Guitars and Ukes in the Classroom
Better Learning through Music

# The AMASE Project

## Adapting Music for Achievement in Special Education

# WHAT DO WE DO?

- GITC provides free, on-going musical training in singing, playing simple percussion instruments, strumming instruments, writing songs for learning.

- We supply teachers and specialists with their leadership musical instruments, coaching & educational materials free of charge.
  Teachers volunteer their time and effort.
  Most stay engaged for many years.

- Once trained, the teachers keep music alive for students. GITC has trained 13,000+ educators since 2000.

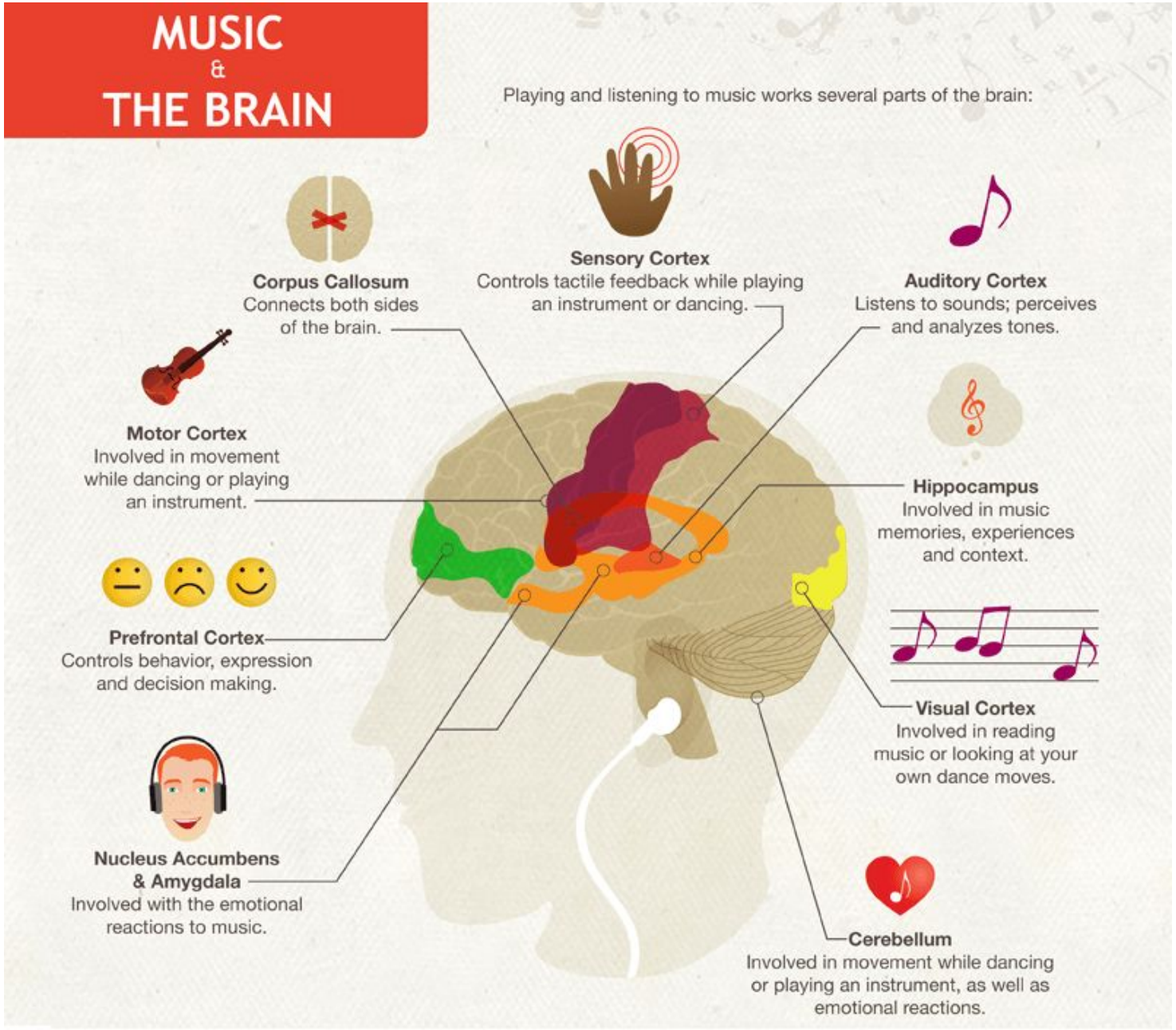
- 80% of GITC teachers serve in Title 1 (at or below the poverty line) schools.

- 1 in 4 of the teachers who voluntarily train with GITC teach special education.
  2 in 4 have special education students mainstreamed into their classrooms.

**Why is music a powerful tool for elementary education?**

Music:

- Captures students' attention
- Brings focus to learning
- Alleviates stress & anxiety
- Unites students in a common purpose and builds a sense of belonging at school
- Activates the whole brain
- Sets up an auditory framework for perceiving and organizing sound and acquiring language
- Provides an organized and uplifting scaffold for movement (calming)
- Builds hand-eye coordination
- Creates opportunity for constructive self expression
- Builds speaking and listening skills
- Provides opportunities for deep collaboration and cooperation
- Gives *every* learner a different modality through which to learn.



