



A Partial List of Online and Community Resources

MISF does not endorse or recommend any particular organization, product or professional association. Contact Beth Murphy, MISF STEM Program Manager, at bmurphy@misf.org with suggested additions.

Colleges & Universities

Bethel University: STEM in K-12 Education Certificate

Hamline University: Center for Global Environmental

Education (CGEE)

St. Catherine University: National Center for STEM

Elementary Education

University of Minnesota:

BrainU: The Neuroscience Teacher Institute

Monarch Lab

STEM Center and STEM Center resources

University of St. Thomas:

Center for Engineering Education (CEE)

Playful Learning Lab

Museums & Education Providers

<u>The Bakken Museum</u>: inspiring a passion for innovation to make the world a better place

<u>Bell Museum</u>: Minnesota's natural history museum with a mission to ignite curiosity and wonder, explore our connections to nature and the universe, and create a better future for our evolving world

<u>Climate Generation: A Will Steger Legacy</u>: empowering individuals and their communities to engage in solutions to climate change

<u>Code Savvy</u>: striving to make kids and teens more codesavvy through creative educational programs and services

<u>Curious Minds</u>: providing STEAM education programs for ages 18 months to 12 years

<u>High Tech Kids</u>: nonprofit that supports Minnesota *FIRST®* LEGO® League Junior, *FIRST®* LEGO® League, and *FIRST®* Tech Challenge programs

Minnesota Zoo: Created by the State of MN, the Minnesota Zoo has a mission to connect people, animals, and the natural world to save wildlife

<u>Science from Scientists</u>: providing exciting, informative and engaging programming by practicing scientists

<u>Science Museum of Minnesota</u>: hands-on exhibits, dinosaurs and the Omnitheater as well as field trips, outreach programs, and teacher professional development

<u>Science House</u>: membership-based teacher resource to borrow instructional, hands-on STEM materials, at SMM

<u>World Savvy</u>: educating and engaging youth to learn, work, and thrive as responsible global citizens

<u>The Works Museum</u>: hands-on kids museum all about engineering

Professional Associations

Minnesota Council of Teachers of Mathematics

Minnesota Science Teachers Association

Minnesota STEM Teacher Center

Minnesota Technology and Engineering Educators Association

SciMathMN





Additional Resources & Curriculum

<u>American Association of Chemistry Teachers</u>: classroom resources for grades K-12

National Chemistry Week: October 22-27, 2017

<u>Edutopia</u>: resources for teachers including project-based learning and integrated studies

<u>Engineering byDesign™ Program</u>, e.g. EbD, developed by the International Technology and Engineering Educators Association (ITEEA)

<u>Engineering is Elementary</u>: developed by the Museum of Science, Boston

<u>Engineer's Playground</u>: information, products and services about engineering and STEM for schools and parents

<u>Full Option Science System (FOSS)</u>*: K-8 science curriculum from the Lawrence Hall of Science, University of California, Berkeley

getSTEM of Minnesota, a web portal designed to connect Minnesota educators with science and technology businesses

<u>Great Explorations in Math and Science</u> (GEMS): from the Lawrence Hall of Science, University of California, Berkeley

<u>KidWind</u>: clean energy curriculum and classroom materials

LASER Classroom™: K-12 tools and resources to teach about light, lasers and optics

<u>Maker Education</u>: whose mission is to create more opportunities for young people to build confidence, foster creativity, and spark interest in STEM and the arts

<u>National Center for Technological Literacy</u>: programs and resources to raise awareness and understanding of engineering

Science and Technology Concepts Program™(STC):

inquiry-based science curriculum for K–10 covering life, earth and physical sciences with technology. Developed by the Smithsonian Science Education Center

Science Companion: curriculum for teachers, by teachers

SciGirls: evidence-based practices in STEM education for girls

<u>Sparticl</u>: a science web and mobile device information service for teens

<u>TeachEngineering</u>: digital library of standards-based engineering content for K-12

<u>TryEngineering</u>: engineering resource for students, parents, teachers & school counselors

<u>Teachers TryScience</u>: a collaborative effort between the New York Hall of Science, IBM Corporation and teachengineering.org to provide STEM Lessons/resources for educators, including teacher-contributed lessons

<u>Vernier</u>: company that provides sensors, software and curriculum to teach science and collect and interpret data

State Agencies

Minnesota Department of Education

STEM Education

Geographic Information Systems (GIS) in K-12

Minnesota Department of Natural Resources: providing natural resources education