

Iowa Governor's STEM Advisory Council Advocate Guide



Why Advocate for STEM in Iowa?

Strong interest and ability in science and mathematics with applications to technology and engineering provide young Iowans with a pathway to the future. In fact, STEM is a vital economic development advantage for quality job growth in our state. STEM graduates are in great demand to meet current and future workforce needs.

How can you help? It's important for legislators and policymakers—especially the general public—to understand why STEM is important and learn of the successes we have seen so far. This guide can help you advocate in support of STEM programming and activities in Iowa.



About the Iowa Governor's STEM Advisory Council

In July 2011, Governor Terry Branstad signed Executive Order 74 to create the Iowa Governor's STEM (Science, Technology, Engineering and Mathematics) Advisory Council. The STEM Council's mission is increasing interest and achievement in STEM (science, technology, engineering and mathematics) studies and careers through partnerships engaging preK-12 students, parents, educators, employers, non-profits, policy leaders and others. The Council provides opportunities that inspire Iowa's young people to become innovative, enterprising contributors to our future workforce and the quality of life in our communities. The STEM Council is a public-private partnership funded by the Iowa Legislature and receives significant support from Iowa business and industry, colleges and universities, national and state grants, program providers and other cost-sharing partners.

Governor Kim Reynolds and Analytical Laboratory Owner and Director of Technical Services Diane Young serve as co-chairs of the STEM Council, which is made up of leaders in higher education, PreK-12 schools, business and industry, nonprofits, government and more. The STEM Council's 50 members collaborate to boost STEM education and innovation with a focus on equitable access to STEM learning opportunities. The STEM Council develops and promotes STEM-specific policies, education programs, events and other resources for Iowans. Regional boards advise six regional STEM managers housed at competitively-awarded Hub Institutions to carry out the STEM Council's vision.

How and What to Communicate to Stakeholders, Policymakers and Media

Know Your Stuff

On pages 4 and 5 of this guide, you will find a discussion guide and message map. Become familiar with them so you can speak freely and fluidly without them. Provide a handout that details what you talked about, like the STEM At A Glance or the Guidelines for School+Business Partnerships, which can be found at www.iowastem.gov/outreach/business.

It also helps to learn about your audience before you speak to them.

If you are speaking to a legislator, read his or her legislator profile online at www.legis.iowa.gov/legislators to learn about his or her interests—like committees he or she is on—and other personal and professional information. That way, you can make a connection with the legislator and tune into reasons he or she may want to support STEM efforts.

Potential business partners will want to hear about how STEM can have a positive effect on their business and their workforce. The STEM students of today are the workforce of tomorrow. It is important to businesses to ensure their future employees are skilled and qualified to work for them one day.

If you're speaking to the media, research the types of stories they usually have an interest in and present STEM from an angle that would be intriguing to them. For instance, if they are interested in community activities, speak to that. If they are education-focused, talk about the strides made with STEM in schools. The following are STEM activities, programs and events that may be of interest to each of these audiences.

STEM Programs and Events

- **STEM Scale-Up Program:** Exemplary STEM programs available to Iowa educators across the state at little to no cost.
- **STEM BEST® (Business Engaging Students and Teachers):** School+business partnerships that provide work-based learning experiences for students.
- **Iowa STEM Teacher Externships:** Secondary STEM teachers immerse themselves in local workplaces for six weeks during the summer.
- **Iowa STEM Teacher Award:** An annual award sponsored by Kemin Industries to recognize one Iowa STEM teacher from each of the six STEM regions for inspiring students in STEM subjects.
- **Computer Science is Elementary:** A project that transforms twelve high-poverty elementary schools into showcases of outstanding computer science education.
- **Microsoft Imagine Academy:** A software and systems certification program that bridges the worlds of education and work.
- **STEM Seal of Approval:** This designation recognizes and supports select, non-Council programs and events that help achieve STEM Council goals.
- **Regional Family STEM Festivals:** Each Iowa STEM region hosts several family STEM festivals throughout the year to offer hands-on learning experiences provided by business and educational organizations local to each community.

Introduce yourself. Talk about your professional role and the part you play with STEM in Iowa.

Ask your audience what they know about STEM in Iowa and in their community. Are they aware of any programs or activities or of what local schools are doing to raise awareness of and teach STEM subjects?

YES

They have a good amount of knowledge about what STEM is and of STEM efforts in their community.

Discuss the benefits of what they know/have seen in their community and introduce them to other STEM activities, programs and events they may not have known about.

NO

They have not heard much or anything about STEM in general or STEM efforts in their community.

Give them an overview of what the Iowa Governor's STEM Advisory Council is and talk about why STEM has become a priority in Iowa through STEM activities, programs and events in their communities.

Use the message map on page 5.

TALK ABOUT:

Why STEM is important and why it is more important now than ever before.

Personal STEM stories to which your audience can relate.
STEM results and successes so far.

Iowa STEM Message Map

Mission Statement:

The Governor's STEM Advisory Council mission is increasing interest and achievement in STEM (science, technology, engineering and mathematics) studies and careers through partnerships engaging preK-12 students, parents, educators, employers, non-profits, policy leaders and others. The Council provides opportunities that inspire Iowa's young people to become innovative, enterprising contributors to our future workforce and the quality of life in our communities.

Key Message:

The Iowa Governor's STEM Advisory Council is dedicated to increasing interest, awareness and achievement in science, technology, engineering and mathematics subjects to:

- Provide better educational opportunities for Iowa students, border to border, rural to urban, girls to boys and especially those currently underrepresented in STEM.
 - Cultivate a skilled workforce
 - Drive economic development in Iowa
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Supporting Messages

Why STEM? Why Now?

Strong interest and ability in science and mathematics with applications to technology and engineering provide young Iowans with a pathway to the future. In fact, STEM is a vital economic development advantage for quality job growth in our state. STEM graduates are in great demand to meet current and future workforce needs.

86 percent of Iowans support state efforts to devote resources and develop initiatives to promote STEM education in Iowa.

95 percent of Iowans agreed that STEM education should be a priority in their local school districts.

Only 58% said STEM education actually is a priority.

STEM Results and Successes

Students who participated in the STEM Scale-Up Program performed better on statewide tests than students who did not receive STEM Scale-Up Programming. This is consistent among students of all gender and race subgroups.

In 2020-2021, STEM Scale-Up Program participants scored an average of 3 points higher in mathematics and 1 point higher in science for grades 3-11.

In 2020-2021, a higher proportion of students who participated in a Scale-Up Program said they were interested in working in Iowa compared to all students statewide.

STEM Community Support

Support from business and industry partners, state and national grants, and cost-sharing partners nearly matches the state's legislative appropriation.

Use these messages and leave the STEM At A Glance with them to help educate your audience. Also, encourage them to visit the Iowa Governor's STEM Advisory Council website (www.IowaSTEM.org/) for more information.

Before you end the conversation, make sure you remind your audience of specific ways they can get involved and invite them to connect with their Regional STEM Manager to get started.



Thank you

Thank you for understanding the importance of STEM in Iowa and advocating for its growth. With your help, our state will continue to see advancements in STEM education and careers for years to come.

The Iowa Governor's STEM Advisory Council welcomes collaboration and communication to help advance STEM in Iowa. Please contact us with any information or suggestions for the STEM Council or to learn more about Iowa's STEM initiative at info@lowaSTEM.org.

**TOMORROW
STEMS
FROM IOWA**

GOVERNOR'S STEM ADVISORY COUNCIL

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