

A close-up, profile view of a woman with dark hair and a light purple shirt, speaking animatedly to a young child. The woman's mouth is open as if in the middle of a sentence. The child, with blonde hair, is partially visible on the right, wearing a white shirt with orange heart-shaped cutouts. The child's hands are raised towards the woman. The background is slightly blurred, showing a brown leather chair and a patterned cushion. A semi-transparent dark rectangle is overlaid on the lower half of the image, containing the text "Imagine This!".

Imagine This!

### **Five Ways Musical Training Helps with Children's Brain Development**

Music engagement is an excellent way to encourage brain development in children. Music has the ability to activate many different areas of the brain at once, such as areas associated with language, memory, hearing, and areas used to process sensory information.

Additionally, music is also adored by children all over the globe, making it an excellent way to do educational activities in a fun and motivating way. Not only is music engagement useful for encouraging the development of musical abilities, the effects of music engagement can be seen in other academic areas as well. Registering children for a music class, and/or incorporating music education into children's school programs (including early-child-hood programs), may have long-lasting positive effects that will help students excel in school and consequently, in their futures.

One study conducted by C. Gaser, Ph.D and, G. Schlaug M.D. Ph.D. found differences in gray matter between musicians and non-musicians. Professional musicians were compared to amateur musicians and non-musicians and were found to have more gray matter in the auditory, motor, and visual-spatial areas of the brain. The strengthening of certain areas of the brain through repeated use will lead to more gray matter.

It's important to remember that engagement with music is the key to encouraging brain development. Simply signing a child up for a music-listening course won't have the same effects on the brain as if the child is an active participant in the music-making process. For example, a study from Northwestern University found better neural processing abilities in students who played an instrument compared to students who only listened to music.

Here are some ways music training can encourage positive brain development in children:

## More Efficient Brain Processing

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## Musical Abilities

Perhaps unsurprisingly, musical training results in increases of musical abilities in children. While some parents believe that excelling at music is only possible when a child has an innate “talent” or genetic ability, children of all types can benefit from learning music. When children are trained musically, they develop increased awareness of pitch. One study found that after two years, children with musical training were able to better distinguish between changes in pitch than children in a non-music training group. Children who receive musical training will, therefore, develop the cognitive ability to pay closer attention to the components of different melodies. This increased awareness will allow children to better appreciate this art form on an intellectual level.

## Reading Abilities

Children’s reading abilities may also improve as a result of musical training. Reading is one of the most important skills a child needs to develop in order to excel in all areas of life. Even mathematic subjects require good reading comprehension skills in order to complete problem-solving questions. A study conducted at Northwestern University found that children who attended music classes regularly, and most importantly, actively participated in those classes, had better speech processing abilities in addition to higher reading scores than children not involved in music class.



### **Scientific Understanding**

Music can also be used to teach basic scientific principles. The physics of sound are very relevant to children who play instruments. Music lessons can be a great way to discuss the science of sound waves, sympathetic, and harmonic vibrations. Playing an instrument is also a very physical activity. Drums, for example, involve a lot of large-scale movements and incorporate both the arms and legs. Children who play percussive instruments, such as drums, will have the opportunity to learn about the muscles in the arms and legs and how they become stronger the more they are used. Other instruments, such as guitar, involve smaller-scale movements. These instruments are an excellent way to teach children about the anatomy of the hand.

### **Empathic Development**

It's no surprise that music is one of the highest forms of human expression. Music has served as a tool for human expression and connection throughout history, and it still serves this important purpose in today's society. Listening to sad music is believed to be connected to the hormone prolactin, which is correlated with curbing grief. This is why music, despite it's sometimes sad content, makes us feel better. In a time when division can often be taught to children through various media outlets, it's important to encourage connectivity and awareness of the problems experienced by other people. Young generations can undoubtedly increase positive brain development by continuously practicing empathy. The more a child practices a certain skill, including empathy, the more easily they will be able to utilize that skill in their daily lives.

## In Summary

Music is a universal art form that can encourage positive brain development in children. Music engagement activates many different areas of the brain and therefore has countless positive effects on child development. Children can increase gray matter in the auditory, motor, and visual-spatial areas of their brain by pursuing music.

Additionally, children can also improve their speech processing and reading comprehension abilities through musical engagement, which will improve performance in all areas of life.



## MUSIC AND ART FOR KIDS!

Imagine This! is a place for children and the adults who love them to find easy and fun ways to get the benefits outlined in this article while creating and playing through music and art!

In our one-of-a-kind Music Classes, children from 0-5 years old can learn, sing, and play! We have Newborn (0-8 months) classes or you can enroll them in Hoky Poky Kids, which ranges from Sitting - 5 years.

This family atmosphere is perfect! Younger children develop and learn from older children, and older children just love to show off for the younger ones. And having a mother or father (or other loved one!) attend with them just adds to the fun! In all of these classes, we sing popular children's songs but also learn new ones. We play simple instruments, dance, and just have a grand time together!

We offer discounts for those enrolled in multiple classes or have multiple children attending from the same family. Check out our classes and sign up today!

