

Synopsis on Current Research on Arts Education

"A culture populated by a people whose imagination is impoverished has a static future. In such a culture there will be little change because there will be little sense of possibility."

-- Elliot Eisner, Lee Jacks Professor of Education and professor of art, Stanford University

Many of us involved in arts education feel the "case for arts education" has been made. And made again. Studies are rapidly piling up that show both the intrinsic value of arts education, its impact on academic learning and the positive effects that employment in the arts has in the economy.

However, we realize that because we are actively involved every day in teaching in and through the arts, we have a natural affinity for and easily latch onto this information. We recognize that we must continue to purposefully share the case for arts education and bring the proof of its value to others daily.

We have two primary ways of discussing the value of arts education. First, we want to emphasize the impact arts education is having on overall K-12 academic achievement and preparation for postsecondary education. Second, we want to refute the common perception that "you can't make a living as an artist," which leads to an obvious and, to us, dangerous corollary: Why teach the arts?

Arts education and academic achievement

First, the Perpich Center for Arts Education recently published the first statewide assessment of K-12 arts education in Minnesota. This report, "Building a Legacy," has an excellent section listing almost two dozen links to various reports, studies, articles, and books that look at the connections between arts education and academic achievement. The report can be found online at

http://perpich.mn.gov/index.php?section=outreach_publications_survey

Robert Morrison, president of Quadrant Arts Education Research, who did the surveys and research leading to the Perpich report, likes to recount Steve Jobs' story about how a happenstance arts course led, in part, to the development of the Macintosh computer as we know it. Morrison's point is the same as Jobs': "We do not teach the arts to create great artists anymore than we teach math to create the next generation of mathematicians or language arts to create the next generation of writers. We teach the arts in our schools to create great people so they are empowered with skills and knowledge to be successful in life... to do great things regardless of the vocational pathway they choose. Steve Jobs . . . knew this."

In the book *Doing Well and Doing Good by Doing Art: The effects of Education in the Visual and Performing Arts on the Achievements and Values of Young Adults* (Los Angeles: I-Group Books, 2009), author James Catterall of UCLA reports on a longitudinal study that followed 12,000 students from high school to age 26. He was able to connect the students' involvement in visual and performing arts with doing better and going further in higher

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



education and greater involvement in public service. Catterall was able to show that low-income students benefitted from arts learning even more than more privileged students and that the benefits last well into adulthood.

Here are additional studies drawing a reliable connection between arts education and engaged, successful students. The details of the studies cited may be found at http://www.artsedsearch.org/students/research-overview

Literacy and language development: Arts learning in music, drama, media arts and spoken word relates to high achievement in reading and writing and high verbal SAT scores. (1) Music training relates to stronger performances in learning a second language with greater improvement in expressive fluency and competency. (2)

Mathematics achievement: Studies find a relationship between music and high mathematics SAT scores. Relationships also exist between dance and media arts learning in high school and high achievement in math. (3)

Overall academic achievement: Research suggests a significant positive relationship between arts study and high school students' overall academic achievement as measured by standardized tests and student grades. (4)

Research finds that students who experience arts integrated curricula meet or significantly exceed state and district standardized test averages, even in schools with high populations of at-risk students. In addition, a notable study finds that arts integration programs do not lower test scores, suggesting there is no negative impact on academic achievement in core subjects from an arts-integrated curriculum. (5)

Perpich's study confirms this trend. Two correlations between student achievement and arts education were identified in Minnesota. First, a positive relationship exists between a school's Focus Rating (part of the Minnesota's Multiple Measurement Rating or MMR) and higher levels of arts education (as measured by the arts education index). Second, there is a positive relationship between a school's scores for the Graduation Required Assessment for Diploma (GRAD) reading assessment and higher levels of arts education. These positive correlations still hold when controlling for other "confounding" variables such as income, minority status or geography. Higher levels of arts education coincide with higher Focus Ratings (MMR) and GRAD reading scores.

