

Contact: David Greenfield  
(310) 614-5998  
Los Angeles, CA

For Immediate Release  
July 11, 2011

## **Press Release**

**THE UNITED STATES IS IN DANGER OF LOSING ITS PLACE TO CHINA AS LEADER OF INNOVATION IN THE GLOBAL ECONOMY. IN ORDER TO REMAIN COMPETITIVE, THE UNITED STATES MUST REINTRODUCE FORMAL ARTS EDUCATION IN THE K-12 CURRICULUM.**

**Fact: The People's Republic of China is the world's second largest economy after the United States.**

**Fact: China is the world's fastest-growing major economy, with average growth rates of 10% for the past 30 years.**

**Fact: China is the largest exporter and second largest importer of goods in the world.**

**Fact: China became the world's top manufacturer in 2011, surpassing the United States.**

**Fact: Art education in China is an important component in both primary and secondary schools, along with science, technology, engineering and math.**

LOS ANGELES, CA, July 11, 2011. America is in crisis mode in two crucial and interrelated areas- economy and education. Since 2002, the US has lost close to 5.5 million manufacturing jobs. The US unemployment rate is 9.2% (14.1 million) and the rate of high school graduates has been hovering at about 68%, (although it can be as low as 30% in minority communities). These trends do not bode well for the future of our country.

One of the primary causes for these alarming statistics is the ongoing transformation of our economy from one based on industry to one based on information management. Unfortunately there are no easy, instant solutions to these trends. Nonetheless, bi-partisan leaders have all agreed that one of the most important steps necessary to build for the future is the need to innovate in all fields and professions. The challenge then is to identify ways to teach and promote innovation in the work place and in education.

For many years, the US government has promoted STEM (Science, Technology, Engineering, Math) education initiatives. But this is clearly not enough to stem the tide of unemployment due to factory and business closures, and the off shoring of jobs. One key component to addressing this challenge can be found in formal arts education. Current research shows that one of the best ways to teach innovation (as well as creative problem solving and collaboration) is through formal arts education. In other words, it is time to change STEM to STEAM.

The arts are a growth industry- the NEA projects an 11% growth rate for arts-related jobs through the year 2018. It is essential to understand that there is more to formal arts education than simply design, illustration, film and television, theater, writing and music. Arts education promotes imagination, creativity, communication and other relevant 21<sup>st</sup> century skill sets necessary for solving 21<sup>st</sup> century problems. Dr. Joseph Piro, Associate Professor Curriculum & Instruction Long Island University writes "If creativity, communication and critical thinking- all

touted as the hallmark skills of the 21<sup>st</sup> century success- are to be cultivated, we need to insure that STEM subjects are drawn closer to the arts”.

Formal arts education is not a new idea. In the past, an understanding of all of the arts was considered a valuable and important component of a well-rounded education in order to prepare students to be valuable contributors to society. Although the arts are usually the first casualty of budget cuts in school systems, there are organizations in this country currently working to address the lack of arts education as well as STEAM. For example, The Dana Foundation, a non-profit institution known for its funding of brain research sufficiently believes in the importance of arts education that they have funded the training of over 8,000 arts educators in over 100 organizations. The National Art Education Association provides grants and arts-related support for educators across the United States and even though many arts programs have been cut from the schools, the US government still supports standards for arts education.

The arts and sciences are not mutually exclusive. Indeed, many great scientists were also musicians, writers, poets or painters. Einstein was a life-long student of violin, Samuel Morse painted portraits, Galileo was a poet and literary critic, Richard Feynman was an enthusiastic fan of Tuvan throat singing, and of course there was Da Vinci. It is also noteworthy to recognize that there are also many artists and musicians who are scientists. For example Brian May, the guitarist who founded the rock group Queen, has PhD in astrophysics from Imperial College, action-star Dolph Lundgren- has a master's degree in chemical engineering from the University of Sydney and was awarded a Fulbright Scholarship, and Israeli artist Yaakov Agam has extensively researched light waves and color theory.

To better compete in the global economy, American businesses need 21<sup>st</sup> century employees with 21<sup>st</sup> century skills for innovation and creative problem solving. The best way to prepare students to lead our county into the future is to insure that formal arts education is incorporated into school systems across the United States.

Sources:

Arts education in China <http://steam-notstem.com/articles/art-education-china/>

The Dana Foundation- <http://www.dana.org/>

National Art Education Association- <http://www.arteducators.org>

STE(+a)M - <http://steammanifesto.com>

U.S. Arts Education standards- <http://www2.ed.gov/pubs/ArtsStandards.htm>

U.S. Bureau of Labor Statistics- <http://www.bls.gov/news.release/empsit.nr0.htm>

*David Greenfield is a doctoral student in learning technologies at Pepperdine University (expected graduation- June 2013). He is an educator, academic technologist and has been an exhibiting artist for over 20 years.*