



little bird music

QUARTER NOTES

News | Profiles | Events

Neuroplasticity and Music-Learning

Dr. Andrew Huberman, neuroscientist at the Stanford University School of Medicine, offers useful tips for thinking about how neuroplasticity can help us be better teachers and learners. His [research summary](#) is a must-read, but here are a few take-aways that will make music-learning at the piano more fun and efficient:

1. Alertness = mental focus: wake up the brain and body by taking a few deep breaths or playing several loud chords.
2. Repetition = progress: play a song or a scale several times in a row, each time a little faster.
3. Mistakes are okay! Errors keep us alert and mean we're pushing ourselves. Research shows that a ~15% error rate is optimal for learning something new. Wow!
4. Take random 10 second breaks about every 2 minutes to let the brain rest and process learning.
5. Keep learning sessions short. A 30-60 minute piano lesson is about the limit for maintaining intense focus.
6. Quality sleep: when we learn, we're rewiring our brains. Rewiring of neural circuitry happens during sleep, so get some rest!



Samuel and Maya, Brooke's children, listening to music.

Connecting through Music

By Brooke Chabot

The first time I went to a Music Together class with my son, he had just turned one. I was excited to bring him to a class where we could spend some time together with other families. I loved music, but I didn't have expectations that it would be fulfilling for me in a musical way. Samuel was a quiet observer during class, and he still is at 12 years old. I was watching, too. I was paying attention to my body as a surge of anxiety pulsed through me when I realized I was expected to sing with this group of strangers. I felt vulnerable to put my voice out there. What if I didn't sound good? What if I was the only one singing? I felt the heat of these questions in my body. But then, once I started singing, something surprising happened. I felt my pulse begin to normalize and my body ease into my son's little frame. He looked up at me and watched me sing. He smiled, and I smiled back at him.



Samuel (right) and a friend jamming on ukulele.



Maya (right) and a friend engaged in song.



Brooke in the mountains.

By the end of the class, I was deeply content. I felt connected to the teacher and the other parents even though we had barely spoken to each other. That 45 minutes felt magical. I was completely present there with my little guy on my lap, just singing. When the teacher asked at the end of the semester if anyone was interested in taking over her business, I didn't hesitate. I knew it was for me. And after 12 years of teaching Music Together, I still get that surge of happiness while singing with others.

Since I started teaching music, I have been hyper aware of the unique connections that music creates. It happens in churches, at overnight camps, in protest marches, and at sporting events. It is that feeling of togetherness that is heightened by shared musical moments. But what is it about music that can so deeply connect us in a way like no other? How can we feel not only uplifted ourselves but bonded to others, even strangers? These are the questions that will forever intrigue me. And like most adventures, the search for the answers is the most fulfilling part of the journey.

Check out these [powerful chants](#) at soccer matches around the world. The connection between these fans is undeniable.

When we play or listen to music, there are chemical changes in our brains, produced by hormones such as oxytocin, which promotes trust, empathy and bonding. We have all felt this to some level. Sharing a musical moment with others enhances our relationships. Maybe you, like me, have experienced this connection at live concerts, when the audience is suddenly engaged as one in a song. It feels otherworldly, like something magical, untouchable, and unnamable is happening. It feels like for that one moment we are all connected together in a way that could not happen without music. It is unique, and I will forever be searching for it. [Check out the audience at Queen's Live Aid show](#) (go to minute 1:35 for the magic moment). What could be accomplished if that human connection was somehow harnessed?

Music can also help us connect inwardly, offering a salve of healing or relief. Often we turn to music when we are feeling down, and it somehow lifts us up. When we listen to sad music our brains release oxytocin and prolactin, which not only makes us feel better, but helps us empathize with other's pain. It also opens a safe space for us to explore our own sadness. As a teenager, I suffered the death of my father. It was a crippling loss, but I was able to find some relief by listening to music. I played R.E.M.'s "Everybody Hurts" on repeat. I learned the song on the guitar, and I sang it over and over again. It allowed me to touch the deepest part of my grief.

