SAMPLE

Just trying this out

IMPACT POINTS

The arts can make complex concepts accessible.

Researchers have found that artist-created visualizations of complex scientific concepts not only help the general public better understand--the help the scientists themselves understand the meaning of the data and devise next steps.

Humans process visuals 15 times faster than text--in as little as 13 milliseconds!

The way complex concepts like climate change and sustainability of the environment are presented is crucial in convincing people of the urgency. Using the arts can drastically increase comprehension.

The arts improve your critical thinking by up to 18%.

Just looking at art improves your ability to think critically. Students from high-poverty schools, according to one study, experience an 18% effect-size improvement in critical thinking about art after a 1 hour tour of a museum.

Nobel prize winning scientists are almost 3x more likely to have an artistic hobby.

The arts increase your likelihood of rising to the top of your field. Research has shown that the top scientists in the world, particularly Nobel prize winners, are 2.85 times as likely than average people to have an artistic hobby.

105% retention of science content through the arts

Research shows that students exposed to scientific concepts through artmaking retain it more and for longer--even months later!

40% of scientists have collaborated with an artist--and more than 95% of those say they'll do it again.

A poll conducted by the scientific journal Nature found that 40% of the researchers surveyed have collaborated with artists, and nearly all of them said they would consider doing so in the future again.

Wilson, S. (2002). Information Arts: Intserctions of Art, Science, and Technology. MIT Press: 37.

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Root-Berstein, R. "Arts Foster Scientific Success: Avocations of Nobel, National Academy, Royal Society, and Sigma Xi Members." (2008) Journal of Psychology of Science and Technology, 1(2):51-63. Retrieved 15 May 2018 from https://www.researchgate.net/profile/Kendell_Pawelec/publication/247857...

https://releases.jhu.edu/2019/03/05/singing-for-science-how-the-arts-can-help-students-who-struggle-most/

https://www.nature.com/articles/d41586-021-00469-2

EXAMPLES OF PRACTICE



PACIFIC STANDARD TIME: ART X SCIENCE X LA

Los Angeles

Art x Science x LA is a range of exhibitions and public programs that explore the intersections between the visual arts and science, from prehistoric times to the present and across different cultures worldwide.



KALEIDOSCOPE

Bloomington

Kaleidoscope by Christopher Lutter-Gardella was an interactive art installation in the Mall of America with a 20 ft. monarch butterfly and over 300 small butterflies. The piece was created from waste stream materials and unveiled on Earth Day.



WILD MUSIC: SOUNDS AND SONGS OF LIFE

St. Paul

The Wild Music exhibit explores evidence for the biological origins of music through environmental soundscapes, interactive exhibits, and listening experiences. In the process, it expands our understanding of what makes music.



TIDE FIELD

Philadelphia

Tide Field is a project commissioned through Art@Bartram's initiatives to bring the community a better understanding of the relationship between Bartram's Garden and the Schuylkill River. Tide Field is an art installation of colorful buoys that are



CONFIGURATION SPACES OF RIGID ORIGAMI

Springfield

Configuration Spaces of Rigid Origami explores the intersection between origami, the ancient

Japanese art of paper folding, and mathematics to predict how materials fold.



COVID-19 ENGINEERING DESIGN CHALLENGE

The University of Texas at Tyler University Academy
Texas STEM Coalition (T-STEM)
International Council of Associations for Science Education (ICASE)

Tyler

The COVID-19 Student Engineering Design Challenge provides students of all ages (primary, secondary and higher education) with a platform to identify and design solutions to challenges and worldwide problems related to the pandemic. Students are

READING LIST

The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education

National Academies of Sciences, Engineering, and Medicine National Academies of Sciences, Engineering, and Medicine

Publication Year: 2018

The National Academies of Sciences, Engineering, and Medicine have released the report, The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education. This report examines... Show More ☐ the evidence behind the assertion

Show Less []

Living in Data: A Citizen's Guide to a Better Information Future

Thorp, Jer Thorp, Jer **Publication Year:** 2021

In Living in Data, Thorp proves that thinking about data in a human context makes us better problem solvers and builds a healthier relationship between us and our data—one that puts... Show More [] our well-being front and center—and that there is a path

Show Less □

Consilience: The Unity of Knowledge

Wilson, Edward O. Wilson, Edward O.

Publication Year: 1998

Using the natural sciences as his model, Wilson forges dramatic links between fields. He explores the chemistry of the mind and the genetic bases of culture. He postulates the biological... Show More [] principles underlying works of art from cave-drawings to

Show Less □

ORGANIZATIONS

ARTS IN MEDICINE

Arts in Medicine integrates all artistic disciplines throughout New York City's Health and Hospital system. Beyond serving partients, the program includes initiatives taimed at staff as a means to reduce reduce stress, support emotional health, and adress "compassion fatugue."

ARTSPACE

Artspace is a nonprofit that uses the tools of real estate development to create affordable, appropriate places where artists and communities can intersect and live.

NATIONAL ART EDUCATION ASSOCIATION

The leading professional membership organization exclusively for visual arts educators advancing visual arts education to fulfill human potential and promote global understanding.

THANK YOU TO OUR SPONSORS



The Arts Impact Explorer was made possible thanks to the generous support of the Mellon Foundation and the National Endowment for the Arts. Additional support provided by the Doris Duke Charitable Foundation.

LEARN MORE

AMERICANSFORTHEARTS.ORG/SOCIAL IMPACT

This fact sheet was developed as part of the **Arts + Social Impact Explorer**

