ANOKA COUNTY-BLAINE AIRPORT

BLAINE AIRPORT PROMOTION GROUP

TOURS AVALIBLE K-12

Un-Locking STEM

Many organizations in the United States follow National Science Foundation established guidelines in the creation of STEM initiatives. STEM is a focus in education discussions that refer to shortages of skilled workers and inadequate education that have concerns relating to workforce development, national

security and immigration policy.

In his State of the Union Address on January 31, 2006, United States President George W. Bush announced the American Competitive Initiative. President Bush proposed the initiative to address shortfalls in federal government support of educational development and progress at all academic levels in the STEM fields.

In 2006, The United States National Academies expressed concern of the decline in STEM education in the United States. The National Aeronautics and Space Administration implemented programs and curricula to advance STEM education to replenish the pool of scientists, engineers and mathematicians who will lead space exploration in the 21st century. NASA Means Business sponsored competition by the Texas Space Grant Consortium, challenges college students to develop promotional plans to encourage students in middle and high school to study STEM subjects. The National Science Foundation has numerous programs devoted to STEM fields. The STEM Academy is a national non-profit organization dedicated to STEM literacy for all students to close the achievement gap, decrease dropout rates, increase high school graduation rates and improve teacher and principal effectiveness. Project Lead the Way is a leading provider of STEM education curricular programs to middle and high schools in the United States. This national non-profit organization has over 5,200 programs in over 4,700 schools in all 50 states. Programs include PATHWAYS TO ENGINEERING, BIOMEDICAL SCIENCE and GATEWAY TO

TECHNOLOGY. PLTW provides the curriculum and the teacher professional development and ongoing support to create transformational programs in schools, districts and communities. The PLTW programs have been endorsed by President Barack Obama and the U.S. Secretary of Education Arne Duncan.

The U of M has joined with a community to build a school that integrates the arts with science, technology engineering, and math. STEM + arts = STEAM NEW KIND OF SCHOOL

http://discover.umn.edu/news/teaching-education/new-kind-school STEM supports and broadens the study of engineering within each of the subjects with beginning engineering at elementary level and bringing education in the STEM fields to all students.

Legislated act of 2007

America COMPETES Act of 2007 (P.L. 110-69) became law on August 9, 2007. The act responds to concerns that the United States may not be able to compete economically with other nations in the future due to insufficient investment today in science and technology research and science, technology, engineering and mathematics (STEM) education and workforce development. This legislative act is meant to invest in STEM education from kindergarten to graduate school and postdoctoral education.

January 2014 Subcommittee hearing on STEM

The U.S. House Research and Technology Subcommittee held a hearing to examine STEM education programs run by the private sector. In 2014, the U.S. federal government plans to spend \$3 billion on STEM education programs through a variety of federal agencies.

