

Music and Student Achievement

MUSIC STUDENTS SCORE HIGHER ON SAT's

In both verbal and math scores, high school student/musicians outpace peers.

The College Entrance Examination Board reports, "Students of the arts continue to outperform their non-arts peers on the SAT(R). In 1998, SAT takers with coursework/experience in music performance scored 52 points higher on the verbal portion of the test and 37 points higher on the math portion than students with no coursework/experience in the arts."

Longer arts study proved to parlay into even higher test scores. The 1996 report observed, "Those who studied the arts four or more years scored 59 points higher and 41 points higher on the verbal and math portions respectively than students with no coursework or experience in the arts."

Reference: Profile of SAT and Achievement Test Takers, The College Board, compiled by Music Educators National Conference, 1998, 1996.

TEN-YEAR STUDY SHOWS MUSIC IMPROVES TEST SCORES

Regardless of socioeconomic background, music-making students get higher marks in standardized tests.

UCLA professor, Dr. James Catterall, led an analysis of a U.S. Department of Education database. Called NELLs88, the database was used to track more than 25,000 students over a period of ten years.

The study showed that students involved in music generally tested higher than those who had no music involvement. The test scores studied were not only standardized tests, such as the SAT, but also in reading proficiency exams.

The study also noted that the musicians scored higher, no matter what socioeconomic group was being studied.

Reference: Dr. James Catterall, UCLA, 1997.

MUSIC LESSONS BOOST STUDENT MATH ACHIEVEMENT

Studies show that music lessons will help improve a students math skills more than using a computer math software program.

Second-grade students were divided into two groups, group one was given four months of piano keyboard training, group two was given four months of computer tutoring using newly designed math software. The music group scored over 27% higher on proportional math and fractions tests than children who used only the math software. Music involves ratios, fractions, proportions and thinking in space and time. The software—called Spatial-Temporal Animation Reasoning (STAR)—allows children to solve geometric and math puzzles that boost their ability to manipulate shapes in their minds.

The findings are significant because a grasp of proportional math and fractions is a prerequisite to math at higher levels, and children who do not master these areas of math cannot understand more advanced math critical to high-tech fields.

Reference: Neurological Research March, 1999

MUSIC TRAINING HELPS UNDERACHIEVERS

Researchers find arts training not only raises scholastic performance, but also improves student behavior and attitude.

In Rhode Island, researchers studied eight public school first grade classes. Half of the classes became "test arts" groups, receiving ongoing music and visual arts training. In kindergarten, this group had lagged behind in scholastic performance. After seven months, the students were given a standardized test. The "test arts" group had caught up to their fellow students in reading and surpassed their classmates in math by 22%. In the second year of the project, the arts students widened this margin even further.

Students were also evaluated on attitude and behavior. Classroom teachers noted improvement in these areas also.

Reference: Nature May 23, 1996

MUSIC LESSONS HELP STUDENTS MORE THAN COMPUTER TRAINING

Research shows piano students are better equipped to comprehend mathematical and scientific concepts.

Preschoolers were divided into three groups: One group received private piano keyboard lessons and singing lessons. A second group received private computer lessons. The third group received no training. Those children who received piano/keyboard training performed 34% higher on tests measuring spatial-temporal ability than the others - even those who received computer training.

"Spatial-temporal" is basically proportional reasoning - ratios, fractions, proportions and thinking in space and time. This concept has long been considered a major obstacle in the teaching of elementary math and science.

Reference: Neurological Research February 28, 1997

U.T. STUDY SAYS SUBSTANCE ABUSE LOWEST IN MUSIC STUDENTS

College-age musicians are emotionally healthier than non-musician counterparts.

According to a study conducted at the University of Texas, college-aged music students have fewer problems with alcohol, are emotionally healthier, and concentrate better than their non-musical counterparts.

"This study is interesting on many levels," commented Dr. Kris Chesky, one of the study's researchers. "First of all, it flies in the face of all the stereotypes out there about musicians. It also seems to support the assertion that studying music helps people learn to concentrate."

The study looked at 362 students who were in their first semester of college. They were given three tests, measuring performance anxiety, emotional concerns and alcohol related problems. In addition to having fewer battles with the bottle, researchers also noted that the musicians seemed to have surer footing when facing tests.

Reference: Houston Chronicle, January 11, 1998