

December 2018

SC STEM Hub Newsletter



**We had a great 2018
and look forward to
serving you in the new
year!**



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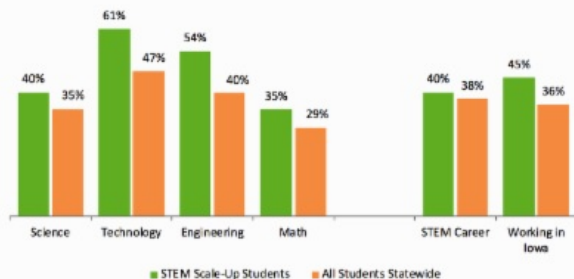
Calendar: Calendar of Events

Hashtag: #STEMinYourWorld

Working to Increase Student Interest and Achievement in STEM

Since 2012, an estimated 462,778 preK-12 students have participated in state-wide Scale-Ups. There is a correlation between participation in Scale-up and achievement in Math, Reading, Science, AND interest in STEM Careers and Working in Iowa.

STUDENT INTEREST IN STEM



A higher percentage of students who participated in STEM Scale-Up Programs said, "I like it a lot" or were "very interested" in STEM-subjects, as well as in pursuing a STEM career and in working in Iowa after graduation compared to all students statewide.

Scale-Ups in Review



Above: The collage shows Scale-Ups in action. The award begins with professional development, where teachers learn about the materials they'll receive and model best practices. All programs offer year-long resources and some have online support that create community year after year.

A Year of Scale-Ups

Since 2012, the STEM Council has partnered with STEM education programs that have reached up to 100,000 young Iowa learners each year, engaging them in exemplary STEM curriculum across the state. Thousands of educators in and out of schools across Iowa have delivered exciting units in robotics, coding, engineering design, agriculture, animal science and more.

From January 2018-December 2018, 34,020 students and 564 educators in South Central Iowa have received STEM training and materials through our Scale-Up Program Awards. **Here is who received an award for the 2018-19 academic year.**

2019-20 Scale-Up Applications Open January 21

The Iowa Governor's STEM Advisory Council will release the menu for next year's STEM Scale-Up programs on **January 14, 2019.**

Applications open for these programs on **Monday, January 21, 2019 and close March 4, 2019.** Selected applicants will be notified of their award beginning in early April.



Iowa's Scale-Up programs are selected with the goal of providing students rigorous, hands-on learning experiences. They begin with in-depth professional development experiences, all materials are provided for a classroom experience, and the state follows-up with a 2-part evaluation tool.

Scale-Ups are open to all formal and informal educators, including:

- * public and private schools
- * home schools
- * before/after school experiences
- * scouts
- * 4-H
- * community programs
- * library endeavors
- * and more.

To learn more about the Scale-Up programs, visit

<http://iowastem.gov/Scale-Up>

Programs in Review



Above: This collage shows what happens at a typical STEM festival, students visit exhibitor tables, participating in hands-on activities and learning about STEM careers.

Festival Numbers

Since January 2018, 3,500 South Central Iowans participated in our 7 STEM Festivals. The philosophy is two-fold, festivals are about learning, investigation and career readiness, but they're also about FUN!

The South Central Regional Hub partners with local community leaders and educators to host annual family STEM festivals. Exhibitors from throughout Iowa spark student and parent interest with hands-on learning ranging from driving robots and trying virtual welding to testing chemical reactions and building structures. Learn about **festivals here**.

The BEST of 2018

We awarded \$25,000 to each of our 3 new BEST awardees, bringing the total number of Businesses Engaging Students and Teachers Programs to 50 in the state, with a total of 9 in South Central Iowa.

Districts awarded in the South Central Region include: Des Moines Schools Central Academy, Ottumwa Community School District, and St. Theresa's in Des Moines. **Here are some details about each program.**

We LOVE Teachers

We honored one outstanding educator for her Innovative Outstanding Worldly Academic (I.O.W.A) STEM teaching, Dr. Holly Showalter. Take a moment to be inspired by **Dr. Showalter's story**. Plans to surprise the 2019 awardee are underway! Thanks to Kemin Industries for sponsoring this annual award.

This past summer, 22 South Central Region teachers did summer externships across 12 extern host sites. Educators work side-by-side with knowledgeable and skilled industry employees who help bring classroom curriculum to life. Check out their day-to-day experiences in a **collective blog**.

Growing Emphasis on Comp Sci

Iowa is making progress in the computer science standard's area in three ways: First, the legislature passed a new state mandate encouraging schools to include computer science in their curriculum, leaving



First Fest of 2019: IMMAW Education Day Mini-STEM Fest

WHEN: Friday, January 25, 2019

TIME: 9-2 pm

WHERE: Iowa Event Center

Event History

I'll Make Me a World in Iowa (Iowa's African American Festival) is pleased to offer its Education Day programming to middle and high school students with the important goal of promoting education, awareness, and reservation around African-American history. The South Central STEM Hub coordinates a mini-STEM festival within the Education Day experience. We invite you and your students to join us once again for a day filled with educational opportunities and fun.

Who should attend?

Education Day is a golden opportunity to enrich social studies, world history, world cultures or government classes. IMMAWII Education Day is a wonderful opening activity or culminating project for an extracurricular activity such as debate team, social studies club or diversity club.

The day features:

- Black History Game Show
- Biz Pitch Contest
- Keynotes and Workshops
- College Fair
- Mini-STEM Fest
- and More!

