

The study of music helps students achieve Success in Society

Perhaps the basic reason every child must have an education in music is that music is a part of the fabric of our society. The intrinsic value of music for each individual is widely recognized in the many cultures that make up American life —indeed, every human culture uses music to carry forward its ideas and ideals. The importance of music in our economy is massive. And the value of music in shaping individual abilities and character are evident:

- Data show that high earnings are not just associated with people who have high technical skills. In fact, mastery of the arts and humanities is just as closely correlated with high earnings, and, according to our analysis, that will continue to be true. History, music, drawing, and painting, and economics will give our students an edge just as surely as math and science will.

—*Tough Choices or Tough Times: The report of the new Commission on the Skills of the American Workforce, 2007*

- The arts provide one alternative for states looking to build the workforce of tomorrow—a choice growing in popularity and esteem. The arts can provide effective learning opportunities to the general student population, yielding increased academic performance, reduced absenteeism, and better skill-building. An even more compelling advantage is the striking success of arts-based educational programs among disadvantaged populations, especially at-risk and incarcerated youth. For at-risk youth, that segment of society most likely to suffer from limited lifetime productivity, the arts contribute to lower recidivism rates; increased self-esteem; the acquisition of job skills; and the development of much needed creative thinking, problem solving and communications skills. Involvement in the arts is one avenue by which at-risk youth can acquire the various competencies necessary to become economically self-sufficient over the long term, rather than becoming a financial strain on their states and communities. *The Impact of Arts Education on Workforce Preparation, The National Governors Association, May 2002*

- Secondary students who participated in band or orchestra reported the lowest lifetime and current use of all substances (alcohol, tobacco, illicit drugs).
— *Texas Commission on Drug and Alcohol Abuse Report. Reported in Houston Chronicle, January 1998*

- The U.S. Department of Education lists the arts as subjects that college-bound middle and junior high school students should take, stating "Many colleges view participation in the arts and music as a valuable experience that broadens students' understanding and appreciation of the world around them. It is also well known and widely recognized that the arts contribute significantly to children's intellectual development."

In addition, one or two years of Visual and Performing Arts is recommended for college-bound high school students. — *Getting Ready for College Early: A Handbook for Parents of Students in the Middle and Junior High School Years, U.S. Department of Education, 1997*

- "When I hear people asking how do we fix the education system, I tell them we need to do the opposite of what is happening, cutting budgets by cutting music programs.... Nothing could be stupider than removing the ability for the left and right brains to function. Ask a CEO what they are looking for in an employee and they say they need people who understand teamwork, people who are disciplined, people who understand the big picture. You know what they need? They need musicians."— *Former Arkansas Governor Mike Huckabee, 2007*



The study of music helps students achieve Success in School and Learning

Success in society, of course, is predicated on success in school. Any music teacher or parent of a music student can call to mind anecdotes about effectiveness of music study in helping children become better students. Skills learned through the discipline of music, these stories commonly point out, transfer to study skills, communication skills, and cognitive skills useful in every part of the curriculum. Other stories emphasize the way the discipline of music study—particularly through participation in ensembles—helps students learn to work effectively in the school environment.

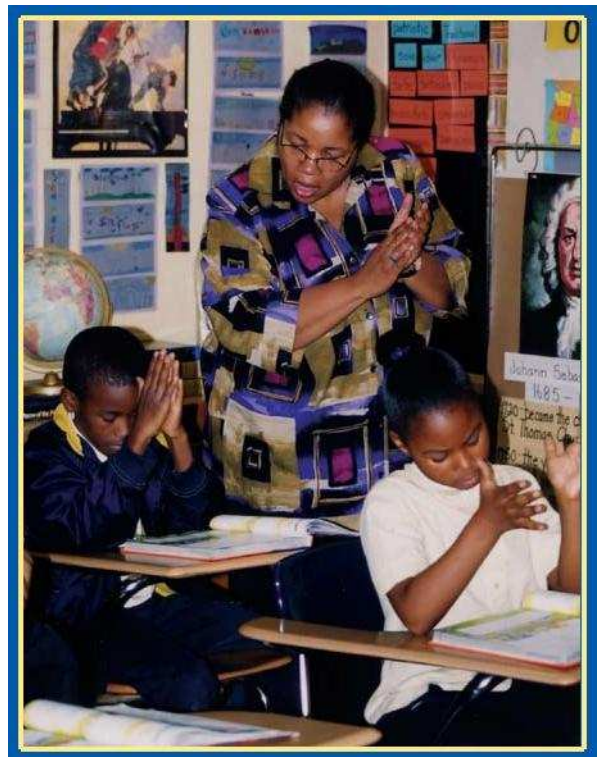
□ Schools with music programs have significantly higher graduation rates than do those without programs (90.2% as compared to 72.9%). In addition, those that rate their programs as “excellent” or “very good” have an even higher graduation rate (90.9%). Schools that have music programs have significantly higher attendance rates than do those without programs (93.3% as compared to 84.9%). *Harris Interactive poll of high school principals, 2006*

□ Students in high-quality school music programs score higher on standardized tests compared to students in schools with deficient music education programs, regardless of the socioeconomic level of the school or school district. Students in top-quality music programs scored 22% better in English and 20% better in math than students in deficient music programs. Students at schools with excellent music programs had higher English and math test scores across the country than students in schools with low-quality music programs. Students in all regions with lower-quality instrumental programs scored higher in English and math than students who had no music at all.

