STEM Resources for Educating Gifted Students

Go to this Web Site for the online links for these organizations: <u>www.GiftedEdPress.com/STEMLINKS.pdf</u>

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(This list will be updated periodically. If a link doesn't work, try copying and pasting it into your browser's http area.)

Academy for Math, Engineering & Science: Secondary Education Partner of the University of Utah, Salt Lake City, Utah http://bit.ly/sJMWAs

Academy of Applied Science: Fueling the Spark of Genius – Sponsors numerous programs for teachers, students and inner city youth in STEM areas. http://bit.ly/7PIGBg

Accord Institute STEM Education Model http://www.accordeducation.org/website/

Advanced Technology Academy of Dearborn, Michigan – STEM education at the elementary, middle and high school levels in partnership with the Ford Motor Company. http://www.atafordpas.org/

Aggie-STEM (Texas A&M University) – Helps school districts to set up STEM programs. http://bit.ly/sVR5FI

Adventures in Rocket Science Educator Guide (NASA) http://l.usa.gov/j9D6FX

Allegheny County Public Schools STEM Programs (Cumberland, Maryland) http://bit.ly/qntAXb

America's Best High Schools: The Elites (Newsweek Magazine) http://bit.ly/c5u4lG

American Institutes for Research STEM Center http://www.air.org/focus-area/education/?id=10

Arizona Center for STEM Teachers – University of Arizona resource and training center for STEM education. http://www.az-stem-teachers.org/content/home

Arizona Department of Education: 21st Century Learning Centers – Describes STEM resources in Arizona with emphasis on available state grants. http://bit.ly/sBkomv

Arizona State University STEM Partner Programs http://modelit.asu.edu/outreach

Arizona Tech Prep – Contains information on training programs in Arizona and elsewhere. http://www.aztechprep.org/

Arkansas Center for Mathematics and Science Education http://bit.ly/pOiESR

Bergenfield School District STEM Program (Bergenfield Public Schools, New Jersey) http://bit.ly/qz4he6 Best Practices in Technology Education (Cisco Systems, Inc.) http://bit.ly/g7zNas

The Bronx High School of Science – Bronx, New York http://www.bxscience.edu/

Canon River STEM School – Faribault, Minnesota http://cannonriverstemschool.org/

Cedar Park Elementary STEM School – Apple Valley, Minnesota http://www.district196.org/cp/

Center for Advanced STEM Studies (Lexington Technology Center in Lexington School District One, South Carolina) http://bit.ly/rktgVY

Center for Excellence in Education – Provides summer programs to students who are highly gifted in science and mathematics. Manages the USA Biology Olympiad. http://www.cee.org/

Center for Mathematics, Science and Technology (Illinois State University) http://bit.ly/p2SbzB

The Center for STEM Education – Northeastern University http://www.stem.neu.edu/staff.htm

Central Indiana I-STEM – Indiana University Purdue University Indianapolis http://bit.ly/md6UaD

Challenger Learning Centers for Space Science Education http://www.challenger.org/

Children's Engineering Educators (CEE): Developing Technological Literacy at the Elementary Level http://www.childrensengineering.com/CEEShop1.htm

The Children's Engineering Journal – Virginia Children's Engineering Council http://bit.ly/mNKjg6

Children's Technology and Engineering – Journal of the INTERNATIONAL TECHNOLOGY AND ENGINEERING EDUCATORS ASSOCIATION (ITEEA) http://www.iteea.org/Publications/t&c.htm

Cleveland High School – Seattle, Washington http://bit.ly/mxHnVM

Cleveland Hub – STEM Schools & Programs in Northeast Ohio http://bit.ly/pp4Fo1

The Coalition for Science After School – Has a search program for finding after school science activities throughout the USA. http://www.afterschoolscience.org/tools/

Colorado MESA /Mathematics Engineering Science Achievement – Denver, Colorado. Provides online science courses and other numerous resources for STEM education. http://bit.ly/iwR5LP

Colorado STEM Network http://www.stemflorida.net/

Connect a Million Minds (An Initiative of Time Warner Cable) – Provides information about STEM resources in local communities across the nation. http://bit.ly/nWwT6t

Connecticut Community Colleges STEM Program (Hartford, Connecticut) http://bit.ly/p0RL6Q

Council for Opportunity in Education – Louis Stokes Institute for Opportunity in STEM Education http://bit.ly/kLBYw6

