### South Central STEM Hub Newsletter





SOUTH CENTRAL IOWA REGION GOVERNOR'S STEM ADVISORY COUNCIL

STEM Happens

## **Upcoming Opportunities**

1. Have you nominated an outstanding STEM teacher? The I.O.W.A. STEM Teacher Award will honor one teacher from each of the six STEM regions for his or her contribution and dedication to STEM education in Iowa.

Each winner will receive \$1,500, as well as another \$1,500 to be used in the classroom. Due December 11, 2015. Click HERE to begin the process.



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### **Scale-Up Updates**

PROVIDERS sought:
Currently, STEM Program
Providers are applying to

Providers are applying to be part of Iowa's STEM

Scale-Up program.

Applications due December 7, 2015, by 5:00 p.m.



If you're a provider and need information, please click HERE.

Pssst! Educator applications will be available in January.

**CALLING all current Scale-Up Recipients:** 

2. Hour of Code takes place from December 7-13, 2015.

If your classroom or school is participating in the event, post pictures on Facebook, Twitter or Instagram using #Codelowa to share your experience that week.

Click <u>HERE</u> to see if your school district is participating.

3. You're invited to the IHCC-Ottumwa STEM Festival!

WHERE: Rural Education Center IHCC, Ottumwa, IA

DATE: February 23, 2016

TIME: 5-7 p.m.

- $^{\star}$  We're seeking great presenters! Register here to  ${\color{red}\underline{\sf EXHIBIT/VOLUNTEER!}}$
- \* Pre-register here to <u>ATTEND</u> and be signed up for a free STEM bag!



Students at Newton's Aurora Heights received a certificate upon success. Need help getting started? Email the hub at scstemhub@drake.edu.

We're looking for projects to visit for future newsletter features. When your school or student group is engaged in a Scale-Up, contact the Hub, and we'll come and visit.

If you need any support or assistance with your current Scale-Up, we're here to help! See below for contact info.

### Manager:

Dr. Sarah Derry

#### Call:

515-271-2403

#### Find us at:

SC STEM Hub Drake University School of Ed 3206 University Avenue Des Moines, IA 50311

### Email:

scstemhub@drake.edu

#### Website:

https://scstemhub.drake.edu/

Like us on Facebook 🚹

Follow us on twitter

Check out our calendar!

Remember to send us your STEM events and news, too! We can help you promote your event

Congratulations to SC STEM



# Simpson College Secures National Science Grant



Image from Simpson College: http://simpson.edu/carver-bridge-scholars/.

What can \$586,784 do? Change the lives of 15 college freshmen next fall. Simpson College secured federal funding to pilot an interdisciplinary program that pulls local businesses and academia together, ensuring student success. The Carver Bridge Scholars will help students pursue a degree in the STEM fields, including actuarial science, computer science, mathematics or physics.

Hub Advisory Board Member

# Kim Wayne



Pictured left to right: Jasmine Sutton and Antoinette Stevens, both from Principal, the award-winning Kimberly Wayne and STEM Co-Chair Lt. Governor Kim Reynolds.

Kimberly Wayne, founder of Jewels Academy, won the Women of Innovation Diversity
Champion Award. Jewels Academy is a nonprofit that encourages young women to take part in science, technology, engineering and math programs.

Wayne dedicates hours to teaching and mentoring young women. "My inspiration stems from my personal journey and the struggles of becoming an engineer," says Wayne, "but also the rewards of accomplishing such a task."

Recipients will receive \$8400 for *each* of the four years spent at Simpson. To qualify, applicants will show academic talent and financial need. During that time, they'll be mentored by local businesses, guaranteed an internship and participate in Simpson's unique interdisciplinary STEM program. Those local businesses include: EMC, IMT, the Principal Financial Group, SHAZAM and more. In addition, Simpson will work with ISU to transition students hoping to continue at a post-graduate level.

"If the students are successful, our program will serve as a national model," said Rick Spellerberg, "and in four years we'll write another grant."

Spellerberg, Simpson College Math Professor, is one of four team members who applied for the grant. He's also Simpson's representative on the Governor's STEM Advisory Council.

Spellerberg mentioned he hopes a few go into education. Dr. Jack Gittinger, professor of education at Simpson, echoes that sentiment.



"Iowa needs more qualified science and math teachers." Gittinger also serves on the SC STEM Hub's Advisory Board.

Please click <u>HERE</u> for more information and please share this opportunity with high school teachers and seniors.

