

## Here's What the Research Shows...

Scientific studies indicate that **music participation helps train the brain for higher forms of thinking**. Children perform better in other subjects by improving reading, spelling, and math skills. Experts note that a year's musical training can increase a child's IQ by as much as ten points! SAT scores show that students with experience in music scored fifteen to thirty points above the mean.

**High school music students score higher on SATs** in both verbal and math than their peers. In 2001, SAT takers with coursework/experience in music performance scored 57 points higher on the verbal portion of the test and 41 points higher on the math portion than students with no coursework/experience in the arts. *Source: Profile of SAT and Achievement Test Takers, The College Board, compiled by Music Educators National Conference, 2001.*

Nearly 100% of past winners in the prestigious **Siemens Westinghouse Competition** in Math, Science and Technology play one or more musical instruments. *Source: The Midland Chemist (American Chemical Society) Vol. 42, No. 1, Feb 2005*

A ten-year study indicates that **students who study music achieve higher test scores**, regardless of socioeconomic background. *Source: Dr. James Catterall, UCLA*

**First grade students who had daily music instruction scored higher on creativity tests** than a control group without music instruction. *Source: K.L. Wolff, The Effects of General Music Education on the Academic Achievement, Perceptual-Motor Development, Creative Thinking, and School Attendance of First-Grade Children, 1992.*

Students who were exposed to the music-based lessons scored a full **100 percent higher** on fractions tests than those who learned in the conventional manner. Second grade and third grade students were taught fractions in an untraditional manner-by teaching them basic music rhythm notation. The group was taught about the relationships between eighth, quarter, half and whole notes. Their peers received traditional fraction instruction. *Source: Neurological Research, March 15, 1999.*

**Music study can help kids understand advanced math concepts.** A grasp of proportional math and fractions is a prerequisite to math at higher levels, and children who do not master these areas cannot understand more advanced math critical to high-tech fields. Music involves ratios, fractions, proportions and thinking in space and time. Second grade students were given four months of piano keyboard training, as well as time using newly designed math software. The group scored over 27 percent higher on proportional math and fractions tests than children who used only the math software. *Source: Neurological Research, March 1999*

**Music majors are the most likely group of college grads to be admitted to medical school.** Physician and biologist Lewis Thomas studied the undergraduate majors of medical school applicants. He found that 66 percent of music majors who applied to med school were admitted, the highest percentage of any group. For comparison, 44 percent of biochemistry majors were admitted. Also, a study of 7,500 university students revealed that music majors scored the highest reading scores among all majors including English, biology, chemistry and math. *Source: "The Comparative Academic Abilities of Students in Education and in Other Areas of a Multi-focus University", Peter H. Wood, ERIC Document No. ED327480*

**College admissions officers continue to cite participation in music as an important factor in making admissions decisions.** They claim that music participation demonstrates time management, creativity, expression, and open-mindedness. *Source: Carl Hartman, "Arts May Improve Students' Grades," The Associated Press, October 1999*