

# April, 2021

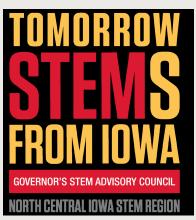
North Central STEM Region Monthly News

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## **New STEM BEST Program Resources**

The STEM BEST Program encourages teachers and industry professionals to develop a work-based learning model that incorporates STEM subjects like mathematics and science with experiential learning opportunities to emphasize the necessary skills for the workplace. The STEM Advisory Council has resources to help guide school districts in formulating their STEM BEST plan and application. For more information about the STEM BEST Program or to submit an application for the program, visit <a href="https://www.iowastem.org/STEMBEST">www.iowastem.org/STEMBEST</a>.

#### **STEM BEST Mentors**

The STEM BEST Mentors are leaders within their own STEM BEST model that have the knowledge and experience to help you apply for and develop a successful STEM BEST Program model. They can provide direct support and answer questions through the application process and connect potential STEM BEST applicants with additional resources.

List of Mentors

### **STEM BEST Office Hours**

The STEM Advisory Council's Project Coordinator, Tanya Hunt, has set aside time to connect with anyone who wants to learn more about the STEM BEST Program. Each week, she will host office hours to discuss topics relevant to STEM BEST and answer any questions. To register, click the button below.

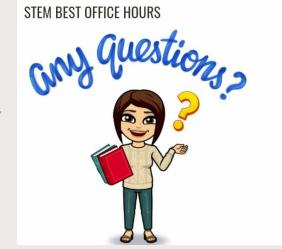
#### "What is Cost-share?!"

What is cost-share and how do I meet the 1:1 requirement for a STEM BEST proposal? Join us to answer questions or hear potential examples of cost-share.

Monday, April 26 from 2:00-3:00pm Tuesday, April 27 from 5:00-6:00pm Wednesday, April 28 from 12:00-1:00pm Thursday, April 29 from 7:00-8:00pm Friday, April 30 from 11:00am-12:00pm

"Help, I'm writing a proposal!"
Hear tips for submitting your STEM BEST proposal.

Monday, May 3 from 1:00-2:00pm Tuesday, May 4 from 9:00-10:00am Wednesday, May 5 from 3:30-4:30pm Thursday, May 6 from 7:30-8:30am Friday, May 7 from 11:30-12:30am



## **STEM BEST Office Hours**

# Welcome New Co-Chair: Diane Young

We are thrilled to welcome the new Iowa Governor's STEM Advisory Council Co-chair, Diane Young, Owner and Director of Technical Services at Foundation Analytical Laboratory.

Young has been a long-time proponent of STEM education. "I am honored to be following in the footsteps of the rock stars that have championed this initiative and to work with the extremely talented members of the Iowa Governor's STEM Advisory Council," says Ms. Young.



# Summer STEM Opportunities

Communities across North
Central lowa offer a variety of
summer STEM experiences that
includes topics such as robotics,
coding, engineering, making &
creating and outdoor
experiences. For a list of
opportunities through your local
Community College or University,
check out our website. If you
would like to have camp
information listed here that is not
included, let us know!

**Summer STEM** 



Astro Camp® is an opportunity to bring NASA STEM lessons to the youth of lowa. The goal of Astro Camp® is to give all youth the chance to get involved in and experience Science, Technology, Engineering and Mathematics (STEM) -- and to inspire future astronauts and engineers to learn about space with NASA unique activities.

To date, a total of 39 ISU Extension and Outreach county offices, the Science Center of Iowa, and the Putnam Museum and Science Center will be hosting camps, projected to reach over 1,000 youth across the state of Iowa this summer. In addition, Astro Camps are still in the running for a downlink or a chance to speak with astronauts aboard the International Space Station. If chosen for a downlink, this event will be broadcast to the public on NASA TV.

Preparation for the camps includes training on featured NASA curricula, delivery of a camp material kit, and precamp activities for youth such as a lunch and learn. Camp activity highlights include the creation of a mission patch, building a space habitat and a state-wide rocket launch. Astro Camp® is a great way to help youth foster career dreams of tomorrow and develop life-changing goals through Next Generation science, math, and engineering skills!

"We are so excited to be working with partners to offer this exciting opportunity to the youth of Iowa. We hope that Astro Camp inspires youth to learn more about space and to consider a STEM profession," shares Sara Nelson, Assistant Director of Education and Outreach for the Iowa Space Grant Consortium. Partners for this statewide STEM event include the NASA Iowa Space Grant Consortium, Iowa 4-H Youth Development, Governor's STEM Advisory Council, Science Center of Iowa, University of Northern Iowa, Putnam Museum and Science Center and Iowa PBS. To find out more information on AstroCamp, contact your local county extension office, the Science Center of Iowa or the Putnam Museum.

