his mother some privacy. He sings a line and commands them, "Now you gotta do it faster." Each one speeds up and then insists he has to go even faster. They burst out laughing when he tries and fails. But they make a tight circle and continue the game in whispers when they realize their mom is still talking. Once she's off the phone, she says, "There's the proof—they got their music, any time, any place."

-Musicopia-led Lullaby Project at Brightside Academy, Philadelphia



A similar kind of spontaneous, cooperative play among young peers unfolded in a music class for families.



The teaching artist dumped out a mountain of shaker toys for children and caregivers to join in the next song. Two toddlers began to grab in a push-pull for the biggest and brightest shakers. Caregivers leaned forward, ready to intervene. But partway into the song, it became clear that some of the smaller shakers had the loudest and most bell-like tones. The toddlers listened closely to the sounds each could make, decided to trade shakers, and continued playing, pleased by what they had. A new game emerged: they each darted to the pile of shakers, found a new one, tried it out, and then gifted it to their newfound partner. Their caregivers leaned back, sharing a look of relief and quiet pride.

—Big Note, Little Note class at the Children's Storefront, Harlem, New York

Both moments show how music offers children a space to learn how to explore, negotiate, and connect with siblings and peers.

## **Communicating and Imagining**

Humans are wired to be sensitive to sound patterns. Even unborn infants respond selectively to their mothers' voices. Babies can distinguish speech from music, and they can learn what rhythms to expect in Western and non-Western music through listening.<sup>36</sup> Before babies speak, their babbling and sound play helps to develop the neural pathways necessary for listening and speaking.<sup>37</sup> Infants who hear language directed and responsive to them babble more and have larger vocabularies as toddlers.<sup>38</sup> Just like adult musicians, children with musical experiences develop acute sound processing skills. They can distinguish between different sounds in ways that may be important to early reading.<sup>39</sup>

Both the quantity and the quality of language that a child hears affects how and what she learns to communicate. If all a child hears is "Don't do that; put on your coat; finish your milk," she is missing out on learning new vocabulary and on powerful ways to use words to express what she knows, feels, and imagines.

When children hear and see others singing as a part of daily life, they quickly pick up the habit. Listen in and you will hear them making up informal songs and games as part of enjoying or making sense of the world.



Home from the Water, into dragon Fire,
but we have umbrellas, and she'll never tire.
Someone Save Hoppsy, before the floor's lava
We have magic Stones, and Hoppsy we gotha

Unicorns, Cushion Castles,

Laser Maze Spider Webs,

fancy dresses, Painters' tape

Knock Knock, banana heads.



—David, a Father working with teaching artist Sage DeAgro-Ruopp in Musicopia-led Lullaby Project at Settlement Music School, Philadelphia

This is where imagination and creativity come into play. Invented and shared songs are also a way for caregivers and children to share imagined worlds, as this father describes in his lullaby for his daughter (and her beloved rabbit, Hoppsy).

This type of creative engagement fosters a sense of ownership over language, giving children the freedom to explore and invent their own expressions. It also nurtures an early understanding of how ideas can be molded and reshaped, empowering them to think outside the box and approach challenges with a playful mindset.

#### **What Research Shows**

Recent studies show how early differences in children's language environments affect how they develop as communicators. At 18 months, toddlers saw images of two familiar objects on a screen, while a recorded voice named the object and used it in a sentence (e.g., "Look at the doggy."). Children growing up in underresourced households responded more slowly and spent less time studying the correct pictures than their more advantaged peers. <sup>40</sup> These early differences matter: having the words to express your plans and feelings makes it easier to play and work with others at home and in the wider world. Moreover, early vocabulary development predicts later reading skills and school success.

Songs, music, and the talk that surround them offer powerful ways to close these kinds of gaps in language development by introducing children to new words and varied ways to express ideas and experiences. Through songs, children encounter expanded vocabulary, rhythmic patterns, and sentence structures that deepen their language understanding.

For example, instead of simply saying, "It's raining," a child can sing, "It's raining, it's pouring." Repetition in songs strengthens memory, helping children internalize new words, while songs introduce new concepts, actions, and emotions, allowing children to connect words to experiences. This dynamic interplay of melody, rhythm, and vocabulary supports language learning but makes it engaging, fun, and memorable. Language used in such rich ways is a source of what has come to be called "word nutrition"—just like fresh vegetables, fresh ways of expression make for growth.<sup>41</sup>



#### **Music at Work**

YO, ROO, BOO:

Wonder wheel, I wonder... What will we make today? Wonder wheel, I wonder... What will we play?

**ROO, BOO:** 

We are flying eagles! We are, we are, we are!

YO:

What do we see?

**ROO, BOO:** 

We are flying eagles!

We are, we are, we are!

YO:

What lies beneath? What lies beneath?

**ROO, BOO:** 

A wheel or a universe?

YO:

An adventure on the floor?

**ROO, BOO:** 

A forest of colors to explore!

**ROO, BOO, YO:** 

Wonder wheel, I wonder...
What can we make today?
Wonder wheel, I wonder...
What can we play?
We are all painters!
This circle is our muse!
We are all painters!
What will we choose?
A circle of colors on the floor!
A circle of colors for us to explore!

In this spirit, Carnegie Hall is reimagining what early childhood concerts can be, centering not just performance for children, but performance with them. A core part of this work is the belief that children as young as 0–2 years old are not only capable of being audiences, but essential participants. Their vocalizations, movement, and play are not interruptions—they are part of the performance itself.

