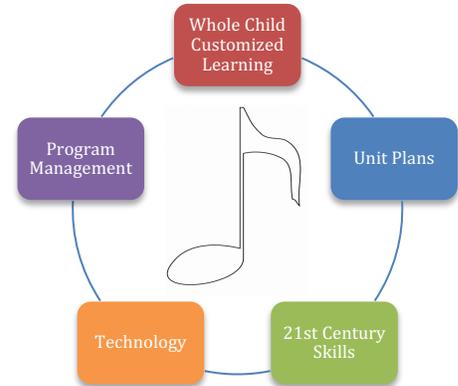


Upper St. Clair School District Performing Arts

Music Advocacy Facts and Statistics

The U.S. Department of Education recommends the arts to college-bound middle and junior high school students asserting, “Many colleges view participation in the arts and music as valuable experience that broadens students’ understanding and appreciation of the world around them.”

In addition, it plays a part in developing “children’s intellectual development.” The U.S. DOE also suggests one year of Visual and Performing Arts for college-bound high school students. (Source: 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)



The arts are one of the six subject areas in which the College Board recognizes as essential in order to thrive in college. (Source: Academic Preparation for College: What Students Need to Know and Be Able to Do, 1983 [still in use], The College Board, New York)

The arts produce jobs, generating an estimate \$37 billion with a return of \$3.4 billion in federal income taxes. (Source: American Arts Alliance Fact Sheet, October 1996)

Students taking courses in music performance and music appreciation scored higher in the SAT than students with no arts participation. Music performance students scored 53 points higher on the verbal and 39 points higher on the math. Music appreciation students scored 61 points higher on the verbal and 42 points higher on the math. (Source: 1999 College-Bound Seniors National Report: Profile of SAT Program Test Takers, The College Entrance Examination Board, Princeton, New Jersey)

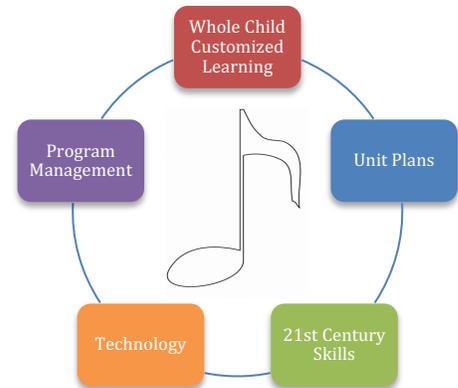
According to the National Education Longitudinal Study of 1988, music students received more academic honors and awards than non-music students. A higher percentage of music participants received A’s, A’s/B’s, and B’s than non-music participants. (Source: NELS:88 First Follow-up, 1990, National Center for Education Statistics, Washington D.C.)

Lewis Thomas, physician and biologist, found that music majors comprise the highest percentage of accepted medical students at 66%. (Source: As reported in “The Case for Music in the Schools,” Phi Delta Kappan, February 1994.)

Research made between music and intelligence concluded that music training is far greater than computer instruction in improving children’s abstract reasoning skills. (Source: Shaw, Rauscher, Levine, Wright, Dennis and Newcomb, “Music training causes long-term enhancement of preschool children’s spatial-temporal reasoning,” Neurological Research, vol. 19, February 1997)

“The arts enrich communities and employees, and also stimulate the kind of intellectual curiosity our company needs to stay competitive.” (Source: Norma R. Augustine, Chairman and Chief Executive Officer, Martin Marietta Corporation.)

The University of Montreal researched brain imaging techniques to study brain activity during musical tasks. Researches concluded that sight-reading musical scores and playing music “activate regions in all four of the cortex’s lobes” and “parts of the cerebellum are also activated during those tasks.” (Source: J. Sergent, E. Zuck, S. Tenial, and B. MacDonnall (1992). Distributed neural network underlying musical sight reading and keybpard performance. Science, 257, 106-109.)



Researchers in Leipzig discovered through the use of brain scans that musicians had larger planum temporale, the region of the brain associated with reading skills. Also, musicians had a thicker corpus callosum, the nerve fibers that connect the two halves of the brain. (Source: G. Schlaug, L. Jancke, Y. Huang, and H. Steinmetz (1994). “In vivo morphometry of interhemispheric asymmetry and connectivity in musicians.” In I. Deliege (Ed.), Proceedings of the 3rd international conference for music perception and cognition (pp. 417-418), Liege, Belgium.)

