

PIANO LESSONS ARE GOOD FOR YOU AND YOUR BRAIN

The most intricately and perfectly coordinated of all voluntary movements in the animal kingdom are those of the human hand and fingers, and perhaps in no other human activity do memory, complex integration, and muscular coordination surpass the achievements of the skilled pianist. — Homer W. Smith, *From Fish to Philosopher*

STUDIES SHOW PIANO LESSONS HELP CHILDREN EXCEL

COGNITIVE BENEFITS

- Piano instruction is far superior to computer instruction in dramatically enhancing children's abstract reasoning skills necessary for learning math and science. — *Neurological Research, February 1997*
- Students who received piano lessons scored 34% higher on tests indicating that music uniquely enhances higher brain functions required for mathematics, chess, science, and engineering. — *University of California, Irvine Study*
- Studying the piano before the age of seven can help boost the normal maturation of connections between motor and sensory regions of the brain. — *Concordia University Study*
- After nine months of weekly piano or voice lessons, young students' IQ rose nearly three points higher than those of their untrained peers. — *University of Toronto Study*
- Preschool children given six months of piano lessons improved dramatically on spatial-temporal reasoning. Piano instruction dramatically enhances a child's abstract thinking skills. — *University of California, Irvine Study*

EMOTIONAL AND SOCIAL BENEFITS

- Children who have taken three years of piano instruction have significantly higher self-esteem than children who are not enrolled in piano lessons. — *McGill University Study*
- College-age musicians are emotionally healthier than their non-musician counterparts. — *Kouzes Chronicle, January 17, 1998*
- Playing the piano reduces stress and anxiety more than other creative art activities. — *International Journal of Music Education, 2011*
- Learning to play the piano requires patience and perseverance. Good pianists are masters of discipline.
- Playing the piano isn't something you do just on your own. Playing with others is a social experience that teaches listening, communication, and teamwork.

THIS IS YOUR BRAIN ON PIANO

PLAYING THE PIANO IS FUN but check out all the things your brain is doing at once!

EYES
Sight-reading on the piano involves reading two lines of music, each in a different color.
FRONTAL CORTEX | OCCIPITAL LOBE

EARS
Pianists listen to notes being played and adjust their playing accordingly.
AUDITORY CORTEX | TEMPORAL LOBE

2 HANDS
Both hands often play intricate rhythms independently from each other.
PRIMARY MOTOR CORTEX | PREFRONTAL CORTEX | CEREBELLUM

KEEPING TIME
Pianists accurately "keep time" by synthesizing and synchronizing all sensory input and motor activity. In addition, they are able to subdivide the beat in a myriad ways.
PREFRONTAL CORTEX | CEREBELLUM

10 FINGERS
Very few, if any, instruments require the use of all ten fingers.
PRIMARY MOTOR CORTEX | PREFRONTAL CORTEX | CEREBELLUM

SPATIAL
Pianists know where all the notes are without having to look at the piano keyboard.
PARIETAL LOBE | CEREBELLUM | RIGHT HEMISPHERE

ARTISTIC INTERPRETATION
Pianists transmit emotion by capturing the mood, style, and tempo of a song, using performance techniques such as dynamics, articulation, rhythm, and expressive timing.
PREFRONTAL CORTEX

PROPRIOCEPTION
Pianists are aware of the relative position of neighbouring parts of their body and the strength of effort being employed in movement.
CEREBELLUM

2 FEET
The left foot is used to operate the left una corda pedal and the right foot is used to operate the sustain pedal.
PRIMARY MOTOR CORTEX | PREFRONTAL CORTEX | CEREBELLUM

TOUCH
Pianists use touch to determine how much force is needed to press the piano keys and foot pedals.
PARIETAL LOBE

Playing the piano activates the brain in ways no other game, gadget, instrument or tool can. It's the total brain workout!

PIANO LESSONS CAN MAKE YOU SMARTER

- PLAYING THE PIANO CAN** help enhance and accelerate your child's development. It can:
- ✓ Raise IQ
 - ✓ Increase focus and attention
 - ✓ Promote a sense of balance and relaxation
 - ✓ Boost pattern recognition
 - ✓ Enhance spatial organization
 - ✓ Sharpen cognitive abilities
 - ✓ Improve verbal intelligence and executive function
 - ✓ Increase self-esteem
 - ✓ Refine motor control skills

MUSIC LESSONS MEAN SUCCESS!

- ADULTS WHO TOOK MUSIC** lessons when they were kids get into the most competitive programs, land top jobs and are healthier emotionally.
- ✓ 75% of Silicon Valley CEO's took music lessons as a child.
 - ✓ Music majors make up the highest percentage of accepted medical students (56%).
 - ✓ Adults who play the piano are less likely to experience anxiety, loneliness or depression.

FAMOUS PEOPLE WHO ALSO PLAYED THE PIANO

ACTORS EDWYD EASTWOOD, KELLEY GRAMER, JUSTIN HOFFMAN, ANTHONY HOPKINS, SANDRA BULLOCK, RICHARD GERE, COURTNEY COX AND MORE

SCIENTISTS THOMAS EDISON, ALBERT EINSTEIN

PRESIDENTS ABRAHAM LINCOLN, RICHARD NIXON

OTHERS FRANK LUTTERBACH, MARK TWAIN, ROBERT SCHUMANN

SOURCES

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