Take Camille's Rainbow, for example, a performance in which young children and their caregivers are invited to sit on the floor, level with the performers, and follow Camille on a search to recover her lost colors—red, yellow, and blue. As colored lights ripple across the space, children are free to chase them alongside Camille, becoming part of her journey.

Camille's world is shaped by three playful characters: ROO (red), BOO (blue) and YO (yellow). Together, they reflect different dimensions of Camille's own evolving identity, guiding the children through a sensory-rich experience of orientation, discovery, and connection.

What precedes is an excerpt from the libretto that brings this world to life, inviting the youngest audiences and their caregivers into a space where every sound, step, and gesture helps shape the story.



-Excerpt from "Camille's Rainbow", music by Thomas Cabaniss and Saskia Lane, libretto by Zoë Palmer

## **Sharing and Managing Feelings**



When a three-year-old begins to make a racket at dinner, his father tells him to "Go play." He scoots away, grabs a small mallet and toy safety glasses, and chases round and round singing:

This is how we bang and clatter
This is how weeeee
Bang and claaaa-teeeerrr

He rushes in circles, hammers, and sings, while still minding his dad out of the corner of his eye.

A major part of growing up is learning to recognize, express, and manage our emotions. Positive emotions like pride, happiness, and interest can spur and sustain curiosity; negative emotions like fear and anger can be important warning signs.

The human capacity to regulate emotions—to turn fear into curiosity or anger into discussion makes it possible to recover from sadness, bounce back from disappointment, or laugh only minutes after being scared by a strange noise.<sup>42</sup> Many of children's earliest games and chants are about this kind of emotional management, turning suspense into release. (Consider the song and game, "This little piggy," as it bursts into "WEEE WEEE all the way home!") As these sound games speed up, the partners figure out the boundary between what is exciting and what is too much. With invitations and models from adults, young children learn to invent games, songs, and stories that help them explore and harness their feelings.43

In this moment, the child is actively using music to channel his emotions, turning his restlessness and energy into a playful, not-quite-disruptive expression. The rhythmic singing and physical activity allow him to release pent-up feelings in a safe and controlled way. Singing is a tool for emotional regulation, allowing him to be loud, but not too loud, mindful of his father's boundaries.





What Research Shows

Music and movement programs can enhance young children's ability to self-regulate their emotions and behaviors. For instance, the MacPhail Center for Music's "Learning with Music" program integrates music into daily preschool activities, focusing on developing self-regulation skills. 44 Activities such as call-and-response singing, rhythm games, and guided movement exercises promote emotional and behavioral control and also improve focus, patience, and impulse management. A study evaluating this program demonstrated notable improvements in these areas, suggesting that structured musical engagement lays a foundation for effective self-regulation. 45

Similarly, the Kaleidoscope Preschool, part of the Settlement Music School in Philadelphia, integrates arts-based learning, including music and movement, into early education. Children attending Kaleidoscope exhibit higher levels of positive emotions and greater growth in emotion regulation compared to peers in traditional preschool settings. The opportunity to explore sound, rhythm, and movement within a structured, yet flexible, environment is linked to increased motivation, confidence, and resilience among these children.

Beyond children's self-regulation, musical activities can offer caregivers mechanisms for relieving stress and anxiety. When live-performed music therapy is combined with physical contact for pre-term infants, parents' stress and salivary cortisol levels drop during the initial weeks after birth, potentially mediating the dyad's arousal and distress.<sup>47</sup>

Taken together, these findings suggest that early exposure to music can foster self-regulation but also a broader capacity for emotional resilience. Through structured play, improvisation, and creative expression, young children and their caregivers may learn to navigate and process their emotions in a way that supports both their cognitive and social development.



#### **Music at Work**

A parent in the Big Note, Little Note program, speaking on the impact it has had on her child:

"There are times where I know K. is starting to get antsy and fussy, and so I'll just throw on some music and just have an impromptu dance party. There are other times where K. is being really defiant about, let's say, washing her hands. And so a song will help break, you know, sort of break that defiance down a little bit where we can just be like, hey, we're going to wash your hands. Hey, we're going to wash your hands, hey. And we'll just, like, just throw out lyrics. However it works, whatever kind of mood we're in. And it works. It gets her to move along and do what she needs to do."

—Quiana, New York Early Childhood Programs Participant, speaking on the podcast StrollerCoaster.48

This mother's reflection highlights how music serves as both a tool for emotional connection and a practical strategy for navigating daily challenges with her child. Through impromptudance parties or playful, made-up songs, she transforms difficult moments into shared musical experiences, shifting her child's mood and easing transitions.



## **Belonging to a Culture and Community**

Music is a powerful vehicle for passing down cultural knowledge and sustaining community traditions. This cultural transmission occurs through songs, rhythms, and musical traditions passed down from generation to generation, building a strong sense of cultural continuity and identity for and with children. Songs can preserve family and cultural traditions and teach children about their linguistic and cultural heritage, anchoring their personal identities.

By engaging with these cultural practices, children can develop emotional connections to their community. Whether through lullabies, folk songs, or community rituals involving music and dance, young children internalize the cultural values shaping their family's way of life. Music, in this sense, can help children feel pride in their cultural roots and learn to respect and uphold their family's traditions.