Dayton Regional STEM School – Dayton, Ohio http://www.daytonstemschool.org/

Denver School of Science and Technology http://dsstpublicschools.org/

The Department of Defense Ordnance Technology Consortium (DOTC) STEM Education Office, US ARMY – Picatinny, New Jersey http://www.stemresource.org/

Design Squad Nation (WGBH Educational Foundation, Boston) – Contests and projects involving the design of innovative technologies http://pbskids.org/designsquad/video/index.html

Discover Engineering http://www.discoverengineering.org/

Discoveries Unlimited: Multiplying Possibilities. Provides STEM Mentors for Gifted Students. http://discoveriesunlimited.org/

Dos Pueblos High School Engineering Academy. Located in Goleta, CA and is part of the Santa Barbara USD. http://bit.ly/qo1iNU

Edison Muckers – Edison Innovation Foundation. Presents numerous online lessons for elementary and middle school students on energy innovations and applications. http://bit.ly/kykKOU

eGFI (Engineering Go For It – Created by the American Society for Engineering Education (ASEE). Has lessons, a newsletter and a magazine designed to increase students' interest in STEM education and becoming an engineer. http://teachers.egfi-k12.org/

The El Paso T-STEM Center http://epcae.org/tstem/home.asp

Engineering is Elementary® - Engineering & Technology Lessons for Children http://bit.ly/AYmHU

Engineering by Design[™] – INTERNATIONAL TECHNOLOGY AND ENGINEERING EDUCATORS ASSOCIATION (ITEEA) http://www.iteaconnect.org/EbD/ebd.htm

Engineering Empowerment is Mathematicians Collaborating for Children Indiana University Purdue University Indianapolis http://www.engr.iupui.edu/istem/content.php?id=42

Engineering is Elementary – Engineering and Technology Lessons for Children http://bit.ly/dEnirV

Essex County College STEM Program (Newark, New Jersey) http://eccstem.org/default.aspx

Ethos: Helping Children Learn Science http://www.ethosinc.org/

Exploratorium: The museum of science, art and human perception – San Francisco museum of science education. http://bit.ly/dh6lvh

FastTrack STEM Centers http://stemcenters.org/about.html

First Lego League Competition – Introduces Students in Grades 4-8 to Building Lego-Based Robots. http://bit.ly/3JB3RY

Girlstart: Empowering Girls in Science, Technology, Engineering and Math http://bit.ly/koDZWo

Goddard School of Science and Technology – Worcester, Massachusetts – http://bit.ly/j8U8OD

Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) – Study of Gifted Blacks in STEM Programs http://www.giftedblackstem.org/

Hughes STEM High School – Cincinnati, Ohio http://hughesstem.cps-k12.org/about/aboutstem/

Indiana University STEM Initiative http://www.stem.indiana.edu/

Indiana Workforce Development: STEM Schools Taking Root in Indiana http://l.usa.gov/ljmPrl

Industry Initiatives for Science and Math Education (IISME) – Has many Science and Math curriculum resources. http://community.iisme.org/

The Infinity Project – Middle School, High School, and Early College Engineering Curricula http://l.usa.gov/ljmPrl

Innovating Education at Northeast Ohio's STEM Schools http://bit.ly/fflpNs

INTERNATIONAL TECHNOLOGY AND ENGINEERING EDUCATORS ASSOCIATION (ITEEA): STEM Connections http://www.iteea.org/Publications/STEMconnections.htm

Iowa STEM Programs http://www.iowastem.org/links.html

I-STEM Resource Network (Indiana) https://www.istemnetwork.org/index.cfm

It Stems from Algebra: Professor Chris Dede and Assistant Professor Jon Star – Harvard Graduate School of Education http://hvrd.me/l2yP6a

Johns Hopkins Center for Talented Youth http://cty.jhu.edu/ctyonline/ref/YR.html

Junior Engineering Technical Society (JETS) http://www.jets.org/

Junior Science and Humanities Symposium – Promotes original research and experimentation in the sciences, engineering, and mathematics at the high school level. http://www.ishs.org/about.html

Kentucky Center for Mathematics http://kentuckymathematics.org/

KIPP STEM Programs (Houston, Texas) http://kipphouston.org/stemprogramoverview

Knowles Science Teaching Foundation – Offers teaching and research fellowships, and conducts research and evaluation studies. http://bit.ly/ubqi4V