Christopher M. Johnson and Jenny E. Memmott, Journal of Research in Music Education, 2006

□ Students of music continue to outperform their non-arts peers on the SAT, according to reports by the College Entrance Examination Board. In 2006, SAT takers with coursework/experience in music performance scored 57 points higher on the verbal portion of the test and 43 points higher on the math portion than students with no coursework or experience in the arts. Scores for those with coursework in music appreciation were 62 points higher on the verbal and 41 points higher on the math portion. *The College Board, Profile of College-Bound Seniors National Report for 2006*

□ Nearly 100% of past winners in the prestigious Siemens Westinghouse Competition in Math, Science and Technology (for high school students) play one or more musical instruments. This led the Siemens Foundation to host a recital at Carnegie Hall in 2004, featuring some of these young people, after which a panel of experts debated the nature of the apparent science/music link. *The Midland Chemist (American Chemical Society) Vol. 42, No.1, Feb. 2005*



The study of music helps students achieve **Success in Developing Intelligence** The study of music helps students achieve **Success in Life**

Success in school and in society depends on an array of abilities. Some measures of a child's intelligence are indeed increased with music instruction. Data supports a long-established base of anecdotal knowledge to the effect that music education makes kids smarter. What is new and especially compelling, however, is a combination of behavioral studies and groundbreaking neurological research that shows how music study can actively contribute to brain development.

Results of an IQ test given to groups of children who were provided with lessons in keyboard, voice, drama, or no lessons at all showed that the IQ of students in the keyboard or voice classes increased from their pre-lesson IQ score more than the IQ of those students taking drama or no lessons. Generally these increases occurred across IQ subtests, index scores, and academic achievement. Summary of results by Dr. E. Glenn Schellenberg, Psychological Science, August 2004

- Children with music training had significantly better verbal memory than those without such training, and the longer the training, the better the verbal memory. Students who continued training and beginners who had just started learning to play both showed improvement in verbal learning and retention. *Summary of paper by Ho, Y. C., Cheung, M. C., & Chan, in Neuropsychology, 2003*
- A 2004 Stanford University study showed that mastering a musical instrument improves the way the human brain processes parts of spoken language. Using functional magnetic resonance imaging (fMRI), researchers also discovered that musical training helps the brain work more efficiently in distinguishing split-second differences between rapidly changing sounds that are essential to processing language — *Prof. John Gabrieli, associate director of MIT's Athinoula A. Martinos Center for Biomedical Imaging.*
- Young children who take music lessons show different brain development and improved memory over the course of a year, compared to children who do not receive musical training. Musically trained children performed better in a memory test that is correlated with general intelligence skills such as literacy, verbal memory, visiospatial processing, mathematics and IQ. *Dr. Laurel Trainor, Prof. of Psychology, Neuroscience, and Behaviour at McMaster University, 2006*
- Playing a musical instrument significantly enhances the brainstem's sensitivity to speech sounds. This relates to encoding skills involved with music and language. Experience with music at a young age can "fine-tune" the brain's auditory system. — *Nature Neuroscience, April 2007*

Each of us wants our children—and the children of all those around us—to achieve success in school, success in employment, and success in the social structures through which we move. But we also want our children to experience "success" on a broader scale. Participation in music, often as not based on a grounding in music education during the formative school years, brings countless benefits to each individual throughout life. The benefits may be psychological or spiritual, and they may be physical as well.

- "Music is one way for young people to connect with themselves, but it is also a bridge for connecting with others. Through music, we can introduce children to the richness and diversity of the human family and to the myriad rhythms of life." — *Daniel A. Carp, Eastman Kodak Company Chairman and CEO.*
- "Casals says music fills him with the wonder of life and the 'incredible marvel' of being a human. Ives says it expands his mind and challenges him to be a true individual. Bernstein says it is enriching and ennobling. To me, that sounds like a good cause for making music and the arts an integral part of every child's education. Studying music and the arts elevates children's education, expands students' horizons, and teaches them to appreciate the wonder of life." — *U.S. Secretary of Education Richard W. Riley, July 1999.*
- "The life of the arts, far from being an interruption, a distraction, in the life of the nation, is close to the center of a nation's purpose - and is a test to the quality of a nation's civilization." — *President John F. Kennedy*



Kirby

Jim and Regan, Mark Spray, Becky by Photos