Currently in the U.S., one in four children has at least one immigrant parent.<sup>49</sup> For these families music can serve as a bridge between the cultural heritage of their home country and the new environment they are navigating. If community programs and early education incorporate families' music, children learn early that they are welcome and belong. Where children never hear their music, they may be learning who is "an outsider," and which languages are for learning and which can only be whispered.<sup>50</sup> When daycares and preschools feature the music of multiple cultures and homelands, they model an inclusive and connected world. Imagine going to your older brother's concert and hearing Mariachi or bhangra music right along Sesame Street or Sousa.51

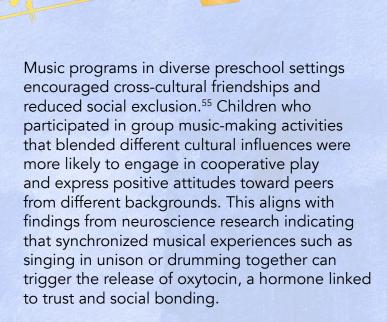
Music is especially vital for families whose languages and traditions have been marginalized, or nearly extinguished. For example, music projects can be a vital part of helping Indigenous communities seeking to hold onto or reclaim their languages. Lullaby Projects from Live Music Now are settings where languages like Welsh are once again becoming the language of early intimacy.

In other words, music can create a kind of third space where young children can knit together complex identities that combine their first languages, traditions, and culture with contemporary, English-speaking, and U.S.-anchored identities. In this sense, music can provide the raw materials for an evolving and affirming identity.<sup>52</sup>



#### **What Research Shows**

When schools actively engage families in their children's education, they become more culturally responsive and equitable, leading to better outcomes for children. Incorporating music from diverse cultural traditions into early childhood education is a powerful tool for fostering inclusivity, intercultural understanding, and a sense of belonging among young learners. Preschoolers exposed to music from multiple cultural traditions showed greater openness to cultural diversity and higher levels of prosocial behavior, such as cooperation and sharing, compared to peers who experienced a more monolithic musical curriculum.53 Engaging with music from different cultures helps young children develop an early appreciation for diverse traditions, fostering empathy and reducing bias. Further supporting this idea, a study found that culturally inclusive music programs in early childhood settings helped immigrant children feel more at home in new environments.54



#### **Music at Work**

This powerful example from the New Zealand Opera's Lullaby project demonstrates how the process of creating of lullabies can support the importance of a community's multiple languages as equally powerful and expressive.

New Zealand Opera has partnered with Carnegie Hall to present the Lullaby Project, supporting young families to connect with their children through song. Some māmā have chosen to write lullabies in their indigenous language, te reo Māori — one of the official languages of Aotearoa New Zealand. In a workshop setting, Māori practitioners work alongside families to speak and compose songs such as the one below:

Māori	English Translation
Ōku Poutokomanawa.	The Pillars of My Heart.
Mai i te kunenga o tō kōrua tīmatanga he aroha mauroa.	From the very beginning of your journey, a love enduring.
E kore rawa e mimiti te aroha.	My love will never run dry.
Kia mau ki te aka matua.	Hold firm to the source that connects us.
Ko te whenua houkura	The sacred land,
ko te whenua taurikura kei wāhi kē atu	rich and abundant, lies elsewhere-
l tō kōrua ūkaipō tūturu.	Beyond your true place of belonging.
Ko au ko kōrua, ko kōrua ko au.	I am you, and you are me.
Kia mau tonu mai.	Hold firm, stay steadfast.
Kia aumangea,	Be resilient,
Kia māia,	Be brave,
Kia whakamanawa kōrua ia kōrua.	Uplift each other, both of you.
Ko te whenua houkura	The sacred land,
ko te whenua taurikura kei wāhi kē atu	rich and abundant, lies elsewhere-
I tō kōrua ūkaipō tūturu	Beyond your true place of belonging.
Ko au ko kōrua, ko kōrua ko au	I am you, and you are me.
Kia mau tonu mai	Hold firm, stay steadfast.
Kia aumangea	Be resilient,
Kia māia	Be brave,
Kia whakamanawa kōrua ia kōrua	Uplift each other, both of you.
Ōku poutokomanawa	The pillars of my heart.

Lullaby name: Ōku Poutokomanawa Written by Poutokomanawa Tangiora-Eketone, NZ Opera & Carnegie Hall 2022 The effectiveness of intercultural music education depends on authenticity and thoughtful integration. Experts warn against "musical tourism," where cultural traditions are reduced to surface-level exposure without meaningful engagement. <sup>56</sup> Instead, successful programs incorporate music in ways that reflect its social and historical significance, inviting community members, such as parents, grandparents, and cultural practitioners, to share their musical heritage with children.

Done well, music can be a bridge between cultures. By creating spaces where children can celebrate both their own identities and the traditions of others, early childhood music education lays the foundation for a more empathetic, inclusive, and mutually-aware generation.



## Finding Joy through Music

Smiles, laughter, and positive emotions play a powerful role in human thriving.<sup>57</sup> Music can be a remarkable carrier for that kind of shared joy. Think about a group of refugee four-year-olds who are all singing, "Head, shoulders, knees and toes," as part of learning English in their preschool program. Imagine them speeding up with each verse until it is no longer possible to keep pace. Soon they are touching their knees as they say "toes," or patting their heads and saying "nose." It's hard not to laugh, especially if teachers or artists are also bungling all that carefully taught vocabulary right along with the newest arrivals. Soon there is a community of very silly people who can't tell their noses from their knees.

