# Benefits PLAYING MUSIC

BENEFITS OF PLAYING A MUSICAL INSTRUMENT

A Musician's Brain is

## Like an Orchestra Studies have shown that when



we're playing an instrument, different parts of the brain engage in simultaneous processing of a variety of information at an amazing speed Visual, auditory and motor cortices are especially active

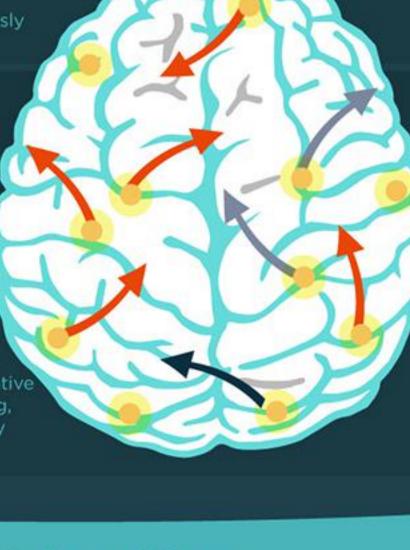
Making music requires and awakens mathematical and linguistic precision

Increased volume and activity in the bridge (corpus callosum) between the hemispheres

means that the brain can process information faster through diverse pathways because of enhanced connectivity People who play instruments are extremely effective & innovative



in problem solving, both academically and socially **Musicians Have** 



**Enhanced Brains** 

Plasticity of the brain and how musical training helps brain plasticity has been proven by decades of research



children's brains structurally change after 15 months of musical training

Memory

High school music

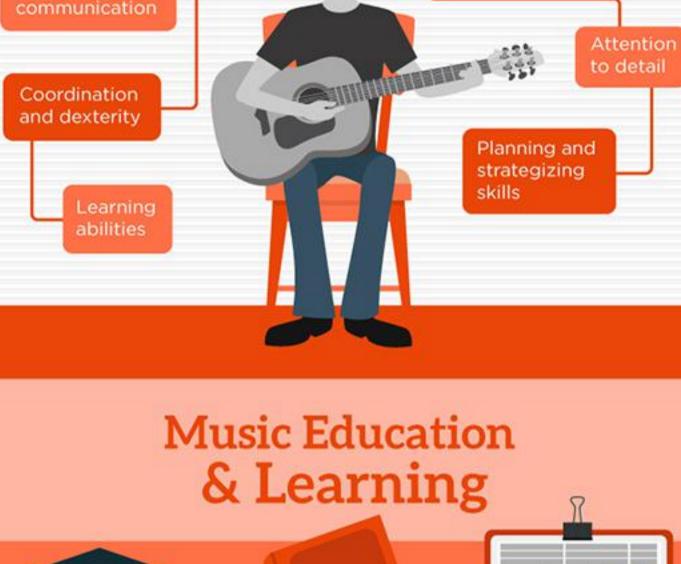
students earn a higher

also showed that



## Understanding of cognitive and emotional aspects of information Understanding

of non-verbal



**GPA** than non-musicians reading scores TO 8-12, students of in the same school lower socioeconomic status showed improved math, reading & history scores[4] Music in schools

Music majors

scored the highest



is less prevalent (6) Teachers said that students were less aggressive when they had music instruction in schools[6]

Playing music had a

positive influence

dyslexia and other

reading and speech

on children with

impairments<sup>[9]</sup>

yields a better

children. Children have fewer fights and hurtful sarcasm

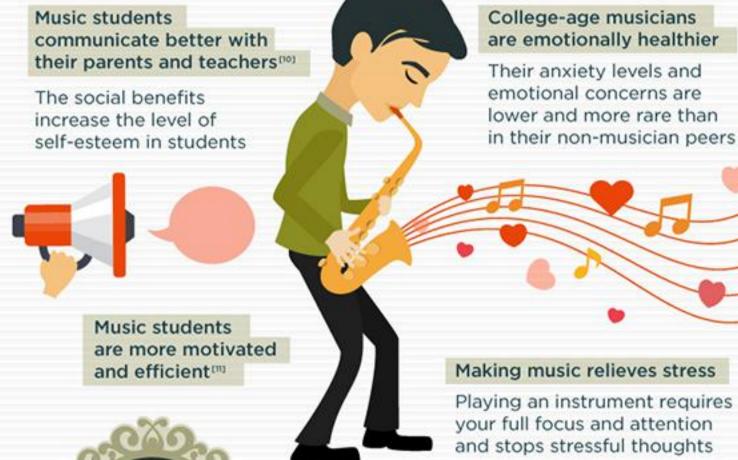
After taking music

lessons from grades

Music Education & Personal Development

Music education

improves self-image. self-awareness and positive attitude[12]



Students with music education report a Accomplishment, greater sense of appreciation, identity fun, active participation and maturing relationships are just a few reported Several studies have shown that music benefits of school education creates connection with like-minded bands in the USA(15) people, sense of contribution and belonging Creative and social aspects of musical training are important- music skills are not just connected to "formal" education You learn



Influence of Music Education

on Old Age

LEARNING TO PLAY MUSIC KEEPS US SHARPER IN OLD AGE

Playing an instrument before 9 years of age and continuing for the next 10 years or more can affect verbal working memory in

adapting new information

IT'S NEVER TOO LATE TO START MAKING MUSIC

Studies have found that taking piano lessons, even for 6 months, improved memory, verbal fluency and other cognitive functions in adults between the ages of 60-85. This group also showed improved planning

Musicians learn early to

Musicians learn how to be responsible and accountable







Research shows that

of stress, anxiety and 60 depression Music also shows potential in preventing

musicnotes

National Educational Longitudinal Study of 1988.

abilities and they processed information faster.

ån,

G. Schlaug, 2003

10. Broh, 2002

12. Whitwell, 1977 13. Brown, 1980 14. Henna-Pladdy, 2012

11. Broh. 2002; Lillemyr, 1983

or slowing down development of Alzheimer's disease and dementia

 The Case for Music in the Schools, Phi Delta Kappa, 1994 4. Gardiner, Fox, Jeffrey and Knowles; Learning improved by arts training, 1996 Eric Jensen, Arts with the Brain in Mind, 2001 6. Konrad, R.R., Empathy, Arts and Social Studies, 2000 7. Spychiger, et al., 1993, Zulauf, 1993

8. Rauscher et al., Music training causes long term enhancement of preschool children's spatial temporal reasoning, 1997. 9. Playing music can be good for your brain," SF Chronicle, 2005