Underserved populations: There is a strong body of research that demonstrates ways in which the arts contribute to academic success for high school students from low socio-economic backgrounds, English-language learners and students with special needs. These populations demonstrate the greatest relative improvement in academic achievement when participating in the arts. (6) Other research provides evidence pointing to a relationship between arts participation in high school and increased attendance and reduced dropout rates. (7) Students from low socio-economic backgrounds, who participate in the arts, also have an increased chance of

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



attending college and completing a postsecondary degree. (8) English-language learners are significantly more likely to pursue a college degree if they attend an arts-rich high school. (9)

Studies measuring creative thinking, critical thinking, problem solving and reasoning all find these functions increase and improve when arts education is added to the educational mix. (10) Dancers tested better on memory and motion processing than non-dancers and musicians demonstrated better auditory-visual discrimination and aural recognition than non-musicians. (11) Another study has found that through visual art studio classes, students develop habits of mind for sustained focus, imagination, close observation and articulation of their decision-making process. (12)

Correlative studies also show a strong relationship between arts education and:

- positive emotional development that leads to stronger abilities to self-regulate
- deep engagement in learning
- motivation to learn for understanding
- a decrease in disciplinary issues in schools
- self-awareness, self-concept and self-expression
- self-efficacy and self-confidence

(13)

Research on students involved in arts education shows that they learn how to communicate effectively, practice constructive criticism and listen better. In a large-scale study, arts programming helped to prepare youth to apply their skills directly to employment opportunities. Another study showed that students who participate in arts education as youth stay in their local communities as adults and contribute to economic and civic growth. (14)

ASCD (Association for Supervision and Curriculum Development), an educational leadership organization with 160,000 members in 148 countries, said in a report three years ago that "studies also show that participating in the arts can actually boost student achievement in other academic areas. Therefore, arts groups are partnering with schools to provide professional development for teachers interested in integrating arts instruction across content areas." (15)

"Arts learning experiences play a vital role in developing students' capacities for critical thinking, creativity, imagination and innovation. These capacities are increasing recognized as core skills and competencies all students need as part of a high-quality and complete 21st-century education. And, as a matter of social justice, we must be concerned when students are denied access to a high-quality education—one that includes learning in and through the arts—simply because of where they live or go to school."

-- Sandra S. Ruppert, director of the Arts Education Partnership, a national coalition of more than 100 arts, education, government and philanthropic organizations (online commentary, Education Week Vol. 29, Issue 05, September 23, 2009)

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



Arts education, employment and contributions to a healthy economy

An article in Business Week magazine said, "The game is changing . . . It isn't just about math and science any more (although those are surely important disciplines). It's about creativity, imagination and, above all, innovation."

"Creativity is now the most important leadership quality for success in business, outweighing even integrity and global thinking."

--IBM study of more than 1500 corporate heads and public sector leaders across 60 nations and 33 industries

"It's no accident that many of the world's top brands are design leaders."

-- Ravi Sawhney and Deepa Prahalad, Bloomberg Business Week

A few facts listed by Ringling College of Art and Design, Florida, in one of its publications:

- Annually, consumers spend \$25 billion on video games, which are developed by designers, writers and other creative workers.
- Mobile game revenues are projected to double by 2015.
- 72 percent of American households play video games.

"I work with a lot of Fortune 500 companies, and they're always saying, 'We need people who can be innovative, who can think differently.'"

-- Sir Ken Robinson, author of *Out of Our Minds*

Interviews with industry leaders looking at employment trends through 2016 for arts-related jobs predicts that:

- Employment of artists and related workers is expected to grow 16 percent, faster than the average for all occupations.
- Employment of game designers is projected to grow by 14 percent.
- Employment of art directors is expected to grow by 12 percent.
- Employment in the motion picture and video industries is expected to grow 11 percent.
- Employment of interior designers is expected to grow by 19 percent.
- Employment of multimedia artists and animators is projected to grow by 13 percent.
- Employment growth by arts-centric businesses since 2007 was 11.6 percent, more than four times the rise in the total number of U.S. employees of 2.4 percent.