## But are students experiencing music education in primary grades in San Diego County?

Hardly at all. Tk-3 music has been decreased to 9 week rotations or cut from most of our school districts.

And students with special needs are excluded entirely.

***Only special education classes with a visiting music therapist experience making music at all these days. This is why GITC seeks support to train the teachers.***

**Most elementary music education now focuses on grades 4 and up.**

**But students' most crucial time to learn language and to develop grade level proficiency is before the end of 3rd grade.**

https://www.aecf.org/resources/double-jeopardy/

# What Do Rhythm & Melody Do for Sped Learning?

**Students with CP & Autism are intellectually capable and bright but they are trapped in bodies and brains that disrupt their abilities to connect with others, to feel good and also to show what they know. These conditions cause suffering, but making music brings relief!**

**For students with Cerebral Palsy, playing a rhythm provides a highly motivating goal for overcoming spastic muscles and rigidity. Playing it feels like a profound achievement. It requires that students with CP find a way to control their movements and regulate them- and it's fun! Once they can strum the beat, they often begin to vocalize for the first time!**

**For students on the Autism spectrum, playing a rhythm sets up a regulated, even, and predictable sound pattern that is both calming and musically rewarding. This can reduce the stress of an overwhelming situation and give them space to make positive choices.**

**For all students, music can help them learn to speak and read!**

http://www.brainvolts.northwestern.edu/slideshows/rhythm/index.php

GITC serves students in both regular (mainstreamed) classrooms and in special education a.k.a. “sped” classrooms, too. When the teachers learn, the students receive music every day.

Some SD districts are reducing Sped services and increasing class sizes. This adds stressors to the learning environment. Music helps everyone cope.

Making music together unifies the class and sets a positive tone for the day. And songs for transitions help students know what is coming next and remember what to do.

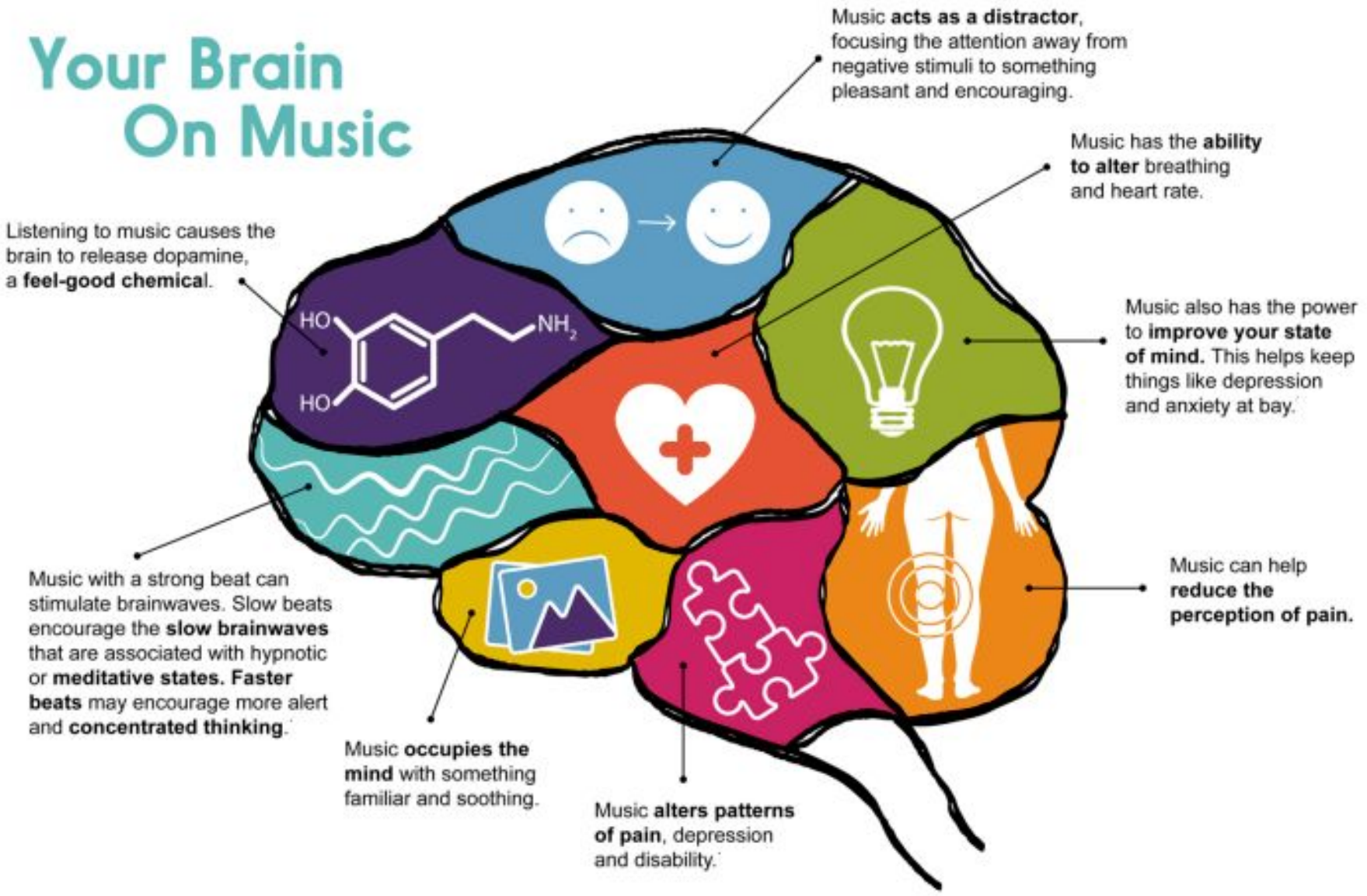
GITC decided to take action because we saw how music was profoundly changing the lives of students in GITC classrooms. Students whose medical, cognitive and psychosocial conditions had caused isolation, depression and a failure to thrive were suddenly making great strides.