### **Inspiring STEM**

### Meet SC STEM Hub Board Member

In addition, Wayne works for Siegwerk as the CIP Regional Manager for Canada and USA, serves on the Hub's board and is working on her doctoral degree at Drake University.

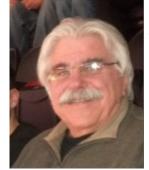
"My goal is to make the path a little easier for the next generations," Wayne adds. "I enjoy empowering youth. Young women have more obstacles; therefore, I feel led to serve in the community by encouraging and inspiring young women by removing unnecessary obstacles."

Congratulations on this incredible award and for making a difference in the lives of so many young people.

## **Pint-Size Science Takes on Coding**



# Dr. Jack Gittinger



This is Dr. Jack Gittinger's first year on the SC STEM Hub's Advisory Board.

If you want to impact change in the world, become a teacher. Dr. Jack Gittinger knows this.

Gittinger spends his day teaching teachers. He's a professor at Simpson College, specializing in science methods for elementary education candidates. He's driven by a passion to help others understand the *why* of the world.

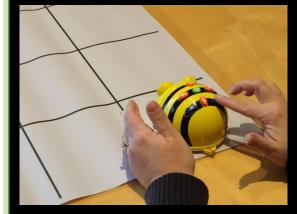
"As a K-12 educator," says Gittinger, "I have always been interested in integrated, authentic learning."

He encourages those who work with elementary students to consider how science, technology, engineering and math can be applied to reflect and answer questions about the world, enhancing a student's interest and understanding in STEM.

"At the elementary level," says Gittinger, "STEM is not so much about careers and economic development. It is about providing students with experiences that use the integration of science, mathematics, and technology within the process of engineering problem solving to help them see the *why:* Why are we learning this stuff?""

Gittinger has always enjoyed the subject areas of math and science and went on to study science in college. "It wasn't long after graduation that I realized the disconnect between mathematics and science in school and mathematics and science in 'the real world.""

He has since spent his career looking for ways to facilitate change and connect the disciplines. "I decided that changing course professionally and becoming involved in mathematics and science education would provide me with the opportunity to facilitate the kind of change that results from





Coding is the language of the future, and even the youngest of scholar can learn it. The Science Center of Iowa's Pint-Size Science Program hosted a teacher in-service for those early childhood educators who are lighting the computer science path for young learners. The training is a part of the Scale-Up Awards from the Iowa Governor's STEM Advisory Council.

Students program a friendly "Bee Bot" and connect "Cublets" to perform specific tasks. If you're interested in learning more, please contact Jolie Pelds at jolie.pelds@sciowa.org.

**New Festival a** 

programs like STEM."

Thanks to Gittinger and to the many others who are looking to change the world--it often starts with one great teacher. And a curious student asking, the great, "Why?"



Dr. Jack Gittinger, at the left, constantly evolves with his target audience. He volunteers at Norwalk's Oviatt Elementary School. On this day, he's helping with A World in Motion's (AWIM) windmill project. AWIM offers 25 percent off to all teachers who can find a community mentor to spend a few hours in the classroom.

### **STEM Festivals**

# Poweshiek County Comes Out for Festival

### **Big Hit!**

Check out the Poweshiek County STEM festival captured in photographs.

Our next festival is February 20, 2016, at Indian Hills Community College in Ottumwa.

Click HERE to attend.

Click **HERE** to exhibit or volunteer.







Thank you to all who attended, exhibited and volunteered at Poweshiek County's STEM Festival! Held on Sunday, November 8, from 1-4 p.m. The inaugural year was a great success with 30 hands-on exhibits. Check out the numbers!

Participants: 337 Volunteers: 21 Presenters: 63

TOTAL: 421 people engaged in STEM

90% of the post-festival survey respondents reported that they learned about at least one new STEM career at the festival.











### Add these dates to your calendar!

December 7 -- IA STEM Scale-Up Program Proposals Due December 11 -- Outstanding Teacher Nominations Due December 16 -- Iowa Governor's STEM Advisory Meeting







January 26 -- SC STEM Hub Advisory Board Meeting

February 3 -- Iowa's Geological Resources Workshop

February 22 -- SC STEM Hub Advisory Board Meeting

February 23 -- IHCC-Ottumwa STEM Festival

March 31 -- ISU's Taking the Road Less Traveled

April 14 -- Drake-Des Moines STEM Festival

Spread the word about STEM EVENTS in your community!

Visit the <u>South Central STEM Calendar</u> to get details on these events and see LOTS more!

To submit your STEM event, click here!