In another example of loss, therapists have seen how music can help restore a person's cognitive functioning. Doctors have found that by exposing dementia patients to music from their past, patients were able to express a coherency that was thought to be gone forever. Listening to music activates a specific part of the brain that creates heightened awareness and fluency. [This clip](#) shows a man who is transformed from a near catatonic state to an excited and present person who remembers the music of his youth.

As a parent, I consider the deeper connections, empathy, and trust that music offers to be crucial. A recent study from the University of Arizona found that parents who share musical moments with their teenagers are more likely to have closer and more meaningful relationships when their children enter adulthood.

As Samuel enters his teenage years, I think back fondly on the 45-minute classes where we sang songs and danced together. I think of the countless hours I sang lullabies, of the silly dances my daughter Maya and I made up in the kitchen, of the outside festivals we picnicked at, the road trips when we sang our hearts out, the campfires where we sang songs and more recently, the mini concerts and performances we experience in our living room as Samuel steps more confidently into his own musicianship and as his older sister Maya feels the music guide her body with each dance move. I know that these shared musical moments will keep us connected in a deep and meaningful way into the future.

There are so many ways to build connections through music. Sometimes we may feel vulnerable or inhibited about putting our voice or musicianship out there, but the benefits far outweigh the brief feeling of nerves. Whatever music-making you do, turn it up, and enjoy it together!

Here is a [final song](#) to leave you with. It is from the non-profit organization, Playing for Change, that connects people around the world through songs recorded and played together.

Resources:

Bronwyn Tarr, Jacques Launay, Robin I. M. Dunbar. [Music and social bonding: "self-other" merging and neurohormonal mechanisms](#). *Frontiers in Psychology* 5: 1096. Published online 2014 Sep 30.

<https://theconversation.com/adele-30-the-psychology-of-why-sad-songs-make-us-feel-good-170322>

<https://parentology.com/study-proves-music-strengthens-parent-child-relationships/>

Brooke Chabot, M.A., is a music educator and performer. She runs [Truckee Tahoe Music Together](#) and teaches piano at [Little Bird Music](#). Brooke is also in the rock and blues band [BC & the Remedy](#). You can read her full bio [here](#).





"I love piano because you get to learn new songs. They're always different, and no music is the same." - Hadley Gladman, age 9



"Piano is fun because you get to listen to music while you play. I love skiing because you get to go really fast. They relate together because you have to practice a lot, and it makes you really good at both things." - Zoe MacFadyen, age 7



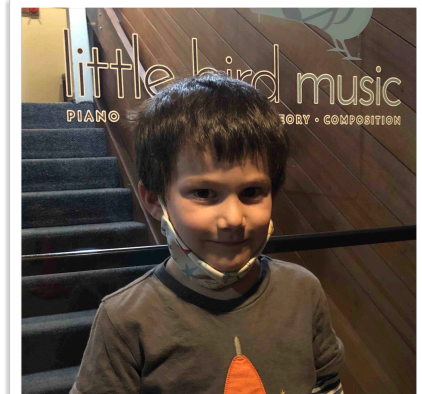
"I like playing piano because it sounds pretty, and I get to do recitals." - Nora Gladman, age 6



"I like the rhythms in my songs." - Anna Shefftz, age 8



"It's cool to play piano songs I like, and I get to hear them over and over again." - Caleb Shefftz, age 10



"My favorite part of piano is making all of the sounds." - Aaron Shefftz, age 6

Upcoming Events

March 4, 5, 6: The Percy Jackson Musical, Truckee Community Theater at the Community Arts Center

April 1-3: Winter Wonder Grass, a top-notch bluegrass festival at Palisades Tahoe

Spring 2022: Reno Phil Classix Series - Mendelssohn, Prokofiev, and Beethoven at the Pioneer Center

April 28-30: Reno Jazz Festival featuring events and concerts that aim to inspire and educate, UNR

June 5: Disney in Concert with the Reno Philharmonic, Pioneer Center, Reno

2022 Concert Season: Classical Tahoe, Orchestra and Chamber Concerts at SNU, Incline Village