State Networks Propel STEM Education
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Expert Presenters:

**Jeff Weld**, executive director, Governor's STEM Advisory Council, Iowa

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An on-demand archive of this webinar will be available at www.edweek.org/go/webinar in less than 24 hrs.
Iowa’s Statewide STEM Network

an initiative of the

Governor’s STEM Advisory Council

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Jeffrey Weld, Ph.D.
Executive Director
Iowa Governor’s STEM Advisory Council

www.IowaSTEM.gov
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Available at http://www.iowastem.gov/imsep/annual-reports-publications-and-studies
EXECUTIVE ORDER SEVENTY-FOUR
The Council shall have the following objectives:

a. Engage the public and private sectors in STEM ed.;

b. Increase students’ interest and achievement in STEM;

c. Recruit and prepare teachers to teach STEM;

d. Map STEM education to economic development;

e. Develop and implement a statewide STEM plan.
Iowa Governor’s STEM Council

STEM Council Co-Chair
Lieutenant Governor
Kim Reynolds

STEM Council Co-Chair
University of Northern Iowa President Ben Allen

Business & Industry (13)
Nonprofit & Youth Orgs. (5)
PreK-12 Education (4)
Local and state Government (8)
Higher Education (10)
Iowa STEM Council’s Activities

1. Exemplar Scale-Up
2. Regional Network
3. STEM Policy & Programs
STEM Exemplar Scale-Up

1. A World in Motion (137)
2. FIRST Lego League (198)
3. FIRST Tech Challenge (119)
4. KidWind (65)
5. The CASE for Agriculture Education in Iowa (96)

12. Engineering is Elementary (63)
STEM Policy & Programs

REAL WORLD EXTERNSHIPS

Iowa Teacher Intern License Pathway—Answering the Call to Teach

2013 Iowa STEM FILM FEST

www.IowaSTEM.gov
Lessons Learned

State STEM Initiative Leaders
• Network
• Diversify Funding Stream
• Measure, Measure, Measure

Business leaders
Prioritize Your Pipeline

Community leaders
Think STEM Haven

Government Leaders
Keep STEM Nonpartisan (multi-partisan?)

K-12 leaders
Nurture Your STEM Roots & Build Bridges
STEM Resources

Triangle Coalition for Science & Technology Education
http://www.trianglecoalition.org

STEM Connector
http://www.stemconnector.org

National Governor’s Association STEM Center for Best Practice
http://www.nga.org/cms/stem

Ntl. Alliance of State Science & Mathematic Coalitions
http://www.nassmc.org

Change The Equation
http://changetheequation.org
Thank you

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California STEM Learning Network

Established 2010

Marcella Klein Williams
Chief Education Officer

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Who We Are

CSLNet
A network of public and private sector STEM education leaders working at the statewide, regional and local levels across California.
We Envision a Time When:
All students in California will graduate with the STEM knowledge and skills required for success in education, work, and their daily lives.
CSLNet’s Mission is to:
Help California prepare the nation’s most STEM-capable graduates by coordinating and activating a statewide network representing all STEM stakeholders.
CSLNet Long Term Goals

Long-Term Goals:

Build partnerships that connect existing education, business and community assets to increase efficiency, innovation, scale and sustainability of quality STEM teaching and learning.

Strengthen quality of and expand access to STEM education across California’s PK-16 formal and informal educational institutions.

Increase STEM interest and competencies of all students in California and increase the number of students who pursue STEM-related credentials, degrees and careers.
CSLNet’s Regional Partners
Why a Cross-Sector, Statewide Network is Needed to Advance STEM Education

**Speed of Change:**
Rapid speed of change in STEM knowledge and technology requires continuous information flow between education, research and industry.

**Scale:**
Scale and cost of STEM instructional resources (e.g., labs, equipment) can not be met by education alone.
Why a Cross-Sector, Statewide Network is Needed to Advance STEM Education

Hands-On Learning:
Opportunities for hands-on and informal education are critical for student engagement and learning.

Policy Change:
Broad and diverse consensus is a powerful driver of policy change.
Critical Infrastructure

- Strong Leadership & Commitment
- A Critical Mass of Stakeholders
- Backbone Support
- Community Vision
- Shared Measurement
- Resources
- Continuous Communication
- Mutually Reinforcing Activities
Network Behavior

- Collaboration
- Cooperation
- Coordination
- Resource Sharing
- Networking
Coordinated Programmatic Solutions

Assessment & Planning
An important part to successfully implementing quality STEM learning opportunities is creating a comprehensive plan and continually assessing the plan for improvement. This section features several different planning and assessment tools.

Curriculum & Activities
In this section you will find activities, STEM curricula and links to databases to search vetted curricula. Implementing STEM activities in your OST programs is a great place to start, but ideally programs should be moving towards creating a comprehensive plan where quality STEM curriculum is implemented regularly.

Funding
This section provides a variety of STEM funding opportunities that are currently available for OST programs as well as links to funding websites to keep up with the various other funding opportunities that are available.

STEM Committee
The STEM Committee of the California AfterSchool Network is a dedicated group of professionals sharing information, resources, promising practices, as well as a shared work plan intended to advance STEM in out-of-school time in California.
Links & Contact Information

- CSLNet: [www.cslnet.org](http://www.cslnet.org)

- Power of Discovery: STEM²: [www.powerofdiscovery.org](http://www.powerofdiscovery.org)

- STEMx: [www.stemx.us](http://www.stemx.us)

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805.665.6318
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Ed-Tech Leadership for Better Schools—Leaders to Learn From

Required Reading from *Education Week*:

**Spotlight on STEM**
Schools and policymakers emphasize STEM as a way to prepare students for 21st century challenges, leaving teachers with their own challenge: How do you successfully engage students in these subjects? This Spotlight offers tips on how to create effective science and math learning opportunities for students.