Sources: Americans for the Arts, National Endowment for the Arts, U.S. Department of Labor, U.S. Bureau of Labor Statistics and the Entertainment Software Association

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711

Toll Free: 800-657-3515

"Design, in short, is becoming an ever more important engine of corporate profit."

-- Roger Martin, Rotman School of Management, University of Toronto



The creative industries are America's largest export with more than \$60 billion annually in overseas sales. Ninety-seven percent of employers say creativity is of increasing importance but 85 percent of employers concerned with hiring creative people are unable to find the applicants they seek. More than 904,000 U.S. businesses are involved in the creation and distribution of art. Creativity-oriented jobs have gone from just over 10 percent of the economy to more than 30 percent.

Sources: U.S. Department of Labor, U.S. Bureau of Labor Statistics

A new report just out from the National Endowment for the Arts, "Artists in the Work Force: 1990-2005," shows that:

- There are now almost two million Americans who describe their primary occupation as artist. Representing 1.4 percent of the U.S. labor force, artists constitute a sizeable class of workers—only slightly smaller than the total number of active-duty and reserve personnel in the U.S. military (2.2 million). Artists represent a larger group than the legal profession (lawyers, judges, and paralegals), medical doctors (physicians, surgeons, and dentists), or agricultural workers (farmers, ranchers, foresters, and fishers).
- The size of the artistic community gives the group enormous aggregate income—approximately \$70 billion annually. In terms of sheer numbers, artists represent a powerful labor force whose economic contributions go largely unrecognized by both the general public and the government.
- Compared to other U.S. workers, American artists tend to be better educated and more
 entrepreneurial. Artists are twice as likely to have earned a college degree as other members of the
 U.S. labor force, though they receive relatively less financial compensation for their educational level.
 Artists are also 3.5 times more likely to be self-employed.
- The number of artists in the U.S. has remained constant as a percentage of the population for the past 15 years. Between 1970 and 1990 the number of artists doubled in the United States—reflecting the great expansion of theaters, galleries, orchestras, and presenting venues as well as the steady growth of both university programs and the entertainment industry. In that heady climate, artists grew at nearly twice the rate of the overall labor force. As the current survey demonstrates, the number of artists is now growing at approximately the same rate as the total labor force.

As Dana Gioia, chairman of the NEA, says in his introduction to this report:

"The time has come to insist on an obvious but overlooked fact—artists are workers. They make things and perform services, just like other workers, and these goods and services have value—not merely in lofty spiritual

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



terms but also in dollars and cents. Without denying the higher purposes of the artistic vocation, this report shows that artists play an important role in America's cultural vitality and economic prosperity."

The executive summary to this report, as well as the full report, may be found at

http://arts.gov/NEARTS/2008v3-nea-international-activities/new-nea-study-released

Five years ago a similar look at Minnesota artists resulted in "Artists Count: The Economic Impact of Minnesota's Individual Artists (2007)," a statewide study conducted by lead organization Minnesota Citizens for the Arts (MCA), Springboard for the Arts and The Minnesota Crafts Council (MCC), which was primarily funded by the McKnight Foundation. The report showed that there were 19,676 artists surveyed, that their economic impact in terms of their own spending was \$295 million, that they supported 5,937 full-time-equivalent jobs and that they generated \$24 million in state and local revenue. The study also showed that artists are engaged in their communities, volunteering and voting to a higher degree than the rest of the population. The report is at http://www.mncitizensforthearts.org/learn/artsresearch/artists-count-2/

"An arts-based economy can enhance state efforts to diversify rural economies, generate revenue, improve the quality of life, and attract visitors and investment. Rural areas often feature various arts and cultural industries, which, with some assistance, can become productive economic sectors. In addition to stimulating substantial employment and tax revenues, arts enterprises are highly entrepreneurial, readily available in many communities, and attractive to tourists. The arts also create a highly desirable quality of life that draws businesses and knowledge workers to further stimulate the economy."