Knox County STEM Academy – Knoxville, Tennessee http://knoxcountystemac.knoxschools.org/

Lindblom Math and Science Academy – Chicago, Illinois http://lindblomeagles.org/index.jsp

Linden-McKinley STEM School on Arcadia: Grades 7-12 – Columbus, Ohio http://bit.ly/irt39a

Los Altos Academy of Engineering – Advanced technical high school in Hacienda Heights, California. http://bit.ly/sPKglX

Maine Pathways to STEM http://www.mainestem.org/METeachers.asp

Manor New Technology High School – High powered STEM school located in East Manor, Texas. http://bit.ly/tHeCX5

Maryland Department of Education: STEM Schools & Local School Systems' Vision and Contact Information http://www.marylandpublicschools.org/MSDE/programs/stem/stem_links

Maryland Science Center – Baltimore science museum that presents lessons to students in physics, mathematics, astronomy and biology. http://www.mdsci.org/

Massachusetts Academy of Sciences – Resources for STEM curriculum. http://bit.ly/eVDS9e

Maysville Community & Technical College STEM Program (Maysville, Kentucky) http://bit.ly/obWJip

Millard Oakley STEM Center (Tennessee Tech University) http://www.tntech.edu/stem/home/

MESA – Mathematics, Engineering, Science and Achievement – Prepares African-American, Native American, Latino and female students for college in mathematics, engineering, and science beginning in elementary school and continuing through high school. http://www.seattlemesa.org/about.htm

Minority Engineering Advancement Program (MEAP) – Indiana University Purdue University Indianapolis http://www.engr.iupui.edu/istem/content.php?id=34

MIT Alumni Association: K-12 STEEM EDUCATION TOOLKIT http://bit.ly/jGOdGO

Museum of Science+Industry Chicago – Has many science programs for teachers and students. http://www.msichicago.org/education/

The National Center for STEM Elementary Education – St. Catherine University http://bit.ly/kD6bZR

National Center for Technological Literacy® – Boston. Provides scholarships, extensive information on different engineering fields, and state-by-state contacts. http://www.mos.org/nctl/about.php

National Girls Collaborative Project http://www.ngcproject.org/directory/index.cfm

National Institute for Women in Trades, Technology and Science – Provides resources and information for increasing the number of women in trades, technology and science fields. http://www.iwitts.org/

National Math + Science Initiative – directed to improving the current and future math and science teachers in the K-12 system and to raising the achievement of American students from the first grade through college. http://www.nationalmathandscience.org/about-us

National Science Foundation – Washington, DC. Fellowships and Grants Available to STEM Educators. http://bit.ly/jgcN2a

Navajo Elementary School STEM Program (Scottsdale Unified School District, Arizona) http://susd.navajo.schoolfusion.us/

New Horizons Governor's School for Science & Technology – Hampton, Virginia http://bit.ly/lzX60v

New Jersey Institute of Technology – Has many STEM programs for minorities and women. http://bit.ly/uuePAI

New Jersey School-Age Care Coalition – New Jersey's Afterschool Stem Initiative http://bit.ly/mEmOJo

New Jersey Technology Student Association http://bit.ly/iF8kdz

New Jersey Region VI Teaching, Learning and Technology Center – Presents extensive resources on STEM education. http://sites.google.com/site/region6tltcsteminitiative/

North Carolina School of Science and Mathematics http://www.ncssm.edu/

Northern Illinois University STEM Outreach http://www.niu.edu/stem/programs/index.shtml

Northern New Mexico College STEM Programs http://bit.ly/p4eTCS

Ohio STEM Learning Network http://bit.ly/mQ2onD

Ohio STEM Learning Network – STEM School Locator http://www.osln.org/stem-school-locator.php

Oklahoma School of Science and Mathematics – Oklahoma City, Oklahoma http://bit.ly/imYctv

Old Dominion University Darden College of Education Department of STEM Education and Professional Studies http://education.odu.edu/ots/academics/undergrad/tech.shtml

PA STEM Initiative http://bit.ly/r2ebly

Passaic County Community College STEM Program (Patterson, New Jersey) http://bit.ly/pok0GI

Pathway to a STEM Degree from Community College to University (Iowa State University of Science and Technology) http://bit.ly/pxcLnh