Attend or Volunteer

how and when up to local control.

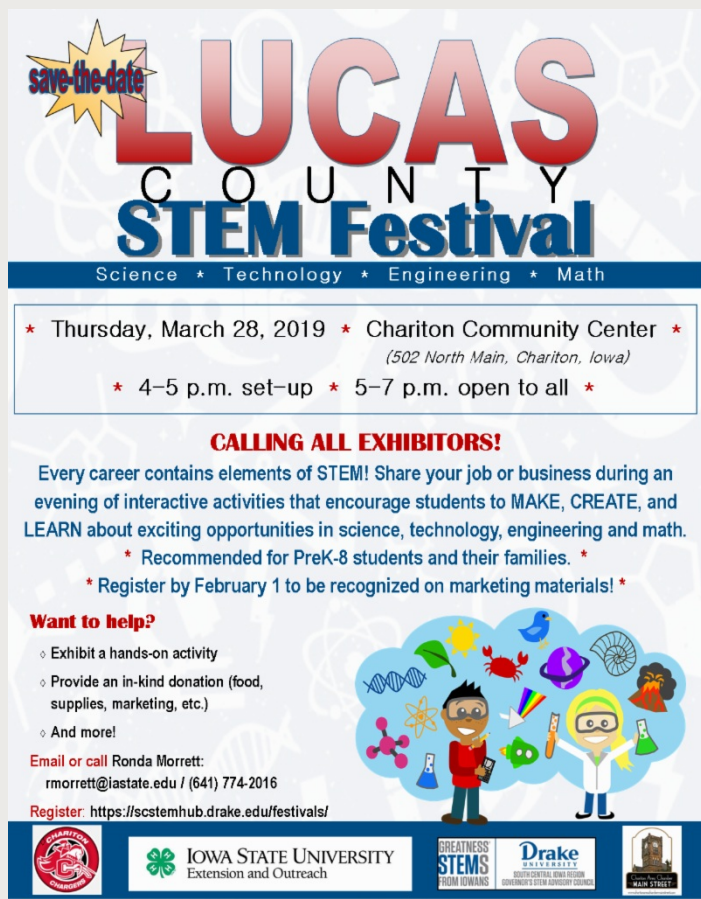
Click [HERE](#) to register to attend.

Second, the STEM Council is raising private dollars to pilot six more schools after the Loess Hills Elementary School model of including computer science in all aspects of teaching and learning. With the **application opening** in January, high-poverty schools are encouraged to apply.

If you'd like to exhibit, present or contribute, please email IMMAW Executive Director, [Betty Andrews](#).

Finally, the state has funded professional development opportunities for educators who wish to improve and expand their own skills. With \$500,000 from the Microsoft settlement and an additional \$500,000 from the state, educators in 49 districts across the state have participated.

New Fest: Lucas County



save the date

LUCAS

C O U N T Y

STEM Festival

Science * Technology * Engineering * Math

★ Thursday, March 28, 2019 ★ Chariton Community Center ★
(502 North Main, Chariton, Iowa)

★ 4-5 p.m. set-up ★ 5-7 p.m. open to all ★

CALLING ALL EXHIBITORS!

Every career contains elements of STEM! Share your job or business during an evening of interactive activities that encourage students to **MAKE, CREATE, and LEARN** about exciting opportunities in science, technology, engineering and math.






★ Recommended for PreK-8 students and their families. ★
★ Register by February 1 to be recognized on marketing materials! ★

Want to help?

- ◆ Exhibit a hands-on activity
- ◆ Provide an in-kind donation (food, supplies, marketing, etc.)
- ◆ And more!

Email or call Ronda Morrett:
rmorrett@iastate.edu / (641) 774-2016

Register: <https://scstemhub.drake.edu/festivals/>

Lucas County STEM Festival

WHEN: Thursday, March 28, 2019

TIME: 5-7 pm

SET-UP: 4 pm (onsite at 1pm)

WHERE: Chariton Community Center
(318 Osage Avenue)

Calling All Exhibitors!

Click [HERE](#) to register as an exhibitor or event volunteer.

- To learn more about what happens at a festival, please visit our **Festivals** page.
- Note: high school volunteers are often eligible for Silver Cord hours. Please sign up using the Exhibitor/Volunteer form and bring your slip to the festival for us to sign.

You're Invited to Attend!

Click [HERE](#) to register to attend the event as an attendee. Troop leaders and group advisers may register the entire group under their name by simply noting the total number of students they will be bringing along.

The Hub is partnering with Chariton Schools, ISU Extension and Outreach, and the Chariton Chamber to bring Lucas County (and beyond!) a night of incredible STEM!

It's a great place to find inspiration and share inspiration. We hope to see you there!

Want more STEM?

Calendar of Events

January 8 -- SC Regional Board Meeting
January 21 -- Scale-Up Applications Open
January 25 -- IMMAW STEM Festival
February 13 -- STEM Day at the Capitol
March 4 -- Scale-Up Applications Close
March 28 -- Lucas County STEM Festival

For more events and details, please visit our website calendar.

*Thank you to the South
Central Regional Board
Members!*

- Creighton Cox
- Breanne Garrett
- Nadilia Gomez
- Mauree Haage*
- Kari Henson
- Jonathon Holmen
- Ronda McCarthy
- Alison Mohr
- Tyler Myerholtz
- Amber Pargmann*
- Laura Williams

* co-chairs