-- Strengthening Rural Economies through the Arts, National Governors Association Center for Best Practices, 8/30/05

"The arts, culture and entertainment sectors are critical to the economic vitality and livability of this region. Clearly, a community that offers these amenities provides a huge draw for companies that may want to do business and for employees who will want to live and work here."

— Cynthia Lesher, President and CEO, Northern States Power Company – Minnesota, An Xcel Energy company, from "Arts, Culture, and Entertainment: A Vision for Saint Paul," 2004

"It's important to note that while it is no surprise that the Twin Cities metropolitan area supports a robust arts and culture economy, the report also shows a significant economic impact in every other area of Minnesota. The eleven regional reports demonstrate that the excellence, scope, and diversity of cultural activity in every corner of the state go beyond contributing to Minnesota's quality of life: the arts and culture make a significant contribution to the state's economy. The return on state arts and culture funding is dynamic. For a very small investment by the state of Minnesota, the arts and culture industry can be leveraged to create jobs, to revitalize both neighborhoods and rural communities, and to educate our children while helping to drive Minnesota's economy."

-- Sheila Smith, executive director, Minnesota Citizens for the Arts, introduction to *The Arts: A Driving Force in St. Paul's Economy 2006*

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711

Toll Free: 800-657-3515

The report is available at http://mncitizensforthearts.org/wp-content/uploads/2008/01/zsaintpaulreport.pdf



Notes

- (1) Weinstein, S. (2010). "A unified poet alliance": The personal and social outcomes of youth spoken word poetry programming. *International Journal of Education & the Arts*, 11(2).
- (2) Dunbar, K. N. (2008). Arts education, the brain, and language. In C. Asbury & C. Rich (Eds.)*Learning, Arts, and the Brain*. New York, NY: Dana Foundation.
- (3) Helmrich. B. H. (2010). Window of opportunity? Adolescence, music, and algebra. *Journal of Adolescent Research*. 25 (4).
- (4) Barry, N. H. (2010). Oklahoma A+ Schools: What the research tells us 2002-2007. Volume three, quantitative measures. Oklahoma A+ Schools/University of Central Oklahoma.

Catterall, J., & Waldorf, L. (1999). Chicago Arts Partnerships in Education summary evaluation. In E. Fiske (Ed.), *Champions of change: The impact of the arts on learning* (pp. 47-62). The Arts Education Partnership and The President's Committee on the Arts and the Humanities. Washington, DC.

DeMoss, K. & Morris, T. (2002). *How arts integration supports student learning: Students shed light on the connections*. Chicago, IL: Chicago Arts Partnerships in Education (CAPE).

Seaman, M. (1999). The arts in the basic curriculum project: Looking at the past and preparing for the future. Unpublished Evaluation Report, College of Education, University of South Carolina, Columbia, S.C.¹

Stevenson, L., & Deasy, R. J. (2005). *Third space: When learning matters*. Washington, DC: Arts Education Partnership.

- (5) Seaman, M. (1999). The arts in the basic curriculum project: Looking at the past and preparing for the future. Unpublished Evaluation Report, College of Education, University of South Carolina, Columbia, S.C.¹
- (6) Catterall, James S. (2009). Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults. Los Angeles/London: Imagination Group/I-Group Books.
- (7) Catterall, J.S. (1998). Involvement in the arts and success in secondary school. *Americans for the Arts Monographs*, 1(9), 1-10.

Horn, J. (1992). An exploration into the writing of original scripts by inner-city high school drama students (ED366957). National Arts Education Research Center.

Heath, S. B., Soep, E., & Roach A. (1998). Living the arts through language-learning: A report on community-based youth organizations. *American for the Arts Monographs*, 2.

Mahoney, J. L. & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33(2), 241-253.