Pathways to Science – Contains extensive information about STEM programs all over the nation. http://pathwaystoscience.org/Programs.asp

Pitsco Education Online Store: Discovery: Teach STEM with Pitsco http://bit.ly/lof4wv

Pittsburgh Science and Technology Academy 6-12 – Rigorous program for inner city youth. http://bit.ly/vK3VtZ

Preparing Outstanding Women for Engineering Roles (POWER) – Indiana University Purdue University Indianapolis http://www.engr.iupui.edu/istem/content.php?id=35

Preston Middle School of Science, Technology, Engineering & Math - Fort Collins, Colorado http://prestonmiddleschool.org/preston-academics/

Project Based Instruction in STEM Education – Contains numerous applications to STEM Education. http://bit.ly/m8luma

Project Lead the Way – STEM Grants from the United States Department of Education http://bit.ly/gvK1tB

Rachel Freeman School of Engineering – Wilmington, North Carolina http://bit.ly/klERqD

Real World Design Challenge – annual team competition for 9-12 students who work on engineering problems http://www.realworlddesignchallenge.org/

REPORT TO THE PRESIDENT – PREPARE AND INSPIRE: K-12 EDUCATION IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) FOR AMERICA'S FUTURE http://l.usa.gov/dwJak5

Resources for STEM Education – National Science Foundation http://www.stemflorida.net/

RobotEvents.com: Robotics Education and Competition Foundation's Community Portal for Robotics and Technology in Education http://robotevents.com/robot-competitions/vex-robotics-competition

ROVER: Remotely Operated Vehicle Education and Resources – Supported by the Marine Advanced Technology Education (MATE) Center and the National Science Foundation. Offers information and contests for building automated underwater vehicles. http://bit.ly/kbnwFB

Science Foundation of Arizona – Recognition for outstanding work in STEM areas, and describes excellent resources for k-12 programs. http://bit.ly/rxWVqN

Science Matters! Getting Kids Excited about Science http://www.in.gov/icw/files/sci_matter.pdf

Science, Technology, Engineering & Mathematics: A Guide to Goals after Graduation – Learn How to Get From High School to a Successful STEM Career http://www.in.gov/icw/files/G3 STEM.pdf

Science, Technology, Engineering, and Mathematics (STEM) Education – Maryland State Department of Education http://bit.ly/KOZYi

SciMathMN – Advocates for rigorous mathematics, science and technology programs in Minnesota. http://www.scimathmn.org/science.htm

SETDA (State Educational Technology Directors Association) – Has information about state Ed Tech activities. http://bit.ly/R0lk

Siemens STEM Academy – Provides Administrators and Teachers with Resources & Descriptions of Siemens Fellows. http://bit.ly/ajtDOG

Southwest Indiana STEM – University of Southern Indiana http://www.usi.edu/stem/

The Space Shuttle Experience (NASA) – Has detailed interactive information on this program http://shuttleexperience.nasa.gov/home.aspx

The STEM Academy - Develops K-12 STEM Curriculum http://www.stem101.org/about.asp

STEM Academy of Highlands Branch, Colorado – Rigorous middle and high school program. http://www.stemhigh.org/

STEM Career Awareness and Choices – Baltimore County Public Schools http://bit.ly/IDhEbz

STEM: Center for Women and Information Technology http://bit.ly/qLCZ7v

STEMConnector: The One Stop Shop for STEM Education – National and state resources. http://bit.ly/utozvo

STEM Education Center – University of Minnesota http://bit.ly/lQRnQV

STEM Education Coalition http://www.stemedcoalition.org/about-us/

STEM Education in Florida http://www.stemflorida.net/

STEM: Historically Black College University Programs (Thurgood Marshall College Fund, Inc.) http://bit.ly/pdx3ED

STEM Magnet High Schools (Anne Arundel County Public Schools, Maryland) http://bit.ly/pwBgzH

STEM Magnet Lab School – Northglenn, Colorado http://stem.adams12.org/principal

STEM School Academy – Highland Ranch, Colorado http://www.stemhigh.org/?page_id=336

The STEM School Blog – School Resource for Educators, Parents and Students. http://www.stemschool.com/

STEM Schools – Wake County, North Carolina Public Schools http://bit.ly/ghPTGB

STEM Starters (University of Arkansas at Little Rock) – Project focused on developing STEM materials for gifted students. http://ualr.edu/gifted/index.php/home/stem/