“A grounding in the arts will help our children to see; to bring a uniquely human perspective to science and technology. In short, it will help them as they grow smarter to also grow wiser. (Source: Robert E. Allen, Chairman and Chief Executive Officer, AT&T Corporation, in “America’s Culture Begins with Education”)

This data is excerpted from Music Makes the Difference: Music, Brain Development, and Learning which is MENC publication #1668 and may be purchased at the MENC website at www.menc.org.

Arts Education aids students in skills needed in the workplace: flexibility, the ability to solve problems and communicate; the ability to learn new skills, to be creative and innovative, and to strive for excellence. (Source: Joseph M. Calahan, Director of Corporate Communications, Xerox. Corporation)

I believe arts education in music, theater, dance and the visual arts is one of the most creative ways we have to find the gold that is buried just beneath the surface. They (children) have an enthusiasm for life, a spark of creativity, and vivid imaginations that need training...training that prepares them to become confident young men and women. As I visit schools around the country I see a renewed interest in arts education and a growing concern about the negative impact of cutting art and music out of curriculum. The creativity of the arts and the joy of music should be central to the education of every American child. (Source: Richard W. Riley, U.S. Secretary of Education)

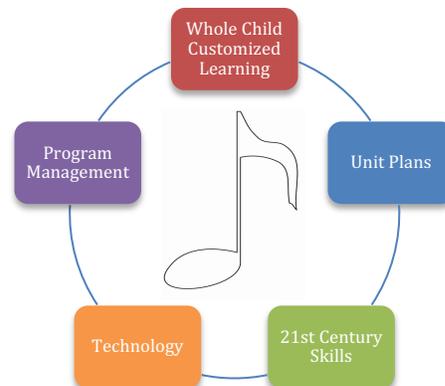
Music is Beating Computers at Enhancing Early Childhood Development. Music training, specifically piano instruction, is far superior to computer instruction in dramatically enhancing children’s abstract reasoning skills necessary for learning math and science. Learning music at an early age causes long-term enhancement of spatial-temporal reasoning. (Source: Frances Rauscher, Ph.D., Gordon Shaw, Ph.D., University of California, Irvine, 1997)

Music Enhances Linguistic Skills. Music -- specifically song -- is one of the best training grounds for babies learning to recognize the tones that add up to spoken language. (Source Sandra Trehubn, University of Toronto, 1997)

America Is a Country Full of Music-Makers. 113 million, or 53% of Americans over the age of 12 are current or former music makers. (Source: 1997 “American Attitudes Towards Music” poll conducted by the Gallup Organization)

Americans Say Schools Should Offer Instrumental Music Instruction as part of the regular curriculum. 88% of respondents indicated this in a 1997 “American Attitudes Towards Music” Gallup poll. (Source: Music Trades, September 1997)

Student involvement in extracurricular or co-curricular activities makes students resilient to current substance use among their peers, according to a recent statewide survey of Texas Schools. Secondary students who participated in band, orchestra or choir reported the lowest lifetime use of all substances. (Source: 1994 Texas School Survey of Substance Abuse Among Students: Grades 7-12)



Studying Music Strengthens Students’ Academic Performance. Rhode Island studies have indicated that sequential, skill-building instruction in art and music integrated with the rest of the curriculum can greatly improve children’s performance in reading and math. (Source: “Learning Improved by Arts Training” by Martin Gardiner, Alan Fox, Faith Knowles, and Donna Jeffrey, Nature, May 23, 1996)

Music and Spatial Task Performance: A Casual Relationship. Music lessons, and even simply listening to music, can enhance spatial reasoning performance, a critical higher-brain function necessary to perform complex tasks including mathematics. (Source: Frances Rauscher, Ph.D., Gordon Shaw, Ph.D., University of California, Irvine, 1994)

The Mozart Effect surfaced about four years ago when research uncovered that adults who listened to music of complexity for ten minutes or so experienced temporary increases in their spatial IQ scores. (Source: Frances Rauscher, Ph.D., Gordon Shaw, Ph.D., University of California, Irvine, 1994)

Music Is One of Our Greatest Economic Exports. “The arts are an economic plus -- second only to aerospace as our most lucrative national export.” (Source: Michael Greene of The National Academy of Recording Arts and Sciences)

Teacher Expertise in Music is a Critical Factor in Student Learning. Research indicates that teachers of all subjects -- including music -- who are more experienced and educated are more effective in the classroom. Consequently, students learn more from them. (Source: Paying for Public Education: New Evidence on How and Why Money Matters, by Ronald Ferguson, 1991)

Compiled by Paul K. Fox, Upper St. Clair School District Performing Arts Curriculum Leader from data distributed by the National Association for Music Education (2011)

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