What Research Shows

Many children experience trauma and extreme loss. Migrant and refugee children often lose family members, their own health and wellbeing, and their homelands. Children affected by disasters such as earthquakes, storms, and fires suffer similar disruptions. Others experience loss through adoption and foster care. These traumas strip away the routines, foods, gatherings, and celebrations that shape children's sense of time and belonging. As part of efforts to support children's survival, grieving, and healing, it is essential to acknowledge the restorative power of joy and the role of music, dance, storytelling, drawing, and play in rebuilding health, hope, and trust.<sup>58</sup>

For families who have experienced trauma through migration, natural disasters, or violence,

healing and restoration is urgent.<sup>59</sup> There is a growing understanding that the arts and culture can play a crucial role in healing and restoration processes. 60 For example, in refugee camps for Khmer families fleeing persecution in Cambodia, Khmer aid workers supported families and children by teaching classes in their native language and history, organizing performances of beloved music and dance, and maintaining a calendar of holidays. These efforts honored grandparents and parents as transmitters of heritage while signaling the resilience of cultural identity even under stress, creating bridges between the past and present.<sup>61</sup> This kind of work underscores how healing often begins with the opportunity to reconnect with others in celebrating the life they love and miss.62



Rise2Shine, a preschool program serving 50 of the poorest children in Haiti, integrates music as a central component of its curriculum because of the profound impact of music on young learners:

"Compared to regular lesson plans, when music was introduced in the classroom, the children began to smile from ear to ear, with a gleam in their eye that we've never seen before; an involvement we've never seen before. Children cannot hide their emotions and passion, and music released in them a new stream of happiness and engagement. We knew then that this 'frequency' must be accessed and used more, like a highway for transporting further teaching and curriculum."

—Jit Vaitha, the founder of Rise2Shine

Vaitha further emphasizes that music must be part of a holistic support system, including adequate nutrition, safety, and emotional care. Without these fundamental necessities, music alone cannot fulfill its potential impact. However, when combined with a nurturing environment, music serves as a catalyst for engagement and happiness, reaffirming human creativity as a core component of well-being.<sup>63</sup>



### **Music at Work**

Through their participation in Big Note, Little Note, many parents have shared how music-making helps them navigate the rough spots of everyday life. Below a parent explains how this works in daily life:

"It definitely
helped me as a
first-time parent to bond with
my daughter more as far as igniting
her love for music and helping me
express myself more through dance. It
also helped me with networking and making
new friends who are also parents... Thank
you to the Carnegie Hall family for having
us and making it such a fun and expressive
experience. With help from the classes, Z.
and I used music to bond with each other more.

Whether it be a dance party or me rocking her to sleep, it has created fun and precious moments that as a mother I'll remember forever. One of the things I loved about class was the use of English and Spanish songs because I'm teaching Z. Spanish as a second language and her hearing it through singing helped because now I can add those songs to our playlist. It also taught me songs I didn't know, so I'm also grateful for that."

— Janan, participant in Big Note, Little Note, Harlem Children's Zone, Harlem, New York

In this sense, the class wasn't about teaching rhythm or melody. It was a lesson in using the companionship and joy of music to get through the "narrow spaces" of early parenting.

# Music and Caregivers' Well-being

Music-making can also make a difference in caregivers' lives. Just like language, music is a shared, expressive, inventive, portable way to be together. When caregivers can make time to talk, play, and sing, they have the chance to:

Feel Capability and Accomplishment

Claim their own Emotional Well-being

Strengthen their Connection to family and cultural history



# Capability and Accomplishment

A major source of satisfaction is feeling capable. But the work that caregivers do is rarely respected despite how complicated, demanding—and vital—it is. Music-making can offer one setting in which to access that sense of capability and accomplishment. When caregivers soothe a baby to sleep, or create a game that provokes laughter and invention, they can experience mutuality and sense of effectiveness. Here a mother in a Lullaby Project speaks to how that process helped her ask her young son to acknowledge her work and needs:

"We have conversations
like when I'm feeling sad. "Hey
Z... Z could you come here and give
me a break for a minute?" He seems to
understand. Like he'll give me a break and
just hug me and I tell him I appreciate it,
like helping me out."

-R., a participant in Musicopia-led Lullaby Project, Philadelphia



# **What Research Shows**

Music-based interventions not only have an impact on the child but also the caregiver and the caregiver-child relationship. A systematic review of programs that included all kinds of music-making and movement saw parents experience improved mental health and well-being, mothers' sense of joy and

accomplishment, and reduced stress. Potentially these activities trigger the autonomic nervous system which heightens self-regulation of emotions and social engagement in the caregiver, leading to improved co-regulation with the child.<sup>64</sup> Similarly, music interventions strengthen mother-infant bonding, mother's mood, and sense of accomplishment. Active interventions (e.g., singing) as compared to more passive ones (e.g., listening) resulted in a more positive mood for mothers due to stronger social interaction with their child, which further resulted in heightening mothers' sense of accomplishment.<sup>65</sup>

#### **Music at Work**

Research on creative music therapy (CMT) with premature infants and their parents demonstrates how music can empower parents who are undergoing the stress of having a vulnerable child. While CMT is conducted between the infant and therapist, parents are active contributors through singing and adjusting their movements and body language to their child. This kind of communicative musicality (e.g., the parent nodding their head to the beat of the song) bolsters parent-child attachment and boosts parents' confidence that they can care for their child despite their vulnerable condition.<sup>66</sup>

Similarly, families waiting to hear about an autism diagnosis for their young child can use the process of writing a song for that child to work through and accept their new identity as a "family with autism."