STEM Works Indiana: Career Advisors & Counselors Training http://bit.ly/ku4CQS

STEMfinity – Hands-on Educational Kits http://www.stemfinity.com/store/

STEMGrants.com http://www.stemgrants.com/

STEMscape: Ohio STEM Learning Network – Updates on STEM activities in Ohio. http://www.stemscape.org/

Stuyvesant High School – New York City http://stuy.enschool.org/

Successful K-12 STEM Education: Identifying Effective Approaches in Science, Technology, Engineering, and Mathematics (Free PDF download) The National Academies Press – The National Research Council. Excellent report on STEM education programs across the nation. http://bit.ly/kQN4pM

Summer STEM Academy 2011 http://www.wswheboces.org/gt.cfm?subpage=418

Teach Engineering, Resources for K-12 – Has many lessons for teaching principles of engineering design http://bit.ly/jWxQf5

Teaching Institute for Excellence in STEM (TIES) – Provides statewide networks on building STEM programs. http://bit.ly/dNxR2I

Team America Rocketry Challenge – Middle and High School Rocket Building Competition Sponsored by the Aerospace Industries Association http://www.rocketcontest.org/

Technology Experiences Cheerleading (TECh) – Purdue University College of Technology Summer Camp for Girls. http://www.tech.purdue.edu/Camps/TECh/index.cfm

Technology Student Association – Offers resources in STEM education for middle and high school students. http://www.tsaweb.org/What-Is-TSA

Texas Project Lead the Way http://bit.ly/kPm6C2

Texas Center for STEM http://www.utdanacenter.org/tcstem/about.php

Texas Tech University T-STEM Center http://www.depts.ttu.edu/tstem/

Thomas Jefferson High School for Science and Technology – Alexandria, Virginia http://bit.ly/3xur8W

Thomas More College STEM Program (Crestview Hills, Kentucky) http://bit.ly/nluc46

Triangle Coalition for Science and Technology Education – Designed to bring together government, business and education to improve the quality and outcome of STEM education http://www.trianglecoalition.org/

Twelve Best High Schools for STEM Education http://bit.ly/qpqTlv

UC Davis K-14 Outreach Center for Computing and STEM Education (C-STEM) http://bit.ly/jZII18

United States Naval Academy – Summer STEM Program http://bit.ly/k6s154

University of Buffalo Center for Education Collaboration Buffalo, New York Public Schools STEM Program http://bit.ly/nxcc7p

University of Cincinnati STEM Program Master of Education Degree http://bit.ly/nKXrFH

University of Massachusetts MA STEM Initiative http://bit.ly/ncc3jV

University of Minnesota STEM Center http://bit.ly/neCzM7

Urban Center for the Advancement of STEM Education (UCASE) – Indiana University Purdue University Indianapolis http://www.iupui.edu/ucase/

US First Robotics Competition – Founded by the great inventor, Dean Kamen to promote technology and science learning through designing robots. http://www.usfirst.org/aboutus/vision

U.S. Innovation – STEM Education Reports by States http://bit.ly/XZHEC

Virginia Children's Engineering Council – K-5 Technology References and Resources http://www.childrensengineering.org/resources/resources.php

Virginia Space Grant Consortium – Teacher Education STEM Scholarship Program. http://bit.ly/uDgtko

Virginia Tech-Integrative STEM Education http://www.soe.vt.edu/istemed/

Virginia Tech-STEM K-12 Outreach Initiative: STEM Related Educational Journals http://bit.ly/iGU289

Vols4STEM: Volunteers for Science, Technology, Engineering, and Mathematics – Tennessee Society of Professional Engineers, Knox County Schools and the Great Schools Partnership http://bit.ly/m0KDmV

Washington Saratoga Board of Cooperative Educational Services (BOCES) Saratoga Springs, New York

Washington (State) STEM Programs http://www.washingtonstem.org/index.asp

Waukesha (Wisconsin) STEM Academy http://www.waukeshastemacademy.com/Home.aspx

West Point Center for STEM Education – West Point, New York http://cse.usma.edu/

WI STEM.ORG: Wisconsin's Source for all Things STEM http://wistem.org/

Women and Minorities in STEM Education http://bit.ly/jeWEJ9

Zero Robotics – Robotics Competition Sponsored by MIT http://zerorobotics.mit.edu/