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



Barry, N. H. (2010). Oklahoma A+ Schools: What the research tells us 2002-2007. Volume three, quantitative measures. Oklahoma A+ Schools/University of Central Oklahoma.

- (8) Mason, C. Y., Steedly, K. M., & Thormann, M. S. (2008). Impact of arts integration on voice, choice, and access. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 31(1), 36.
- (9) Catterall, James S. (2009). Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults. Los Angeles/London: Imagination Group/I-Group Books.
- (10) Heath, S., & Roach, A. (1999). Imaginative actuality: Learning in the arts during nonschool hours. Chapter in E. Fiske (Ed.), *Champions of Change: The Impact of the Arts on Learning*. Washington DC: Arts Education Partnership and President's Committee on the Arts and Humanities, 19-34.

Horn, J. (1992). An exploration into the writing of original scripts by inner-city high school drama students (ED366957). National Arts Education Research Center.

Winner, E., Hetland, L., Veenema, S., Sheridan, K., Palmer, P., Locher, I., et al. (2006). Studio thinking: How visual arts teaching can promote disciplined habits of mind. *New directions in aesthetics, creativity, and the arts*, 189-205.

- Heath, S., & Roach, A. (1999). Imaginative actuality: Learning in the arts during nonschool hours. Chapter in E. Fiske (Ed.), *Champions of Change: The Impact of the Arts on Learning*. Washington DC: Arts Education Partnership and President's Committee on the Arts and Humanities, 19-34.
- (11) Dunbar, K. N. (2008). Arts education, the brain, and language. In C. Asbury & C. Rich (Eds.) *Learning, Arts, and the Brain*. New York, NY: Dana Foundation.
- (12) Winner, E., Hetland, L., Veenema, S., Sheridan, K., Palmer, P., Locher, I., et al. (2006). Studio thinking: How visual arts teaching can promote disciplined habits of mind. *New directions in aesthetics, creativity, and the arts*, 189-205.
- (13) Larson, R., & Brown, J. (2007). Emotional development in adolescence: What can be learned from a high school theater program? *Child Development*, 78(4), 1083-1099.

Stevenson, L. M. (2011). *Creating destiny: Youth, arts and social change*. (Unpublished doctoral dissertation). Stanford University, Stanford, CA.

DeMoss, K. & Morris, T. (2002). How arts integration supports student learning: Students shed light on the connections. Chicago, IL: Chicago Arts Partnerships in Education (CAPE).

Rostan, S.M. (2010). Studio learning: Motivation, competence, and the development of young art students' talent and creativity. *Creativity Research Journal*, 22(3), 261-271.

Kennedy, R. (1998). The effects of musical performance, rational emotive therapy and vicarious experience on the self-efficacy and self-esteem of juvenile delinquents and disadvantage children. (Doctoral dissertation) University of Kansas, Lawrence, KS

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711



Larson, R., & Brown, J. (2007). Emotional development in adolescence: What can be learned from a high school theater program? *Child Development*, 78(4), 1083-1099.

(14) Heath, S., & Roach, A. (1999). Imaginative actuality: Learning in the arts during nonschool hours. Chapter in E. Fiske (Ed.), *Champions of Change: The Impact of the Arts on Learning*. Washington DC: Arts Education Partnership and President's Committee on the Arts and Humanities, 19-34.

Catterall, James S. (2009). Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults. Los Angeles/London: Imagination Group/I-Group Books.

Heath, S., & Roach, A. (1999). Imaginative actuality: Learning in the arts during nonschool hours. Chapter in E. Fiske (Ed.), *Champions of Change: The Impact of the Arts on Learning*. Washington DC: Arts Education Partnership and President's Committee on the Arts and Humanities, 19-34.

(15) Sloan, W. (2009). Making content connections through arts integration, *ASCD Education Update* (online), March 2009 Volume 51, Number 3

Telephone: 763-279-4200

TTY/TDD (MN RELAY SERVICE): 711