"Tones of Home" is a songwriting project aimed at supporting parents of children with or on the verge of diagnosing autism. Parents are paired with professional musicians to develop and create original songs for their children. Reflections from parents who participated in the project revealed that their special songs served as a unique and impactful mode of communication not only with their children but also with other family members and parents, something that is beyond normal conversation. Their songs evoked certain emotions that can be hard to express in everyday language, and after sharing their songs, songwriter parents shared that they were able to feel deeper levels of connection, understanding, and accomplishment. Especially for parents of children with neurological disorders, it can be hard to find others who understand their child's development process. Tones of Home, led by teaching artist, Todd Henkin, provides parents with a community of caregivers who can connect and understand each other in more ways than one.<sup>67</sup>

Below is a song that a parent wrote for their child while participating in the project:

# M's Song

This is where I'm at as a mother, everything in my power, Talking to myself every morning, Finding courage for the long run, I won't sit back.

The unknown is understanding.
How?
Growing up, everything as a whole.
The family?
And when we're older?

Chorus
Little changes, little steps,
A long way to go,
Little changes, little steps.....

No matter what, love! Love no matter what!

I'm learning with him through his eyes. I wouldn't have thought of it that way, Doing so much from one spot, Beautiful to see to be shown differently.

Little changes, little steps. We've come a long way. Little changes, little steps.

No matter what, love! Love no matter what...

#### M's mother reflects:

It's had a good impact, definitely. It's been a way for me to write down everything that I felt about the journey that we have been on. Rather than writing it down and just putting it on a piece of paper and a book, or talking to someone, I think something beautiful came out of it. That's the biggest impact for all of us, being so proud of something that you've done, and achieved; something which you know is so meaningful to you and the family. I'd love to share it for other parents who are in the same journey that I'm on, and offer a little bit of comfort and a little bit of light at the end of the tunnel.

-Severa, Mother from Tones of Home project with teaching artist, Todd Henkin



# Claiming Emotional Well-being

The process of raising young children can be rewarding, but it is often exhausting. Music can play a role in addressing how drained and spent many caregivers feel. Nowhere is this clearer than in the postpartum period when a mother's mood and sense of meaning can have a major impact on the rest of her motherhood journey, as well as their child's mental and emotional state.

the postpartum period, many women (13 – 40 percent) also experience anxiety. Similarly, mothers who participated in music therapy showed significantly lower levels of postpartum anxiety and pain compared to mothers who underwent routine care. Potentially, music can protect against postpartum anxiety and help mothers to realize they can be agents in finding and protecting their own mental health.

## What Research Shows

Music can support mothers dealing with postpartum emotional struggles, particularly mothers whose children struggle with disabilities or were born premature. Caregivers can use music to regulate their mood, cope with the challenges of mothering, support mother-child connection, and more.<sup>68</sup> This matters, since one in five mothers experiences serious mental health challenges in this period.<sup>69</sup> While some new mothers may require clinical and medical treatment (e. g., anti-depressants), activities like enjoying and creating music can offer powerful alternatives that mothers can control.

A longitudinal study explored mothers' moods from their final trimester of pregnancy (28+ weeks) through nine months post-birth. Throughout their third trimester, women noted how much music they listened to (ranging from a couple hours a week to 5+ hours a day) and tracked their well-being. Their listening during the third trimester led to greater well-being during the first three months post-birth, especially for women who noted lower levels of well-being at the beginning of the study. During



# **History and Connection**

(You love splashing in the water You love looking at the trees You love Maple You love Papa And you love me!)

En el árbol en esa rama El ave roja cual carmín Que te ve por la ventana Te recuerda ser feliz

(In the tree on the branch
A bird the color of Carmine
He watches you through the window
And reminds you to be happy
You are our little gift
You are our dream come true
We're so happy that we get to spend each day
with you)

En el árbol en esa rama Y siempre en su lugar Esa ave roja canta Te recuerda a tu hogar

(In the tree, on the branch
Always in his place
The red bird is singing
Reminding you of your home
Go to sleep now, little baby
Fill your head with lots of dreams
When you wake up you'll keep playing with all
your favorite things
Go to sleep now little baby)

-Parents Paulina and Roberto with baby Leo

Through its unique relationship with human ritual and memory, music has the power to take a caregiver back in time to their own childhood. Musical memories have a powerful way of reinforcing connections across time and space. Specific kinds of music can connect listeners to their cultural origins and prompt them to reminisce about specific memories. For example, two parents separated from their families in Mexico by the Covid-19 pandemic wrote a lullaby about seeing a cardinal outside their son's window, thinking of the bird as his grandmother visiting and making a connection to the legendary red bird in Mexican mythology.



