

CARLSBAD, Calif. - According to a new nationwide survey conducted by the Gallup Organization, more than nine in ten Americans believe music education should be a part of every student's day. In fact, more than three-quarters of the people questioned feel that states should mandate it.

Music Advocacy's Top Ten for Parents

1. In a 2000 survey, 73 percent of respondents agree that teens who play an instrument are less likely to have discipline problems.
- Americans Love Making Music – And Value Music Education More Highly Than Ever, American Music Conference, 2000.
2. Students who can perform complex rhythms can also make faster and more precise corrections in many academic and physical situations, according to the Center for Timing, Coordination, and Motor Skills
- Rhythm seen as key to music's evolutionary role in human intellectual development, Center for Timing, Coordination, and Motor Skills, 2000.
3. A ten-year study indicates that students who study music achieve higher test scores, regardless of socioeconomic background.
- Dr. James Catterall, UCLA.
4. A 1997 study of elementary students in an arts-based program concluded that students' math test scores rose as their time in arts education classes increased.
- "Arts Exposure and Class Performance," Phi Delta Kappan, October, 1998.
5. First-grade students who had daily music instruction scored higher on creativity tests than a control group without music instruction.
- 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.
6. In a Scottish study, one group of elementary students received musical training, while another other group received an equal amount of discussion skills training. After six (6) months, the students in the music group achieved a significant increase in reading test scores, while the reading test scores of the discussion skills group did not change.
- Sheila Douglas and Peter Willatts, Journal of Research in Reading, 1994.
7. According to a 1991 study, students in schools with arts-focused curriculums reported significantly more positive perceptions about their academic abilities than students in a comparison group.
- Pamela Aschbacher and Joan Herman, The Humanitas Program Evaluation, 1991.

8. Students who are rhythmically skilled also tend to better plan, sequence, and coordinate actions in their daily lives.

- *"Cassidy Column," TCAMS Professional Resource Center, 2000.*

9. In a 1999 Columbia University study, students in the arts are found to be more cooperative with teachers and peers, more self-confident, and better able to express their ideas. These benefits exist across socioeconomic levels.

- *The Arts Education Partnership, 1999.*

Music Advocacy's Top Ten for Everyone

1. The Pittsburgh, Pennsylvania School District analyzed its 1997 dropout rate in terms of students' musical experience. Students with no ensemble performance experience had a dropout rate of 7.4 percent. Students with one to two years of ensemble experience had a dropout rate of 1 percent, and those with three or more years of performance experience had a dropout rate of 0.0 percent.

Eleanor Chute, "Music and Art Lessons Do More Than Complement Three R's," Pittsburgh Post-Gazette, April 13, 1998.

2. Two research projects have found that music training - specifically piano instruction - can dramatically enhance children's spatial-temporal reasoning skills, the skills crucial for greater success in subjects like math and science.

Shaw, Grazianow, and Peterson, Neurological Research, March 1999.

3. School leaders affirm that the single most critical factor in sustaining arts education in their schools is the active involvement of influential segments of the community. These community members help shape and implement the policies and programs of the district.

- *Gaining the Arts Advantage, The President's Council on the Arts and Humanities, 1999.*

4. Students with band and orchestra experience attend college at a rate twice the national average.

- *Bands Across the USA.*

5. Music students out-perform non-music on achievement tests in reading and math. Skills such as reading, anticipating, memory, listening, forecasting, recall, and concentration are developed in musical performance, and these skills are valuable to students in math, reading, and science.

- *B. Friedman, "An Evaluation of the Achievement in Reading and Arithmetic of Pupils in*

Elementary

School Instrumental Music Classes,” Dissertation Abstracts International.

6. One in three of today’s school-aged children will hold an arts-related job at some time in his or her career.

- *Education Commission on the States.*

7. The College Board, in a publication about college admissions, states, “preparation in the arts will be valuable to college entrants whatever their intended field of study.”

- *Academic Preparation for College: What Students Need To Know and Be Able To Do, The College Board.*

8. Music therapists working with Alzheimer’s patients have found that rhythmic interaction or listening to music resulted in decreased agitation, increased focus and concentration, enhanced ability to respond verbally and behaviorally, elimination of demented speech, improved ability to respond to questions, and better social interaction.

- *Carol Prickett and Randall Moore, “The Use of Music to Aid Memory of Alzheimer’s Patients,” Journal of Music Therapy, 1991.*

9. Medical researchers have reported that subjects lowered both their systolic and diastolic blood pressure as much as five points (mm/Hg) and reduced heart rates by four to five beats per minute following music listening sessions. People with high blood pressure can help keep their blood pressure down by listening to tapes of relaxing low frequency music in the morning and evening.

- *Tony Wigram, “The Psychological and Physiological Effects of Low Frequency Sound and Music,” Music Therapy Perspectives, 1995.*

10. A 1997 Gallup Survey on Americans’ attitudes toward music revealed that 89% of respondents believe music helps a child’s overall development, and 93% believe that music is part of a well-rounded education.

10. 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.

- *Carl Hartman, “Arts May Improve Students’ Grades,” The Associated Press, October, 1999.*

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 As, As/Bs, and Bs 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 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 keyboard 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. Deliège (Ed.), *Proceedings of the 3rd international conference for music perception and cognition* (pp. 417-418), Liege, Belgium.)

"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.*)

"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 cocurricular 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)