We hope the Nordson Foundation will help GITC develop, evaluate, teach locally and share it globally.

This is Teif. She arrived in the U.S. from Syria after years in a refugee camp.

Her family registered her for school for the first time at 8 years old. She came to our lab school in rough shape.

**Teif has profound cerebral palsy. She had never spoken, sung, or been able to control her movements until she began to make music. The sounds woke her up and made her smile! We trained her teacher, Val Simons to adapt her uke with a traction pad and special thumb pick so she can play. This was Teif's first breakthrough moment. She is now ambulating, strumming and singing at school.**




**Since taking a deep dive into adapting music making for sped students with a wide variety of learning and life challenges, GITC is hearing from teachers who very much want to bring this to their students. The potential to heal and help is huge. With autism on the rise, we need more music in sped now to boost verbal ability.**

# Playing the Steady Beat Builds Literacy Skills

**Clapping in time parallels literacy and calls upon overlapping neural mechanisms in early readers**

"The auditory system is extremely precise in processing the temporal information of perceptual events and using these cues to coordinate action. Synchronizing movement to a steady beat relies on this bidirectional connection between sensory and motor systems, and activates many of the auditory and cognitive processes used when reading." http://www.brainvolts.northwestern.edu/documents/Bonacina_nyas_NSM_b16_13704_1748026_final.pdf

Music holds a key to building language fluency, especially important for students learning English. The more students sing, the more they practice language!

**(decoding) spa- ghe- tti versus spa-ghe-tti (syllabic emphasis)**

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Playing music together can help students with autism create their own beautiful sounds. Singing about good behavioral strategies can help them to develop their social thinking skills. And for students with no or low verbal skills, singing can lead to developing speech! By learning to express and also to modulate emotional responses to triggers and over-stimulation, autistic students find they can enjoy learning and fully participate in music class.

This is George Morrisette. He is a student in our lab at Wegeforth Elementary in Serra Mesa. His GITC intervention teacher is Desiree Cera. Desiree also trains teachers for GITC after school and will be a coach and teaching artist in the AMASE Project.

# Research Supporting Therapeutic Benefits of Musical Learning for Students with Autism

## Deficient brainstem encoding of pitch in children with Autism Spectrum Disorders

**Results:** We found that some children on the autism spectrum show deficient pitch tracking (evidenced by increased Frequency and Slope Errors and reduced phase locking) compared with TD children.

**Conclusions:** This is the first demonstration of subcortical involvement in prosody encoding deficits in this population of children.

**Significance:** Our findings may have implications for diagnostic and remediation strategies in a subset of children with ASD and open up an avenue for future investigations

http://www.brainvolts.northwestern.edu/documents/RussoetalClinNeurophysiol2008.pdf

## Melodic Intonation Therapy

For over 100 years, clinicians have noted that patients with nonfluent aphasia are capable of singing words that they cannot speak. Thus, the use of melody and rhythm has long been recommended for improving aphasic patients' fluency, but it was not until 1973 that a music-based treatment (*Melodic Intonation Therapy*, (MIT)) was developed.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780359/

## AMASE Will Provide This Comprehensive Approach :

- Two sequential SPED Adaptive Music training conferences for 45 already-engaged San Diego teachers of mainstream, mild-mod or mod-severe students. These teachers attended their first conference last July at NAMM thanks to you!
- 3 Pilot Project Schools
- 16 weekly regional GITC Faculty Classes (opt.)
- 9 Monthly GITC Project PLC Meetings
- 9 Multi-week Gradual-Release Classroom
  - Co-Teaching
  - Residencies
- SDCOE Assessment

# Volunteer Opportunities Abound!

Please join us at an AMASE SPED event or develop your own special role with GITC:

- Artistic Angel
- A/V Angel
- Classroom Music Angel
- Event/Concert Angel
- Instrument Angel
- IT Angel
- Photo & Video Angel