#### **What Research Shows**

Parent-child group music-making can promote multi-dimensional socialization between parents and children. Parents who participated in group activity sessions at a children's center reflected that, compared to other group activities, musicmaking in groups offers greater benefits to their children socially and emotionally. Because parents can easily implement techniques learned in the music group at home, the communal experience of music-making can have a particularly strong impact on families: "The experience of moving geographically with young children and yet finding the same songs in different locations was helpful in enabling one parent's twin two-year olds to join in, providing continuity and an affirmation of cultural stability [...] when many things were changing."73

Music also strengthens familial connections and ties to rituals and traditions. A crosscultural study that explored the impact of musical family rituals found that music promotes family cohesion across developmental stages and improves emotional well-being. Musical family rituals are "a set of musical behaviors (engagement and listening) that are reported within a family context and hold symbolic meaning for the family members." These range from lullabies to family sing-alongs to families listening to beloved music during special events.<sup>74</sup>

A study of expectant parents at risk for insensitive parenting found that engagement with music connected them to their own caregivers and supported their feelings of parental competence and parent-child connection. During their third trimester of pregnancy, a sample of parents who experienced "interpersonal and community violence and poverty" were asked about their mental state and about the ways in which they interacted with music during their childhood and in the present day. Their memories of music in their own childhoods often evoked comfortable

and pleasurable feelings of connection and motivated them to share music with their own infants so as to build similar emotional connections.<sup>75</sup> Musical activities can also shake the cobwebs off the "rusty" connections people have to making music and can reconnect them to that vein of creative activity that may stretch as far back as middle school chorus or high school band, reminding them of what musical creativity offers to daily life.

40



#### Curious

You're so curious Standing there You're so curious Your smile and laughter

Watching you grow I don't know Watching you grow Is the greatest show

Running around the world
Your great adventure is waiting there
I'll be there
And you'll never, never be alone
At each milestone
And you'll never, never be alone
At each milestone

You're so curious Pointing at the sun You're so curious Making friends one by one

Watching you grow I don't know Watching you grow Is the greatest show

Running around the world
Your great adventure is waiting there
I'll be there
And you'll never, never be alone
At each milestone
And you'll never, never be alone
At each milestone
And you'll never, never be alone
At each milestone
At each milestone

You're so curious You're so curious (you're so curious) You're so curious (you're so curious) You're so curious (oh, curious)

-Families in Big Note, Little Note class at the Children's Storefront, Harlem, New York Music-making can shape the social fabric of entire communities. It creates spaces where people come together to build trust, form new relationships, and share moments of joy, vulnerability, and cultural expression. Collaborative music-making can open doors to meaningful dialogue, strengthen a sense of belonging, and provide opportunities for people to support one another in the mix of challenge and joy that is caregiving. Consider this anthem to watching your child grow, composed by a collaborating set of families all enrolled in the Big Note, Little Note program.



When communities write lullabies together, they are not simply composing songs; they are creating collective memories and practicing how to care for one another. They find reassurance in a network of caregivers who experience similar struggles and delights in their early years of having young children. The process offers a pathway out of isolation, empowering participants to share their stories and ideas with confidence.<sup>77</sup> This confidence can ripple outward, shaping how parents engage with their children, how neighbors interact, and how communities preserve and honor their cultural identities.



Community-driven music projects are uniquely positioned to address larger structural and cultural dynamics, including those that shape a region's history and its people. Thinking about these broader connections may also encourage families to root themselves in their shared geography and find meaning in specific spaces and times. In Australia, for example, the Lullaby Project invited families and children from First Nations communities to come together. Cultural leaders and elders played an active role, ensuring the process reflected and respected Indigenous knowledge, traditions, and leadership. Rather than directing the work, the project team offered support from the background, creating space for local voices to lead. Projects like this show how communityled music-making can be essential for creating experiences that are culturally meaningful, inclusive, and sustainable.

On the Yorke Peninsula in South Australia, the Lullaby Project provided a vivid example of how music can build social cohesion. Over six weeks, families from across the region came together to meet, share, and create music. Each family co-wrote their own lullaby, but they also collaborated to create community lullabies, songs written collectively by participants and artists. Every aspect of the project's design centered on community togetherness. It honored, celebrated, and connected with place and country. For many participants, this was the first time they reported feeling a genuine, grounded sense of belonging as parents of young children within their regional community.

As Emily Gann, founder of Connecting the Dots in Music that sponsors the Lullaby Project in Australia, described, "The project exuded love, joy, and musical creativity," from artist development days, to workshops held across different towns, to shared concerts where families gathered in song. The project also produced a locally illustrated songbook featuring everyone's lullabies, a professionally released recording that captured the unique voices and sounds of the region, and a Mother's Day concert that became a community-wide celebration.



Importantly, the project's impact did not end with its scheduled activities. Families reported ongoing bonds with other project families, with artists, and with community service providers, long after the formal sessions had concluded.

One participant captured the spirit of the project:

"What an absolutely fantastic outcome! Such beautiful lullabies and songs for Yorke Peninsula. And ever more beautiful is the process of connection, grounding, and creating such magic as a community. We are blessed to have such generous artists and people in our community."

#### **What Research Shows**

Music can be a tool for breaking down barriers between different communities. For example, in post-apartheid-era South Africa, early childhood music programs was a powerful tool for fostering a new national identity, encouraging children to respect and appreciate ethnic differences.<sup>78</sup> These music programs integrated Indigenous music traditions alongside Western styles, helping children connect with their own heritage while forging a new, unified sense of national identity. As children learn the different words and rhythms of other musical traditions, their first steps and mistakes may be important: a "tolerance of uncertainty," which is key to appreciating diversity. Music education is not only about performing but also about understanding and appreciating different musical heritages. Shared in this way, music-making is potentially a part of raising an empathetic, openminded, and culturally aware generation.

