

**The Minnesota STEM Network** is aimed at addressing critical issues in improving STEM education in Minnesota. By articulating and aligning strategies, and effectively communicating the value of STEM, the network is committed to powering STEM learning and innovation across Minnesota. Formed in 2010, the MN STEM Network seeks to connect the the following key stakeholders and audiences:

- Business leaders
- Higher education leaders
- K-12 teachers and administrators
- Informal educators
- Parents and students
- Leaders of non-profit STEM organizations
- Policymakers and legislators
- Community leaders



POWERING STEM LEARNING AND  
INNOVATION ACROSS MINNESOTA

AN INITIATIVE OF



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### Design Principles

1. Effective STEM learning opportunities will be available to all Minnesotans, regardless of income, gender, ethnicity or geographic location.
2. Business and industry will play a key role with formal and informal education to strengthen the STEM literacy of students and teachers.
3. Formal and informal learning opportunities will integrate science, technology, engineering and mathematics with each other and with the arts, humanities and other disciplines.

### Network Goals

Working toward this vision, the goals of the Network are to increase:

1. Connections across sectors leveraging common interests in STEM: business and industry, government, higher education, pre-K-12 education, informal education, families, communities and foundations.
2. The pace of innovation in STEM education and workforce development across Minnesota driven by collaboration across sectors.
3. Participation by business and industry generating a dramatic increase in real world learning opportunities for students and teachers.
4. The number of students selecting STEM as a career opportunity, especially by women and underrepresented minorities.

### Strategies

In order to achieve its goals, the Minnesota STEM Network will:

1. Share among its members innovations and best practices in STEM education, using a variety of information sharing methods.
2. Promote the value of STEM to students, parents, and community through large promotional events and online resources.
3. Develop an inventory and map of STEM learning and employment opportunities at all levels throughout Minnesota.
4. Act as a facilitator for coordinating initiatives to improve STEM learning in schools, colleges and the community and assist Network members to obtain funding for those initiatives.
5. Facilitate the formation of groups in Minnesota's geographic regions in order to customize Network activities to the needs of different communities.
6. Engage formal and informal educators, students and community leaders in a process to identify communities that need additional STEM resources or that can demonstrate leadership in STEM.
7. Communicate and collaborate with STEM networks and alliances in other states in order to improve STEM learning in Minnesota and throughout the United States.

*(continued)*

### Mission Statement

The Minnesota STEM Network will enable Minnesotans to value and use STEM knowledge and skills in their daily lives, work and citizenship to improve quality of life, innovation and economic competitiveness.

### Vision

All Minnesotans will actively engage in science, technology, engineering and mathematics as a means toward lifelong learning, informed civic engagement, and a vibrant economy.

### Who We Are

The Minnesota STEM Network is a statewide alliance of diverse individuals and organizations in Minnesota advancing science, technology, engineering and mathematics (STEM) in education, workforce development and community engagement. The network is a new initiative of SciMathMN in collaboration with leading partners across Minnesota.

## Performance Measures

The Minnesota STEM Network will assess its progress using the following measures:

### For Learners

1. Student results on statewide mathematics and science tests, as well as results on national and international assessments.
2. Participation rates of female students and students of color in STEM disciplines in post-secondary education, and entry-level employment.
3. Participation of learners in informal science education opportunities, including engineering/design competitions, robotics and environmental learning programs.
4. Percentage of female employees and people of color in leadership positions in STEM businesses within Minnesota.

### For the Network

1. A database and communications network will be established across sectors.
2. Best practices will be shared across the network through network communications and meetings including quality fairs.
3. Underserved communities as well as STEM pathways within regions will be identified for the STEM Alliance and communities at large.
4. Alliance networks with local leadership will be established in geographic regions of Minnesota.
5. Increased engagement of individuals from business and industry in education and more public/private partnerships in support of active STEM learning.
6. Proportion of pre-K-12 schools and classes engaged in active learning and real world examples.
7. Increased outreach by colleges and universities to build teachers' STEM knowledge and students' interest in STEM disciplines and careers.
8. More positive attitudes of students and parents toward STEM education and STEM career opportunities.



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## In Partnership with



## 2012-2013 Leadership Team

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