A part of NASA's National Space Grant College and Fellowship Program since 1990, the ISGC continually strives to improve and inspire Iowa's future in Science, Technology, Engineering and Math (STEM). The ISGC supports aerospace research, education and outreach activities for all Iowans with NASA internships, fellowships, and scholarships, competitions for grants within higher education members (with NASA Mission Directorate alignment), as well as informal education grants with outreach affiliates.

With the help of six universities across the state, as well as a number of private industries, educational and government organizations, and science museums, ISGC is able to carry out its goals. Funding from the ISGC for grants and projects is allocated through our affiliates.

## Release of 2019-2020 STEM Evaluation Report

Since launching a formal STEM education initiative in 2011, the Iowa Governor's STEM Advisory Council has prioritized transparency and accountability across its STEM endeavors. Iowans have come to trust and depend on the independent assessment of Iowa STEM each year by the inter-university consortium of Iowa State University's Research Institute for Studies in Education (RISE), University of Iowa's Iowa Testing Program, and the lead organization, University of Northern Iowa's Center for Social and Behavioral Research (CSBR). The STEM Council has released the 2019-2020 Iowa STEM Evaluation Report, which highlights the statewide impact of STEM Council's programs on PreK-12 students and teachers across the state. The independent assessment examines eighteen indicators ranging from student interest in STEM, public support of STEM and postsecondary majors and career trends in STEM.

### Highlights of the report include:

- In 2019-20, 96% of lowans said STEM education should be a priority in their local school district.
- Students who participated in the STEM Scale-Up Program performed better on state assessments than students who did not receive STEM Scale-Up Programming. In 2016-2018, STEM Scale-Up Program participants scored an average of five points higher in mathematics and four points higher in science for sixth to 10th grade students.
- The number of minority students enrolled in STEM coursework has increased by +5.9% in science, +3.2% in technology, +3.1% in engineering, +6% in mathematics and +4.9% in health in the last seven years.
- Iowa university enrollees who took part in the STEM Scale-Up Program in kindergarten through grade 12 were 22% more likely to major in a STEM field.
- Community college STEM diplomas, certificates and degrees increased 8% among white graduates and 31% among minority graduates compared to 2013.

Due to the pandemic, lowa's statewide standardized tests were not administered in 2019-20. Some annual indicators monitored by STEM evaluators are therefore not available for this report.

To view the entire report, please visit **lowaSTEM.org/iowa-stem-evaluation**.

# STUDENT INTEREST IN STEM



A higher proportion of students who participated in a STEM Scale-Up Program said they were "very interested" in all STEM subjects and in pursuing a STEM career compared to all students statewide.

# **RURAL AND URBAN AWARDS**



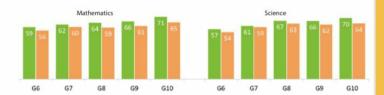
Urban communities include 49 communities in lowa listed as "urbanized areas" by the U.S. Census Bureau and communities with a population of 20,000 or greater.

# STUDENT ACHIEVEMENT AT PROFICIENT OR ADVANCED LEVEL

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 2016-2018, STEM Scale-Up Program participants scored an average of 5 points higher in mathematics and 4 points higher in science for grades 6-10.

In 2018-2019, 85% of students who participated in a Scale-Up Program said they were interested in working in lowa compared to 79% of students statewide.





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### Calendar of Events

April 12-May12
Virtual Aviation Festival

May 10
STEM BEST Application Closes

May 21 NC STEM Region Advisory Board Meeting 12-2 PM

#### Contact Us

NC Regional Manager:

Dr. Kelly Bergman

Phone:

515-203-7247 E-mail:

## 2020-2021 NC STEM Advisory Board

Jerry Chizek, Manson
Kristle Curtis, Mason City
Lindsey Falk, St. Ansgar
Ashley Flatebo, Garner
Sara Nelson, Ames
Michael Pedersen, Marshalltown
Kathy Rogotzke, Mason City
Sarah Rosenblum, Marshalltown
Kay Schmalen, Clear Lake
Camille Sloan Schroeder, Boone
Matthew Stephan, Fort Dodge
Kerry Weig, Nevada
Nancy Woods, Boone
Michael Young, Ames
David Zrostlik, Garner

kbergman@iastate.edu

Website:

ncstemhub.iastate.edu

Address:

lowa State University 1259 Stange Rd Ames, IA 50011-1002

## Connect with us