These community-level outcomes align with a growing body of research demonstrating the role that arts and cultural strategies can play in building supports for young families, strengthening social cohesion and community well-being. To Community music initiatives not only support health and well-being, but also provide a promising way to approach larger-scale problems including health and climate justice inequity. The findings suggest that arts-based community initiatives, such as Lullaby Projects or family community singing, may be uniquely positioned to build resilience, support mental health, and foster stronger, more connected communities.



Work fostered by Live Music Now in the United Kingdom also suggests how such experiences are two-way enterprises: building communities' support for young families and young families' understanding of what to ask their communities to do to support them. This mutuality is beautifully captured in the Welsh term "Cynefin" which is at the center of Live Music Now's work in the Welsh community of Port Talbot.

"'Cynefin' means
'the place where we feel
we belong, where the people and
landscape around us are familiar, and
the sights and sounds are reassuringly
recognisable.' Although it can be translated to
'habitat' in English, 'cynefin' is not just the area
in which we live. It is often used to describe
the relationship between people and the
natural world, and how our connection to our
surroundings can shape our sense of identity
and well-being.

"'Cynefin' is also used in the broader sense of community, culture, heritage and identity. It is a holistic concept that encompasses the physical, social, cultural, spiritual and economic dimensions of a place, and how these dimensions interact with each other. It is seen as the historic, cultural and social space which is shaped and defined by the community that inhabits it. In Wales, music is our culture."81

What is clear, both from research and lived experience, is that music can provide a vehicle for connection, healing, and collective empowerment. Whether in a small town, in a bustling urban center, or within Indigenous communities, music can bring people together, to create, but also to listen, to lead, and to build the kind of relationships that last well beyond the final note.



What Can You Do?



Music can be a powerful force in the growth of young children and families. But for that to be true, researchers and music educators stress:

Quality: The impact of games, songs, and instruments lies in their ability to engage, inspire, and provide lasting value. Songs with captivating melodies and meaningful lyrics draw children and adults back again and again. Wooden blocks and sticks produce richer, more resonant sounds than plastic alternatives, offering a more immersive experience. Quality not only captures attention but also motivates continued exploration and rewards repeated engagement.

**Responsiveness:** Music requires a tuned-in partner who is ready to respond to the cues and abilities of children. Rote music, played without variation or invention, turns into a chore, especially when adults always lead and children always have to follow. Let children improvise, change the words, or add a verse. Give them the chance to accompany and conduct.

Live music: Playing a CD while children draw or nap provides background, not music engagement or education. Even "interactive" music games have limits. They offer just so many songs, or characters, or moves. Viewing and listening to music that never changes is more like listening to a clock tick. To make a meaningful impact, learning through music requires active hands-on and minds-on participation. As we learn more about the possible drawbacks of too much "screen time," it is important to remember that music, like other forms of play, is all about variation, invention, and human interaction.

**Multi-modal participation:** Especially for young children, music comes alive, and engages more aspects of learning, when accompanied by gesture, dancing, and musical instruments. Engaging the whole child increases the impact of music on brain and motor development.

Inclusion: Music has the power to forge community, if it is designed to do so. Thoughtfully structured music can welcome children of a wide range of abilities into a group. It can also welcome newcomers who are acquiring English, giving them a way to communicate and participate fully. The key is to think through the routines, the materials, and the social rules that will let everyone take part.

**Invention:** Music is as much about improvisation and invention as getting all the pitches and rhythms correct. Be sure to make a place for spontaneous songs and invented instruments.

**Sustained engagement:** For music to contribute to children and family development, it can't be "just for the holidays." The impacts discussed throughout this essay come from programs that last anywhere from three sessions over several months to several years.

# What Can You Do?

Early childhood is a period of explosive and promising growth. But many children grow up with increasingly unequal opportunities to thrive. Music could help close this gap—if its advocates and practitioners step up and take action by:

- Designing maternal and child health care initiatives that help healthcare workers understand music as a strategy for developing relationships, emotional health, and communication skills. Imagine lullaby writing as part of birth classes or well-baby visits.
- Building high-quality music and art into early education. This includes training teachers who are skilled and brave enough to lead singing, sound play, and simple composition, and who are committed enough to make those activities part of every day.
- Asking branch libraries and other community organizations to feature musicmaking for children and families with the same regularity that they sponsor storytime.
- Mounting community-wide campaigns. This includes getting posters in buses, subways, trains, and public service announcements that urge families to use their music as a joyful and portable way to be together, to help children develop, and to pass on language and traditions.



In addition to these broad initiatives, think about the many daily ways in which you can expand how music enriches the lives of children and families. What's below is just a start:

# As a parent or caregiver: Sing and play daily as a part of being alive. Ask older children in your home to sing Join up with and play with neighbors or younger ones. other families Check out music, to go to a free along with books, concert in another from your library. neighborhood. Take music with you: use sound and singing as Make household part of soothing instruments from and reassuring Turn off passive pots, pans, and music and media, on the bus, the cans and join in and bring on subway, and in Own the music: the band. live, face-to-face the car. add your child's Allow the noise. conversation, name, invent new singing, and verses, and change playing. the words to reflect who you are and where you live. Watch bulletin boards or use the Internet from home or your local library to locate free live concerts in your neighborhood. Pass on the songs from your childhood. Get grandparents and elders to share the traditional songs they know.

# As an educator (childcare provider, teacher, librarian, nurse-practitioner, and others), you can:

Make dance and movement part of physical education programs.

Create simple
listening stations
in spaces where
families often have
to wait (reception
rooms, offices,
etc,).

Invite caregivers and younger siblings to watch or take part in music sessions at drop-off and pick-up times. Use shared musical activities as a setting for including children with different abilities.

Encourage parents
to share their
musical skills and
heritage with their
children. Invite
them in to
perform.

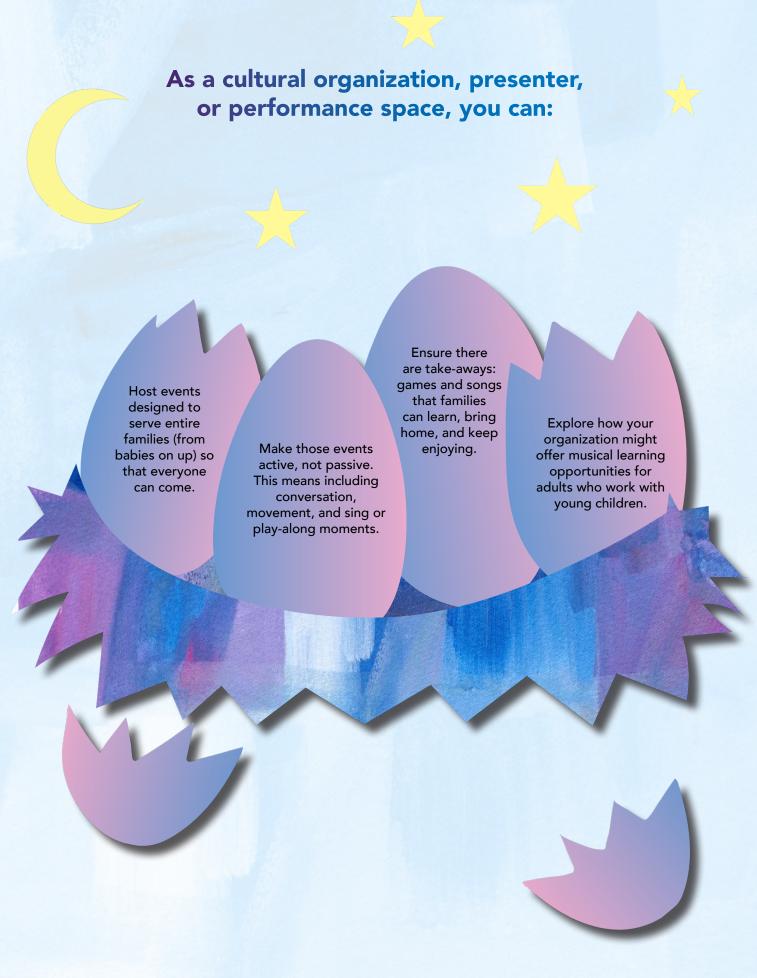
Sing and play, no matter what. Even if you "are not a musician," you can lead using a drum, rhythm sticks, or clapping. Consider taking up a simple instrument like the ukulele.

Encourage children
to compose and
notate their own
music. Have them
teach one another
their invented
songs.

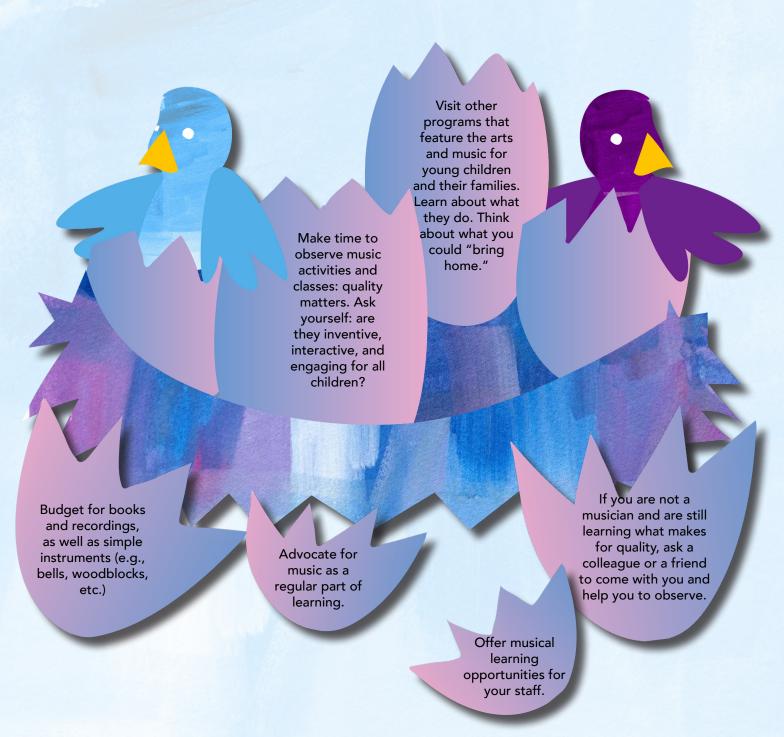
Use music, in place of raising your voice, to signal changes in classroom activity. Engage children in investing songs and rhythms that can mark these shifts.

Mark special times and events with musical performances that bring educators, caregivers, and children together.





# As a decision-maker (an early program director, a board member, a part of an agency that works with early childhood education), you can:



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